Are UN Innovation Labs effective innovation models to meet the needs of communities in the humanitarian sector – Case Study Kosovo

A thesis submitted in accordance with the requirements for the degree of Doctor of Philosophy

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SUMMARY OF METHODS AND FINDINGS

In order to analyse whether UN Innovation Labs are effective models of innovation for the humanitarian sector, this study relied on a case study approach with qualitative research methods. Qualitative methods used for data collection included semi-structured interviews, surveys, focus group discussions and documents analysis. Triangulation of findings from these diverse methods provided this research with diversity of views, increasing the credibility and trustworthiness of the data and research findings.

Sixty-five key informant interviews and 50 surveys were conducted to understand the history and purpose of the Lab, what the Lab is achieving, and the project level features of innovation processes. Two focus group discussions were also organised to gain insight into Lab operations and innovation processes, as well as get opinions on the exact needs of young people in Kosovo and those of their communities, to ascertain how innovation activities of the UNICEF Innovations Lab are meeting these needs. To gain further insight into Lab programmes, participant engagement and outcomes of innovation activities, this research also analysed UNICEF periodical reports, available internal documents, online documents, some grey literature as well as reports from collaborators on joint projects. The collected data was analysed by identifying common and divergent ideas, developing themes and relating them to existing ones. The process involved immersion into the collected data, reduction, interpreting and then reporting what had been discovered.

This study revealed that for UN Innovations Labs are effective when they employ inclusive approaches to innovation. Bottom up approaches, like consultative processes, allow UN organisations to identify the real needs of their target group or population. It is also imperative that results of such consultative processes are integrated into government strategic development plans and policies. The effectiveness of Lab activities was also primarily dependent on the UN organisation developing its own strategic plans in alignment to outcomes and advocacy statements of the consultative processes. It is important that interventions involve key stakeholders in a collaborative network consisting of relevant institutions and sectors. Advisably, representation from public, private, non-governmental agencies and people (community members) could provide the needed concerted efforts to ensure programme deliverables are achieved and sustained. Here the promoter role assumed by UNICEF in what this research sees as a top down approach was

helpful in engaging and winning the support of these key holders. The research also revealed that the innovation model employed by UN organisations is a Living Lab model of open innovation. It discusses the operations of the Lab with respect to key attributes of this model and identifies that context redefines some of the traditional understanding behind these attributes. Adding to existing knowledge, it notes for example that users in the interrogated context are also participants of innovation processes, community members, diffusers of innovations and potential customers, all at the same time. It also redefines the understanding of 'real life context' by arguing that 'real life context' in these situations refers not to the artificially created environment for testing innovations, but rather to the natural living environment of participants and users, where innovation ideas are sourced and generated, developed, prototyped, tested, validated and implemented. Multi stakeholder participation and active user involvement is achieved within this context by creating an inclusive and collaborative network. The study also revealed the Lab as a hub engaging with different actors and multi-dimensional roles. This research further identified a distinct element of co creation among Lab participants working together in teams with mentors who belong to the same local community guiding them through innovation processes. The research revealed a multi method approach involving different programme addressing multiple areas of the society; social innovation, media literacy, advocacy, volunteerism and ICT developments.

Employing structural and leadership contingency theories, the study revealed that a congruence between the designed structure and context variables of environment, culture, tasks, technologies, team climate and a team with an understanding of the local context, joint experiences, a place-based perspective and social embeddedness were additional contingencies for effectiveness. Further, leadership with attributes of experience, system thinking, a facilitator and champion character contributed to making the Lab effective.

The study concludes that an inclusive Living Lab model with the key attributes as discussed in its findings, and satisfying the requirements of the key contingencies identified, made the Lab in Kosovo effective. However, this research argues that there is need for further study to be conducted and recommends a multi case study approach to determine whether the choice UNICEF model is an effective UN Innovations model to allow innovation to occur to meet the needs of demographics in entirely humanitarian settings.

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ABSTRACT

Humanitarian action involves the provision of goods and services such as food, water, sanitation, disasters medical care, shelter and protection, during and soon after natural and human-made disasters (Sphere, 2004, p. 6). Diverse and often complex causes create situations that make the inhabiting of affected locations challenging. In a 2019 UNHCR report, global forced displacement increased again in 2018 to ca. 70.8 million individuals forcibly displaced worldwide, as a result of persecution, conflict, generalized violence, or human rights violations. In addition to providing humanitarian assistance to such populations in crisis, humanitarianism also deals with partnering with other stakeholders, interconnected entities– a "humanitarian system". Whilst lead responsibility in humanitarian responses lie with the affected State, international UN aid agencies assist by rallying the collective support of States to address the needs of affected communities. However, researchers have found that responses can be inefficient, can sometimes lead to dependency and are often unsustainable. With increasing numbers of displaced persons and related challenges facing aid organisations, researchers have argued that Innovation is now imperative in the humanitarian space. Humanitarian innovation is a means of invention, adaptation and improvement through finding and scaling solutions to problems, in the form of products, processes or service models, facing effective humanitarian assistance. Consequently, UN agencies are introducing mechanisms that seek to address needs through new practices. A preferred mechanism is a Lab model (Bloom and Faulkner, 2015). They have however queried the general understanding of innovation and what Lab mechanisms are truly achieving. Obrecht and Wagner (2016) also suggest that progress of measuring impact, as well as factors that contribute to successful innovations are unclear. Ramalingam, Rush *et al.* (2015) also note problems associated with fragmentation, coordination of innovation, actor and roles and the need to strengthen skills capacities and enablers of innovation etc. Thus, this research sought to establish whether UN Innovation Labs are effective innovation models to meet the needs of communities in the humanitarian sector?

Following on from a preliminary key informant phase, the main data collection comprised 65 semi-structured interviews, 50 surveys and 2 focus group discussions. This study investigated Kosovo's UNICEF Innovations Lab, through a case study methodology, underpinned by constructivist principles, to elucidate what innovation outcomes are

achieved through Lab mechanisms. It sought to identify how innovation is achieved by outlining project level features of Lab processes. It interrogated the model employed in light of the Living Lab model of open innovation and innovation ecosystems, identifying thereby key actors and their roles. To answer the main research question, it relied on contingency theory to identify dimensions of effectiveness. It then transposed its findings into contingency factors for effective Lab mechanisms within the context.

The study revealed that an inclusive Living Lab model operating a multi - method approach, in a real life environment, with multi stakeholder participation, openness and active user involvement, a congruence of structure and context variables, leadership with distinctive attributes, made the examined open innovation model effective in achieving its goals and objective in the form of programme, product, service and process innovations within the context. The results of this study may be applied as guidelines for similar initiatives in humanitarian settings. However, there is need for further study to be conducted and recommends a multi case study approach to determine whether the model is the effective UN Innovations model to allow innovation to occur and to meet the needs of demographics in entirely humanitarian settings.

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ACRONYMS

UN – United Nations

UNHCR – United Nations High Commissioner for Refugees

UNOCHA – United Nations Office for the Coordination of Humanitarian Affairs

UNICEF - United Nations Children's Fund

UNDP – United Nations Development Programme

UNRWA - United Nations Relief and Works Agency

IOM - International Office for Migration

ALNAP – Active Learning Network for Accountability and Performance

OECD - Organisation for Economic Co-operation and Development

GTZ - Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH

OSCE - Organization for Security and Co-operation in Europe

UNDP/UNV - United Nations Development Programme

UNFPA - United Nations Population Fund,

UNICEF - United Nations Children's Fund

UNIFEM - United Nations Development Fund for Women

KYSAP - Kosovo Youth Strategy and Action Plan

GHA – Global Humanitarian Assistance

ODA – Official Development Assistance

iNGO – International Non – Governmental Agency

NGO – Non – Governmental Agency

P – Participant

UBT – Participant from UBT (Academic Partner)

SM – Senior Management, UNICEF

MM – Middle Management, UNICEF

JM – Junior Management, UNICEF

PEN – Peer Educators Network (Implementing Partner)

D – Donor Institute

GL -Global Lead

MEST – Ministry of Education, Science and Technology

Chapter 1 – Introduction, Humanitarianism and the Innovation Paradigm

1.1 Introduction

A humanitarian emergency or crisis is an event or series of events that represent a critical threat to the health, safety, security or wellbeing of a community or other large groups of people, usually over a wide area. Humanitarian action consequently involves the provision of goods and services such as food, water, sanitation, disasters medical care, shelter and protection, during and soon after natural and human-made disasters (Sphere, 2004, p. 6).

Diverse and often complex causes create such situations that make the inhabiting of affected locations challenging. A 2019 UNHCR report notes that global forced displacement increased again in 2018. About 70.8 million people are recorded to have been forcibly displaced worldwide as a result of persecution, conflict, generalized violence, or human rights violations (Refugees United, 2019). Global displacement has consequently soared to numbers that could represent the demographics of the twentieth largest nation in the world and affecting more people than, for example, the population of Thailand.

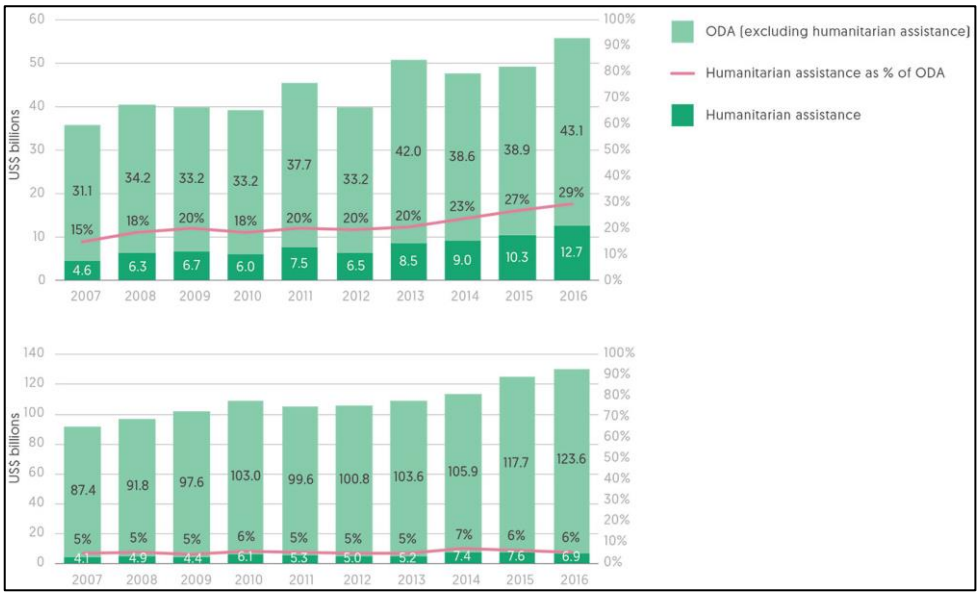
In the spirit of humanitarianism, global humanitarian actors consisting of states, national governments, international organisations, non-governmental organisations, private sector actors, military, faith-based organisations and private individuals all respond to the plight of displaced people in attempts to alleviate their suffering and address their needs. Humanitarian responses from states and international organisations to provide assistance to such displaced communities are guided by Jean Pictet's (Pictet, 1979, p. 225) core principles of *Humanity* (the provision of aid to all who are in need), *Impartiality* (assistance based on need and not on nationality, race, religion, gender, or political opinion), *Neutrality* (refraining from taking part in hostilities or from any action that either benefits or disadvantages the parties to the conflict and *Independence (a* demand that assistance should not be connected to any of the parties directly involved in the conflict). These core principles indeed form the operational code of humanitarian responses.

Whilst lead responsibility in humanitarianism initially lies with the respective State, State responses are typically supported by international aid agencies and the United Nations who rally the collective support of other states to help the respective state(s) address the needs of affected communities. In addition to providing humanitarian assistance to populations in

crisis, and whose governments are unable to adequately meet their needs, humanitarian responses also deal with diverse stakeholders, interconnected entities– a "humanitarian system", who assume and undertake some responsibilities of state.

This humanitarian system is however under increasing pressure to meet the needs of an ever-growing population of people living in protracted humanitarian situations. This exponential growth of the number of people trapped in long-term crisis has deepened the funding gap. For example, as the conflict in Syria enters its tenth year, international aid budgets have stagnated/shrunk. In some cases, European politicians have had to divert official development assistance (ODA) to fund humanitarian responses in their own countries. According to the Global Humanitarian Assistance Report (2018), in 2016, 86% of international humanitarian assistance went to long- and medium-term recipients, continuing a trend[1]. Almost three-quarters (74%) of all international humanitarian assistance provided in that year went to long-term recipients. Of the 20 countries receiving the most official humanitarian assistance, 17 were either long-term (16 countries) or medium-term (1 country) populations in crisis. The trend shows that funding is directed towards protracted and recurrent crises with some countries receiving in some cases a lion's share of their ODA in the form of humanitarian aid.

Figure 1: Humanitarian Assistance as a proportion of ODA, 2007–2016.



Source: Global Humanitarian Assistance Report, 2018

[1] Notes: Long-, medium- or short-term classification is determined by the length of time the country has received an above-average share of its official development assistance (ODA) in the form of humanitarian assistance. Calculations are based on shares of country-allocable humanitarian assistance.

In addition to the funding challenges associated with precarious protracted situations outlined above, researchers such as Betts (2014) have also argued that responses can be inefficient, lead to dependency and be unsustainable. By that they mean that humanitarian organisations may resort to responding with products, processes, and approaches that they have used in the past, even when they may not be the most efficient or effective available. Firstly, a recent ALNAP report (2015) finds that despite humanitarian action taking place in an increasing variety of situations, the system is still applying a one-size-fits-all approach that currently doesn't work. The system is not flexible enough to adapt to these contexts.

Secondly, Betts *et al*., (2012, p. 3) note that, responses can lead to dependency on the part of the receivers. They argue that, "the logic of charity underlying humanitarian response sometimes leads people to be caught in a situation of long-term reliance on international support. This can undermine people's autonomy, depriving them of opportunities to use their skills, entrepreneurship, and creativity to help themselves and be a benefit to their host communities".

Thirdly, and related to the earlier point, Betts *el al.*, also suggest that interventions can be unsustainable, meaning that long-term humanitarian assistance could significantly put a strain on increasingly finite humanitarian budgets (Betts *et al*., 2012, p. 3). The ALNAP Report 2015, also notes that, even though there might be relatively fewer emergencies in recent years, they are longer, deeper and needs are greater. This trend is confirmed by Betts and Bloom (2014, p. 5) who argue that record numbers of people are displaced for longer periods by natural disasters and escalating conflicts. Crisp and Loescher *et al.* also note that challenges apply across the humanitarian system and are starkly illustrated within protracted refugee situations. Elaborating, they suggest that in protracted situations refugees find themselves in an intractable state of limbo for more than five years, frequently confined to refugee camps in which they have no right to work and limited freedom of movement (Crisp 2003; Loescher *et al*., 2008).

Today over half of the world's displaced live in such situations. Hence, the ultimate objective of the involvement of international operative humanitarian actors like UN agencies, international and national NGO's etc. needs to support governments in finding durable solutions to enable the millions of refugees around the world to rebuild their lives

in dignity and safety. However, with soaring numbers of displaced persons and the protracted nature of camp situations, the humanitarian system is faced with grave challenges to respond adequately to the growing needs of these demographics. Ramalingam *et al*. (2015) note further that as the nature of emergencies changes, current paradigms of humanitarian action are being challenged. Humanitarians need to "adapt if they are to maintain their relevance, reputation and impact" (Ramalingam *et al*., 2015, p. 7).

In light of this, Betts *el al*., (2014) have proposed an alternative vision based on the role of 'humanitarian innovation'. Innovation is a process that guides new ideas into implementable and scalable solutions. Humanitarian innovation is suggested as a means of invention, adaptation and improvement through finding and scaling solutions to problems, in the form of products, processes or service models, to support the delivery of humanitarian assistance and to meet the needs of those within a humanitarian context, over an extended period of time. Consequently, researchers like Betts *et al*., (2014), see it as an imperative to addressing new and existing challenges within the humanitarian space.

The innovation imperative has led UN agencies to introduce mechanisms that help to facilitate and drive innovation activities, both within UN agencies and at locations of aid programme. The preferred mechanism that has emerged in recent years is that of an experimental Laboratory model, or Lab model as it is referred to in this text. Lab models are typically defined in terms of do-it-yourself guidelines, with no fixed rules associated with them. A 2019 published UNICEF document on these guidelines, defines a Lab as a space and set of protocols for engaging young people, technologists, private sector, and civil society in problem-solving (Unicef.org. 2019). The document further notes that Labs need to be user centric (engaging young people in processes), built on experience, sustainable, open and scalable. There is however a lack of clarity as to what these mean and the consequent exposure to subjective interpretation has resulted in Labs developing organically. Further, academic discourse also suggests that processes of measuring impact, as well as factors that contribute to successful innovations are unclear and limited. Some authors have also questioned the general understanding of innovation within the sector and what Lab mechanisms are truly achieving. Within the UN itself, there are calls for a single unit of operation, which has consequently led to the setting up of units like the UN Innovation Network.

Although there are merits to a 'free' and 'open' innovation approach, the question arises as to whether an empirically conceptualized approach and model of innovation could be a more appropriate method for humanitarian innovation to occur. The core problem as identified by Obrecht and Warner (2016) is how to innovate successfully in the humanitarian context. Their research observes that there is little understanding of what the project level features of innovation are, especially within the particular constraints of the humanitarian system and the specific operational challenges of any such mechanisms in the humanitarian contexts. Existing research on humanitarian innovation they note, is largely descriptive, with little explanatory analysis of how innovation happens at a pragmatic level and what factors contribute to its success (Obrecht and Warner, 2016). Further, some researchers have found that, the skills and talents of affected communities are often not utilized in innovation processes. Rather, a significant proportion of current approaches to humanitarian innovation have focused mainly on a solely 'top-down' approach, where external product suppliers define the problem and opportunity for new products and invest in their research and development (R and D), before pitching them to agencies for delivery to, use in and by recipient communities (Betts *et al*., 2013).

Thus, the core aim of this study is to examine the effectiveness of the current UNICEF innovation Lab model and to identify the contingent factors that influence the effectiveness of this Lab approach. Through a case study analysis of the UNICEF Kosovo Lab, it identifies and defines a suitable model for humanitarian innovation based on the contingent factors that influence the effectiveness of this model within the context of interrogation. The UNICEF Kosovo Lab established in 2010 is the first of this Lab model employed by UNICEF. Perceived as a success by UNICEF, it has been replicated in approximately seventeen different countries globally. This study thus aims to develop an appropriate framework for measuring the effectiveness of Innovation Labs. Such a framework is currently void in contemporary Lab approaches particularly in the humanitarian space. Consequently, the question under deliberation in this inquiry is, *are UN Innovation Labs effective innovation models to meet the needs of communities in the humanitarian sector*?

In order to achieve the objectives outlined above, this research utilised a qualitative case study methodology that allowed for an in-depth analysis of participants and key stakeholders' lived experiences within the context of Kosovo, its youth population, the UNICEF innovations Lab and its innovation processes. Qualitative research, in all of its

complex designs and methods of data analysis, is guided by the philosophical assumptions of qualitative inquiry: understanding the complex phenomenon of an inquiry, by considering the multiple 'realities' experienced by the participants themselves—the 'insider' perspectives (Sagepub.com, 2019 p. 344). Thus, a constructivism perspective, falling clearly under the philosophical orientation of interpretivism is employed in this research. This orientation honours the understanding of a whole phenomenon via the perspective of those who actually live it and make sense of it (construct its meaning and interpret it personally). This qualitative interpretivists approach and its demand for great flexibility consequently influenced the sampling choice and recruitment of key informants, the informed consent and interview processes, and helped me sensitively and ethically respond to the cultural and contextual circumstances of the young people of Kosovo for whom the UNICEF Innovations Lab was set up. Following on from a preliminary key informant phase which interviewed 5 Lab representatives, explored and identified the key stakeholders involved with the Lab, and also afforded the possibility to secure consent to engage with youth and adolescent participants of Lab programme, the main data collection comprised 65 semi-structured interviews, 50 interviews and 2 focus group discussions over a 4 month period.

Effectiveness is considered in this research as the evaluation of the results of performance. Incepted only 8 years ago, measuring the impact of the Lab and its offering was too early. There are however indications of the Lab achieving its purpose, goals and objectives. Hence, the Labs effectiveness is measured in relation to these. The identified areas are aspects of the Labs' work that have successfully addressed key challenges facing the Lab, as well as the young people of Kosovo. These areas of achievement are consequently considered in this research as dimensions/ domains of effectiveness and the contingent factors of effectiveness.

Underpinned by constructivist principles, this inquiry begun by identifying what UN Labs are truly achieving. It investigated the reasons for the Lab and what innovation outcomes are achieved through Lab mechanisms. In the process, it identified and outlines project level features of the Labs' innovation processes. It then interrogated the model employed in light of innovation models and the Living Lab model of open innovation to identify type and form of innovation the UN Labs represents. It also identified key actors and their roles and represents their position up, mid and downstream of innovation processes.

Employing structural and leadership contingency theories, the study revealed that a congruence between the designed structure and context variables of environment, culture, tasks, technologies, team climate and a team with an understanding of the local context, joint experiences, a place-based perspective and social embeddedness were additional contingencies for effectiveness. Further, leadership with attributes of experience, system thinking, a facilitator and champion character contributed to making the Lab effective.

For humanitarian settings, the study concludes that an inclusive Living Lab model with the key attributes as discussed in its findings, and satisfying the requirements of the key contingencies identified, made the Lab in Kosovo effective. However, this research argues that there is need for further study to be conducted and recommends a multi case study approach to determine whether the choice UNICEF model is an effective UN Innovations model to allow innovation to occur to meet the needs of demographics in entirely humanitarian settings.

This dissertation is organised into ten chapters: **Chapter One** is presented in two sections. Section One above has introduced the dissertation.

Section Two below reviews the literature on humanitarianism and the innovation paradigm. It looks initially at concepts around humanitarianism and humanitarian response before engaging with the literature of humanitarian systems and governance structures. It discusses the humanitarian innovation imperative and current innovation spaces and approaches by UN agencies, identifying gaps before framing its research objectives and main research question.

Chapter Two explores the concept of innovation discussing definitions provided some of the definitions of the concept provided in the literature. It further looks at the characteristics of innovation processes before delving into the different types of innovation. With regards to this it discusses diverse forms of innovation spaces. It reviews the literature then on models of open innovation and user innovation and the Living Lab model of innovation. It finally reviews the literature on innovation ecosystems. It develops in this chapter an operational definition for innovation and a conceptual framework to examine the Lab.

Chapter Three engages with the extant literature on organisational performance focusing on the body of work around structural and leadership contingency theory. It develops a theoretical framework to both analyse areas of the Labs' effectiveness and identify and define possible contingent factors of effectiveness for Labs operational in humanitarian settings.

In **Chapter Four,** the methodological processes that were involved in data collection, interpretation and analysis are discussed. The chapter discusses the methodological approach, data collection tools and the need for triangulation of methods and data sources to improve the credibility and trustworthiness of the research findings. It discusses the importance of qualitative research, ethics and reflects on the researchers' positionality, data collection through document analysis, interviews, focus group discussions and surveys; and data analysis. It discusses the merits of depending on multiple methods and data sources.

Chapter Five is the initial results chapter and presents results of analysing the collected data with regards to the history of the Lab, innovation outcomes and project level features of innovation in the Lab. The chapter presents the historical context and causal factors for establishing this Lab. It presents findings with regards to UNICEF's involvement and aligning its own strategic goals to government strategic development plans. Innovation outcomes are discussed, and project level features of innovation processes are also presented.

Chapter Six presents results of the analysis with regard to the model of innovation and Lab model. Employing the conceptual frame on innovation models, the data is analysed in light of stakeholders, innovation partners and their roles and the multidimensional roles of the Lab itself. It also presents findings with regards to the Living Lab model and its key attributes of multi stakeholder approach, active user involvement, real life environment and the multi method approaches to innovation.

Chapter Seven presents the results of this study with regards to the identified areas of the effectiveness and presents these as domains of effectiveness. It identifies programme definition, programme tasks, design and implementation, network and the organisational structure and context dimensions as areas of the Labs effectiveness.

Chapter Eight discusses findings of this research in relation to the initial dimensions of effectiveness. It presents these dimensions as areas where the Lab has been effective. Beginning with types of innovation, it shows that the Lab has been effective in producing programme, product, service and process innovations.
Secondly it discusses the Labs' success in achieving a collaborative network. Thirdly it discusses the employed model in light of a Living Lab model and its key attributes within this context.

Chapter Nine discusses other dimensions of effectiveness with regard to the structural and leadership contingency theories. It discusses the fit of the Lab structure and contingency variables of environment, culture, tasks, technology, team and team climate and size. It furthermore discusses the influence of leadership on effectiveness, identifying the style of leadership and key characteristics of leadership in this context.

Chapter Ten concludes the thesis. It comes to the conclusion that an inclusive Living Lab model with the key attributes as discussed in its findings, have made the Lab in Kosovo effective. However, this research argues that there is need for further study to be conducted to determine whether the choice UNICEF model is an effective UN Innovations model to allow innovation to occur to meet the needs of demographics in entirely humanitarian settings. It recommends a multi case study approach to determine this.

1.2 Humanitarianism and the Innovation Paradigm

As mentioned above, the number of people forcibly displaced due to human actions and natural disasters has persistently risen over the last couple of years. A recent United Nations High Commissioner for Refugees (UNHCR) annual trends report (2019) confirms that about 70.8 million individuals have been forcibly displaced worldwide as a result of persecution, conflict, generalized violence, or human rights violations. The average duration for populations affected by displacement has recently been estimated at about 26 years, and new displacement is also growing, with 13.6 million people newly displaced during 2018, either for the first time or repeatedly (UNHCR Global Trends, 2019). This implies 26 years in precarious camp or camplike situations; new life born into camp settings; children growing up in camps; people passing away in camps the normal cycle of life continuing over the course of a generation.

The Global Humanitarian Assistance (GHA) report from 2018 also notes that humanitarian crises with the greatest numbers of people in need are often complex, protracted but with exponential potential. This report observes that an estimated 201.5 million people living in 134 countries were assessed to be in need of international humanitarian assistance in 2017. The report also shows that funding is directed more and more towards protracted and recurrent crises with some affected countries receiving a large share of their official development assistance (ODA) in the form of humanitarian assistance.
According to the report, in 2016, 86% of international humanitarian assistance went to long term and medium-term recipients.[2] In fact, about three-quarters (74%) of all the assistance provided in that year, went to long-term recipients. This has precipitated a call for more robust humanitarian responses (from state and international organisations) that can accommodate populations over longer periods of time and can build greater resilience within communities which facilitate a pathway to sustainable development.

Traditionally, responses imply the deployment of products and services that temporarily strengthen or even replace disrupted local activities (Nielsen and Santos, 2013). They are aimed towards providing temporary but necessary lifesaving support to affected

[2] Notes: Long-, medium- or short-term classification is determined by the length of time the country has received an above-average share of its official development assistance (ODA) in the form of humanitarian assistance. Calculations are based on shares of country-allocable humanitarian assistance.

populations. However, when populations are displaced for protracted periods, such temporary solutions are often insufficient and unsustainable.

Innovation, which is a process that guides new ideas into implementable and scalable solutions, is seen as an imperative to addressing the challenges faced by the global aid community in meeting the needs of displaced populations. Consequently, UN agencies are employing Lab models to operationalize innovation within the sector.

The reviewed literature shows that Lab models are being operated in both humanitarian and development settings suggesting that innovation could be used in bridging the gap between humanitarian action and development aid. Some Lab models that started in the rehabilitation phase,[3] after a humanitarian emergency caused by conflicts and wars, are believed to present an effective model for community development and resilience building. They have consequently been replicated globally, including in humanitarian settings. For example, the UNICEF Innovations Lab in Kosovo is deemed successful and has been replicated in 17 other countries including Jordan, which hosts a humanitarian site with refugees (UNICEF, 2017).

These Labs are typically workspaces designed to optimize community led innovation and serve as a unique environment for creativity and information sharing, building new knowledge, creating alignment, and developing comprehensive solutions to address local community needs. However, the effectiveness of these Labs has been queried.

Academic research shows that Labs have evolved organically with no single unit of operation, leading to calls for their objectives to be better understood and processes streamlined (Bloom and Faulkner, 2015).

It is also argued that systematic impact measuring has not formed part of the practice to date leading to a lack of understanding of the impact of such interventions (Betts, 2014). Obrecht and Warner (2016) note that there is also a lack of empirically grounded research into the specific features of project-level innovation. They argue that there has been little explanatory research into the factors that contribute to successful innovation processes.

[3] The EC defines rehabilitation as 'an overall, dynamic and intermediate strategy of institutional reform and reinforcement, of reconstruction and improvement of infrastructure and services, supporting the initiatives and actions of the populations concerned, in the political, economic and social domains, and aimed towards the resumption of sustainable development'. Rehabilitation was initially very much seen as the 'bridge' between relief and development (EC, 1996): not just a placeholder 'in the middle', but an approach that had a different content than either relief or development, focused on rebuilding structures and institutions in a better way.

As a result, understanding of best practices for humanitarian innovation remains limited. Ramalingam, Rush *et. al*., (2015) also observe that there is a lack of knowledge and understanding of actors and their roles in innovation activities in the humanitarian space. They argue that innovation ecosystem in this space need to identify whether roles are understood and played, as well as that relationships are in place and functioning.

In order to better understand the needs, nature and requirements of the humanitarian sector, the prevailing system and to identify factors that could contribute to successful innovation processes, this chapter reviews the literature on humanitarianism, the humanitarian system that operates within this space and the humanitarian innovation imperative which has led to the introduction of initiatives aimed at addressing the needs of affected communities.

This review chapter was conducted using existing topical academic literature, practitioner journals and some grey literature. Section one engages with the literature on humanitarianism and section two discusses humanitarian response, the humanitarian system and its structure. Section three discusses the humanitarian innovation imperative before finally discussing innovation and innovation mechanism employed by UN agencies and other humanitarian agencies in section four. Section 5 summarises the review and presents the research question.

1.3 Humanitarianism

Humanitarianism is a concept based on kindness, benevolence and sympathy extended to all human beings. Although the idea of saving lives and relieving suffering is hardly a western or Christian creation, modern humanitarianism's origin is located in western history and Christian thought. As a noun it refers to humanitarian principles and practices centred around principles like humanity, impartiality, neutrality and independence. Ethically, it is imbedded in the belief that humanity's obligations should be concerned wholly with the welfare of the human race. Thus, in situations of acute need, humanitarianism acts to provide relief to those in need as an act of kindness, benevolence and sympathy (Barnett and Weiss, 2008 p. 7).

Barnett and Weiss (2008) accordingly explain humanitarianism in light of relief aid. In their view, acts of humanitarianism or humanitarian actions are in response to meeting the needs of people in an emergency situation. Martin *et al*., (2014 p. 3) describe a

humanitarian emergency or crisis as any situation in which there is widespread threat to life, physical safety, health or basic subsistence that is beyond the coping capacity of individuals and the communities in which they reside. Situations like these create needs that attract relief aid. Consequently, relief aid refers to any activity or action motivated by extreme needs generated by crisis and the necessity to save lives.

Examining humanitarianism much closer in the literature, it is obvious that the entire institutional structure, including the rules of engagement, are all distinct from the development sector. Barnett and Weiss (2008 p. 51) argue, for instance, that within the aid industry humanitarian aid is distinguished from development aid. The official version of this distinction, they note, is imbedded in the Organisation for Economic Co-operation and Development's Assistance Committees' Statistical Directive, which separates out a category called "emergency and distress relief aid." This defines an emergency as 'an urgent situation created by an abnormal event which a government cannot meet out of its own resources and which results in human suffering and/ or loss of crops or livestock. Such an emergency can result from:

(i) "sudden natural or man *[human]*-made disasters, including wars or severe civil unrest," or;

(ii) "food scarcity conditions arising from crop failure owing to droughts, pests and diseases."

(www.Oecd.org/dac/stats/dac/directives. Italics added)

Barnett and Weiss therefore view humanitarianism as a practical endeavour with a firm ethical basis. They argue that, in emergencies, it involves setting up feeding stations, providing medical facilities, delivering food, building shelters and protecting the rights of vulnerable populations (Barnett and Weiss, 2008).

Murphy S.P. (2011, p. 1) also observes that "within the international humanitarian framework the term humanitarian assistance refers to the operating principles for guiding the actions of states and individuals in the event of a humanitarian emergency, that is any suddenly occurring condition of danger requiring an immediate response to the needs of large numbers of people for basic survival necessities – safe water, shelter, basic medical support, and the like".

The main architect of the 1949 Geneva Conventions and the Additional Protocol I and Protocol II, Jean Pictet of the International Committee of the Red Cross (ICRC) proposed

the seven core principles of humanitarianism: *humanity*, *impartiality*, *neutrality*, *independence, voluntary service, unity and universality*. The first four principles arguably constitute the core. (Pictet, 1979:225). (see Jean Pictet, The fundamental Principles of the Red Cross (Geneva: Henry Dunant Institute, 1979).

Consequently, humanitarianism involves actions of providing aid in response to emergency situations, all imbedded in these fundamental operating principles. *Humanity* refers to the provision of aid to all who are in need, wherever the need exists, with the purpose to protect and respect all human beings. *Impartiality* requires that assistance be based on need and not on nationality, race, religion, gender, or political opinion. *Neutrality* demands that humanitarian organisations refrain from taking part in hostilities or from any action that either benefits or disadvantages the parties to the conflict. *Independence* demands that assistance should not be connected to any of the parties directly involved in armed conflicts or who have a stake in the outcome (Rysaback-Smith, H., 2015).

Barnett and Weiss note that, these principles are nearly sacrosanct and constitutive of humanitarianism, in essence defining what it is. They conclude that these principles serve as functional guidelines because by adhering to them agencies can better provide relief and protection. They do so by creating a humanitarian space that provides a sanctuary for aid workers and victims (Barnett and Weiss, 2008 p. 4).

1.3.1 Humanitarian Response

Sphere, the global movement started in 1997 which aims to improve the quality of humanitarian assistance, and who also provide the most commonly used and the most widely known set of humanitarian standards, emphasise that emergency aid is supplied to save lives while preserving dignity. It involves the provision of goods and services such as food, water, sanitation, disasters medical care, shelter and protection, during and soon after natural and human-made disasters (Sphere, 2004 p. 6).

"Humanitarian setting" is described in this research according to the criteria specified by the Sphere Standards. Sphere describe humanitarian action as taking place in "a range of situations including natural disasters, conflict, slow- and rapid-onset events, rural and urban environments, and complex political emergencies in all countries" (The Sphere Project, 2011 p. 9).

Diverse and often complex causes create situations that make the inhabiting of affected locations challenging. Populations are displaced and often seek to migrate internally, close to their social networks and connections. Others are forced to cross borders with people being trapped or contained in camp like environments. Wars, violence and persecution have driven forced displacement across the globe to this new high as published in the above-mentioned report (p.9). Of the 70.8 million individuals that are forcibly displaced worldwide, 13.6 million were newly displaced during the course of 2018. This represents 2.3 million more than the previous year. 41.3 million were internally displaced persons, 25.9 million refugees and 3.5 million asylum seekers. There are also nine additional situations that have become protracted (UNHCR Global Trends, 2019).
A protracted refugee situation is one in which 25,000 or more refugees from the same country have been in exile for five or more years in a given asylum country. In 2016, UNHCR mandated refugees lived in 27 host countries, constituting 32 protracted situations. While the average duration of the 32 protracted refugee situations at the end of 2015 was estimated at about 26 years, most of these (23) have lasted for more than 20 years (UNHCR Global Trends, 2016).

For states bound by the 1951 Convention on Refugees, such precarious situations call for humanitarian responses (from states and international organisations) to provide assistance whilst adhering to the sacrosanct and constitutive principles of humanitarianism. This international response generally implies the deployment of products and services that temporarily strengthen or even replace disrupted local activities (Nielsen and Santos, 2013).

1.3.2 Humanitarian System and the Governance Structure

In addition to providing humanitarian assistance to populations in crisis and whose governments are unable or unwilling to adequately meet their needs, humanitarian practice also entails engagement with a wide range of stakeholders across complex institutional and operational entities. This group of actors, roles and responsibilities define what is typically known as the “humanitarian system”.
According to a 2015 Active Learning Network for Accountability and Performance in Humanitarian Action (ALNAP) report, the international humanitarian system is larger than ever in terms of financial and human resources. In 2014 alone, it comprised some 4,480 operational aid organisations with combined humanitarian expenditures of over $25 billion

and roughly 450,000 professional humanitarian aid workers in their ranks (ALNAP, 2015). The total number of organisations involved in the humanitarian sector is however considered much larger. As Nielson and Santos note, the system comprises of a range of actors, including local populations themselves, national governments, the private sector, national and foreign militaries, civil society organisations, UN agencies and international governmental and non-governmental organisations (Nielsen and Santos, 2013).

Founded in 1945, the UN plays a significant role in humanitarian action. Its Charter postulates a number of opportunities for the principal organs to create appropriate secondary or special organs or to work with other organisations and actors for the accomplishment of its goals of peace and international stability. The resulting UN system is 'a densely interwoven fabric of institutions and co-operative relationships' (Garies, 2012:3). Accordingly, the first aid special organs such as UNICEF and the Economic Commission for Europe were founded shortly after its inception, in 1946 and 1947 respectively. Organs like UNICEF have, over the decades, been responsible for delivering humanitarian aid programme to address the needs of affected communities. They are called upon by the principal UN body responsible for organising international responses, the UN Office for the Coordination of Humanitarian Affairs (UN-OCHA). UN-OCHA, who as part of the United Nations Secretariat, sees its role as bringing together humanitarian actors to ensure a coherent response to emergencies, by mobilizing and coordinating effective and principled humanitarian action, advocating for the rights of people in need, promoting preparedness and prevention, and facilitating sustainable solutions (UNOCHA, 2015).

In addition to the establishment of the UN, the nineteenth and early twentieth centuries also saw the emergence of organised non-governmental international humanitarian action, in the shape of the International Red Cross and Red Crescent movement and some major NGOs such as Save the Children and Oxfam. The International Red Cross and Red Crescent was one of the first organisations arising in the face of the horrors of the Crimean War. Save the Children had been established in 1919 to pressure the British government to lift its blockade against Germany and Austria-Hungary in the aftermath of the First World War. Oxfam started life as a campaign movement against the economic blockade of Nazi-occupied Greece during the Second World War. Médecins Sans Frontières (MSF) and Concern were founded during the Nigerian civil war over Biafra from 1968 to 1970

(Maxwell and Walker, 2008). These have and still maintain a significant role in delivering humanitarian aid today.

The UN notes that together with its partners (NGO's), it continues to respond to humanitarian needs and emergencies resulting from conflict and/or global challenges such as climate change and environmental degradation. In crisis situations, this 'system' of United Nation bodies, local and international non-governmental organisations (NGOs) and host governments, as well as donors, military and commercial service providers are all involved in one form or another. A 'system' is defined here as a group of interacting, interrelated, or interdependent elements forming a complex whole. A number of these operative bodies tend to specialise in areas like camp management, medical care or water and sanitation (Kovacs and Spens, 2007, p. 99-114). Typically, no single actor has sufficient resources to respond effectively to all needs emerging from a major disaster (Bui *et al.,* 2000). For instance, over 40 countries and 700 non-governmental organizations (NGOs) provided humanitarian assistance following the 2004 Asian Tsunami (Chia, 2007, p. 24-29). Actors in relief environments may have different interests, mandates, capacity, and expertise. Also, challenges around, for example, the complex nature of disasters can make specialisation and coordination both important and challenging. (See: Beamon, 2004; Barnes and Oloruntoba, 2005; Schulz, 2008; van Wassenhove, 2006).
Consequently, this 'international humanitarian system' is a network of national and international provider agencies, donors and host-government authorities that are functionally connected to each other in the humanitarian endeavour and also share common overarching goals, norms and principles. For the purposes of this research, the system's core entities are those who are operationally or financially related to each other and share common overarching goals, norms and principles in humanitarian action.
They include:

- International NGOs (both specifically humanitarian organisations, and multi-mandated organisations that work in humanitarian assistance and development cooperation) that through partnership and sub-granting arrangements often act as a bridge between local organisations and international funding and coordination structures;
- UN agencies, offices, funds and programme that work in humanitarian assistance like UNICEF (including all IASC member agencies, UNOCHA, UNRWA and IOM).

- The International Movement of the Red Cross/Red Crescent (ICRC, IFRC and National Societies);
- National NGOs (that partner with and/or receive funding from international humanitarian entities for humanitarian operations);
- Host-government entities (such as interior ministries and National Disaster Management Authorities), with formal roles in overseeing the receipt and implementation of international humanitarian assistance;
- Regional, intergovernmental agencies engaged in humanitarian activities;
- Donor-government agencies/offices that provide financing for international humanitarian operations and institutions (ALNAP, 2012).

A report produced by ALNAP in 2012 also lists non-core humanitarian actors that work in parallel and often in coordination with the rest of the humanitarian system – but who have different ultimate goals and approaches. They include:

- Militaries;
- Private-sector entities, including commercial contractors;
- Religious institutions (differentiated from faith-based operational aid organisations);
- Diaspora groups and formal and informal private givers.

It is arguable, however, whether these should be seen as humanitarian actors or not, since their primary engagement lies outside the realms of humanitarianism. Nonetheless, their contributions in time of crisis cannot be overestimated. For instance, the Haiti earthquake saw over $1 billion in private sector response, a full 30% of the total for that emergency (ALNAP 2012).

Above provides a snapshot of actors in humanitarian responses. These humanitarian actors can play different roles as they interact and collaborate in diverse and dynamic ways on humanitarian response projects. They function as a network of actor's operative in a humanitarian ecosystem. An ecosystem is considered here as the community of partnering or interacting institutions operative within a specific humanitarian setting sharing common goals and objectives.

This humanitarian system is thus an international analogue to the domestic welfare state and triggered when populations and communities need assistance (Betts *et al,* 2012). However, despite the involvement of various international actors, Barnett and Weiss note

that the global governance of humanitarian action has historically been state-centric with emergency response typically a state-led and state-coordinated response (Barnett and Weiss, 2011). The key UN humanitarian resolution, Resolution 46/182 of 1991 confirms this, emphasising that each State has the responsibility first and foremost to take care of the victims of natural disasters and other emergencies occurring on its territory. Thus, affected States have the primary role in the initiation, organization, coordination, and implementation of humanitarian assistance within their territories.

The Sphere guidelines also acknowledges the primary role and responsibility of the state to provide assistance "when people's capacity to cope has been exceeded" (Sphere, 2004, p 18)

Despite this acknowledgement and, due to the inability and, in some cases, the unwillingness of states to act, the role of the United Nations and other non-governmental agencies is significant. Emphasizing the important contributions of UN agencies, Slaughter and Crisp (2009) argue that despite the specified role and responsibilities of state, the actual provision of assistance to vulnerable groups in emergency situations is largely in the hands of UNHCR and other international agencies (including NGO's). As a result, the notion of "state responsibility" (i.e. the principle that governments have primary responsibility for the welfare of their citizens and others domiciling on their territory) can be weakened by complex emergencies, and so the UN and its humanitarian partners (NGO's) may have to assume a wider range of longer-term responsibilities to support affected populations (Slaughter and Crisp, 2009).

In the case of refugees, Harvey notes that host government involvement is typically limited to the admission and recognition of refugees on their territory, respect for the principle of non-refoulement (which prevents refugees from being returned to a country where their life or liberty would be in danger), and the provision of security to refugees and humanitarian personnel (Harvey, 2009). Indeed, as Slaughter and Crisp find in certain respects, UNHCR has had to assume some of the responsibilities of the state such as: 'registering refugees and providing them with personal documentation; ensuring that they have access to shelter, food, water, health care and education; administering and managing the camps where they are usually accommodated; and establishing policing and justice mechanisms that enable refugees to benefit from some approximation to the rule of law' (2009 p. 2)

In summary, lead responsibility in humanitarianism rests with the State which provides the regulatory and policy framework for displaced populations – determining for example whether they will be settled in camps, whether they will be allowed to work and the degree of self-sufficiency that they will be able to develop. However, their work is supported by international aid agencies from the UN who rally the collective support of states and international and national actors to meet the needs of affected communities. Even though their roles are not at state level but essentially targeted at direct implementation of projects to address community needs, the contribution of NGOs is substantial. By virtue of this, the global operationalising of humanitarian action is therefore shared among these collaborating partners who, in adhering to and carrying out their individual mandates, together work as a system to address the needs of displaced communities. Emphasizing this point, Suhrke argues that this system is a loosely organised entity, held together more by common norms and purposes rather than authoritative arrangements, formal reporting lines and formal governance structures, 'a sort of governance without government in a defined public policy sector' (Suhrke, 2002, p. 20)

Furthering in this discourse, Barnett and Weiss (2011, p. 9) argue that although global humanitarian action has been state-centric, and based around the role of the UN-OCHA and UNHCR), and although this approach enables states to collectively act to meet the needs of people fleeing across international borders and although crucial and saves lives, by itself, it has limitations. They argue that, for example, the increased severity and duration of wars has created a growing demand for more and different kinds of interventions.

Betts *et al*., (2012, p. 3) also suggest that humanitarian action could firstly be inefficient. Humanitarian organisations may resort to responding with products, processes, and approaches that they have used elsewhere, but without a sufficient understanding of the context. According to ALNAP (2015), despite humanitarian action taking place in an increasing variety of situations, the system is still applying a one-size-fits-all approach that currently doesn't work. It is not sufficiently context sensitive and thus may be ineffective and inefficient in its operation.

Secondly Betts *et al.*, note that direct aid over extended periods of time can lead to dependency on the part of the affected communities. "The logic of charity underlying humanitarian response sometimes leads people to be caught in a situation of long-term reliance on international support. This can undermine people's autonomy, depriving them

of opportunities to use their skills, entrepreneurship, and creativity to help themselves and be a benefit to their host communities" (2012, p. 3).
Thirdly, they suggest that interventions can be financially unsustainable. Long term humanitarian assistance puts a strain on increasingly finite humanitarian budgets. (Betts *et al*., 2012, p. 3). ALNAP (2015) also note that, even though there have been fewer emergencies in recent years, they are longer, deeper and needs are greater.
This observation is confirmed by Betts and Bloom (2014, p. 5) who argue that record numbers of people are displaced for longer periods by natural disasters and escalating conflicts. Crisp and Loescher *et al*. also argue that challenges apply across the humanitarian system and are starkly illustrated within protracted emergency situations. Elaborating, they suggest that in protracted situations communities may find themselves in an intractable state of limbo for more than five years, frequently confined to camps in which they have no right to work and limited freedom of movement (Crisp 2003; Loescher *et al*., 2008). Ramalingen, Rush *et al*., (2015) note further that as the nature of emergencies changes, current paradigms of humanitarian action are being challenged. Humanitarians need to 'adapt if they are to maintain their relevance, reputation and impact' (Ramalingam, Rush *et al*., 2015, p. 7).

Today over half of the world's displaced populations live in such situations. Hence, the ultimate objective of the involvement of international operative humanitarian actors like UN agencies, international and national NGO's etc. need to support governments in finding durable solutions to enable the millions of displaced persons around the world to rebuild their lives in dignity and safety. However, with soaring numbers of displaced persons and the protracted nature of camp situations, the humanitarian system is faced with grave challenges to respond adequately to the growing needs of these demographics. Humanitarian tools and services are also deemed, in some cases, to be ill-suited to modern emergencies. Most of them were designed for rural camp settings and short time frames. However, more and more refugees live in urban settings with very different coping mechanisms and basic needs. Despite the changing environment in which humanitarian work and response occur, and their resulting challenges, the operating environment and structure of the humanitarian system has remained fairly unchanged. (Betts and Bloom, 2014, p. 6).
In some cases, wrong supports are delivered; or populations are left without essential services and products. The voices (including skills and talents) of the displaced appear not

to have any role or input into the decision-making process on what aid is made available - thus ignoring their agency and reducing their autonomy (Betts and Bloom, 2014)

In light of this, Betts *et al*., (2014) have proposed an alternative vision based on the role of 'humanitarian innovation'. This research thus examines current Lab models and whether they are effective models for innovation in humanitarian settings, and whether they can overcome some of the challenges identified above, to ensure the delivery of sustainable solutions relevant for affected populations.

1.4 The Humanitarian Innovation Imperative

Innovation, which is a process that guides new ideas from initial concept stage into implementable and scalable solutions, is seen as an imperative to addressing challenges within the humanitarian space. Initial thinking on innovation in the humanitarian space was conducted by ALNAP in 2009. That same year, the UK Department for International Development (DFID) announced a £3 million investment in innovation in the humanitarian system. Since then, many more humanitarian organizations have formally adopted innovation processes to stimulate new thinking on the provision of humanitarian assistance (DFID 2012, Ramalingam *et al*., 2009; Steed 2010). There is also evidence of a growing number of donors, private sector actors, universities, and others outside of the traditional humanitarian system actively engaging in innovation partnerships. Betts and Bloom (2014) argue that a better understanding of the potential and purpose of the innovation cycle and an innovation mind-set can bring benefits to the humanitarian system. They further argue that despite this innovation turn, the term "innovation" per se remains poorly understood in some humanitarian circles and its meaning and value remain contested. It is used to refer to the role of technology, products and processes from other sectors, new forms of partnership, and the use of the ideas and coping capacities of crisis-affected people. "However, as with many emerging ideas, use of the term in the humanitarian system has lacked conceptual clarity, leading to misuse, overuse, and the risk that it may become hollow rhetoric" (Betts and Bloom, 2014, p. 5).

This research adopts Betts and Blooms (2014 p. 5) definition for humanitarian innovation: "a means of invention, adaptation and improvement through finding and scaling solutions to problems, in the form of products, processes or service models, facing effective humanitarian assistance". This is not a categorical definition, but one chosen to facilitate

this research. Its scope does not for example acknowledge organisational innovations or programme innovations.

Critically looking at innovation in the humanitarian space, Betts *et al*., (2013) have argued that a significant proportion of current approaches to humanitarian innovation have focused mainly on 'top-down' models, where product suppliers define the problem and opportunity for new products and invest in their Research and Development (R and D) before pitching them to agencies/recipient communities. This approach of designing solutions that can improve organisational responses within the humanitarian context is valuable and offers opportunities to re-think responses across the range of sub-sectors that comprise the humanitarian system. However, ideas are often short-term and project-based, mostly addressing predefined problems with solutions from external actors.

Another notable reason for the humanitarian innovation imperative is the involvement in recent years of more private sector actors in humanitarian work. According to Betts and Bloom, humanitarian agencies have held high hopes for contributions from the private sector, particularly the business community. Initially seen simply as an alternative source of funding, since about 2010, the private sector has been acknowledged as playing other roles, most notably in product and process innovation (Betts and Bloom, 2014:6). Activities of private sector firms have centred around social entrepreneurship; such as Samasource, Dimagi, and Technology for Tomorrow, with some larger corporations like Deloitte, Ericsson, and IKEA (through the Ikea Foundation) providing humanitarian goods and services in the name of corporate social responsibility.
However, despite these new trends and opportunities that the private sector offers, some argue that there is a direct tension in values and principles, and that the objectives of traditional humanitarian actors and corporate actors are fundamentally different and potentially incompatibility (e.g. Betts and Bloom 2014; ALNAP, 2014; Rush *et al*., 2014). The humanitarian innovation imperative is fuelled also by the potential of technology strengthening and supporting emergency response. The transformative potential of technology, for example with cellular and smart phones, has provided a new platform for needs assessment and feedback mechanisms in crisis situations (Obrecht and Warner, 2016, p. 10).

1.4.1 Unique Challenges to Humanitarian Innovation.

Although it sounds like a major paradigm shift, innovation in the humanitarian space is not new. Since Henry Dunant's founding of the International Federation of Red Cross and the equivalent Red Crescent Societies, modern humanitarianism has developed a number of life-saving and life-improving innovations: from badges that clearly identify humanitarian volunteers in battle to satellite imagery for crisis management; from cash-based programming to the invention of Plumpy'Nut peanut paste to treat malnourished children (Obrecht and Warner, 2016, p. 10). The humanitarian system has therefore shown in the past that it can produce innovations, but these have been typically sporadic. Often developed outside the humanitarian system, they have been introduced to the humanitarian community without considering the ideas and talents, needs and preferences of affected communities.

Innovation in the space also faces many challenges less known to the traditional innovation space. For instance, the humanitarian system's market structure differs from that of traditional capitalist markets in goods and services. Betts and Bloom, (2014) see it as a closed and controlled market, with a demand side that sees humanitarian goods as "global public goods", conferring the benefit of the goods not exclusively on the purchaser, but interpreting the reduction of suffering as benefits to all - governments and all other humanitarian actors. This explains the predominantly held notion that humanitarian goods must be exclusively or predominantly funded by the inter- governmental public sector, through the collective action of governments. On the supply side, supply is done by a closed and tightly regulated group. Inter-agency coordination and procurement tend to privilege a small group of mainly UN organizations and international NGOs, whether or not they are the most efficient or effective providers. These organizations may, in turn, privilege known suppliers rather than reaching out to alternative solution holders (Betts and Bloom, 2014, p. 7).

Another challenge for humanitarian innovation is the fact that users of humanitarian goods do not have the traditional characteristics that economists ascribe to the individual. Users in this context are typically recipients of aid. They are not afforded the autonomy to choose alternative goods. This is because, traditionally, the space is not seen as a market even though goods are exchanged, and services delivered over varying temporal and spatial circumstances.

Furthermore, as an essentially response-based system, it does not have the funding, skills, and mandate to consistently invest in innovation. Thus, it is possible to argue that humanitarian actors have consequently not always been successful at actively introducing or managing innovation processes. Landmark innovations that have been integrated into the system have thus been frustratingly low (Obrecht and Warner, 2016, pp. 13-14). They further note that there is also little understanding of how to manage innovation successfully, especially within the particular constraints of the humanitarian system and the specific operational challenges in humanitarian contexts. There are also no common definitions of what success looks like in innovation and little guidance on how to evaluate innovation.

Humanitarian aid timelines are also structured by externally determined mandates and are composed of different phases. There are several nomenclatures used, but in general the humanitarian community refers to immediate relief, transition, recovery, and development. "It is not clear to enterprises how long products need to last, and due to the limited time of an organization's mandate, this results in short term thinking and limits interest in investing in durable and thus more cost-intensive solutions for both enterprises and customers." (Nielsen and Santos, 2013, p. 413) The specific crisis and environmental context often determines which product needs to be supplied and whether or not the product will be appropriate for that community. The lack of product definition and specification makes it very difficult for suppliers to engage in innovation and new product development.

In addition, institutionally, there is no continuity, rather a gap between the humanitarian and development spaces (Riddell, 2007). The humanitarian market is influenced by the complex and unpredictable setup of active stakeholders. This market involves multiple international and national actors, development agencies and host governments throughout the different phases of aid. All of these stakeholders are present in different numbers, types, intensity of intervention and capacity to relate with other organizations. There is therefore poor oversight over available resources through different phases of aid and in many innovation processes (Rush *et al*, 2014). Enterprises (Innovators) thus face difficulties finding suitable business models and long term, trust-based relationships. According to Nielsen and Santos, this is due in part to the varying demands amongst

stakeholders and inter- agency dynamics, and the distinct requirements amongst locations and circumstances (Nielsen and Santos, 2013).

Both Ramalingam and Rush *et al*. (2015) also note problems associated with fragmentation, coordination of innovation and have suggested potential solutions to these problems in their work. They note that there is a need to address the gaps in resources and approaches, as well as the lack of innovation information and evidence. They further observe the need to strengthen skills capacities and enablers of innovation. Furthermore, they recognise the need for strengthening and facilitating ecosystem interactions and relationships, and innovation management processes. Finally, there is a need for a global alliance to strengthen the humanitarian innovation ecosystem.[4]

Despite all the above challenges, innovation is still being viewed as an imperative to address the challenges the humanitarian system is facing. Betts and Bloom (2014) note that in order to contend with these growing, and changing, demands, (humanitarian) organizations are increasingly exploring the idea of "humanitarian innovation" which draws upon concepts from the private sector to adapt and improve the humanitarian system. However, currently designing for humanitarian markets involves a process of top-down communication, funding and products. This system does not facilitate the return of products nor information after distribution (Nielsen and Santos, 2013, p. 415).

1.5 Innovation in the United Nations

To address barriers and to make the UN a "Strong UN" (UN 2015), different UN agencies have been thinking of new ways to approach the varying challenges they face. Bloom and Faulkner (2015) observe that approaches of employing innovation theories in the humanitarian space are increasingly being favoured.

Consequently, since 2009 there has been a growing interest in defining and operationalising innovation for use in this context. With demanding challenges of new crisis, protracted displaced populations and lack of funding, UN agencies have to rethink and act in new ways (Bloom and Faulkner, 2015). They further note that the operationalization of innovation in the UN is occurring in many forms paying particular

[4] Innovation management and ecosystems are reviewed and discussed in Chapter Three.

attention to the creation of UNICEF's and UNHCR's innovation units with the specific intent to stimulate and support innovation within the UN. Since about 2010, the use of Innovation Labs (sometimes hubs), is being employed by numerous agencies across the UN system to foster humanitarian innovation. This burgeoning establishment of Labs in agencies including the World Food Programme (WFP), the UN Office for the Coordination of Humanitarian Affairs (OCHA) and the UN Development Programme (UNDP) indicates trust in employing this approach. However, to date there has been little analysis to show why. Bloom and Faulkner (2015) note that Laboratories for innovation have become part and parcel of innovation in the UN System over the last decade. Over time, these Labs are evolving and changes, taking varying forms –virtual, physical, shared office spaces, community led hackerspaces to thinking spaces. Most agencies create bespoke units and Labs to foster innovation activities. They are often semi-autonomous from their parent agencies and house experimental activities., There is however a pressing need to understand more about what these Labs are able to achieve, thus motivating the case study analysed in this dissertation.

1.5.1 The Meaning of 'Spaces' and 'Labs' in the UN

By definition, contributions in the sparse literature relate UN innovation spaces to Social Innovation Labs. The Labcraft publication by Tiesinga and Berkout (2014), define a social Innovation Lab as: "a unique kind of Laboratory – one that creates a dialogue, listening carefully with an open mind to all the voices, and then tries to translate them, mix them, and amplify them to prototype and develop alternatives. They cross-pollinate new methods, approaches and perspectives between groups. They provide oxygen, fresh ideas, and protected space to enable new things to emerge" (Tiesinga and Berkhout 2014 p. 13).

Bloom and Faulkner quote Gathege and Moraa (2013) by defining innovation spaces as physical environments that promote community, learning, and making. They come in different flavours: Hubs, Labs, libraries, hackerspaces, makerspaces, telecentres, and co-working spaces. They however all provide opportunities to:

a) Engage with people, ideas, and technologies;
b) Experience participatory culture;
c) Acquire the literacies and skills needed to prosper in the 21st century (Bloom and Faulkner, 2015).

Bloom and Faulkner note that innovation spaces are physical or virtual spaces that enable and support the innovation (technological or otherwise) of those who participate in the space. They facilitate the creativity and critical thinking of their participants through a range of activities and events (Bloom and Faulkner, 2015; Husar, 2014).

UN Global Pulse also defines its Lab as: "…a space for technologies and analysis techniques to be tried rapidly and iteratively, where teams can learn from each other and from other Labs and contribute knowledge to a larger ecosystem." (UN Global Pulse 2014)

Tiesinga and Berkhaut (2014 p. 37) claim that these spaces may take the form of working units, Labs, networks or centres that are established with a focus on supporting innovation within a particular organisation or environment.
UNICEF has currently about 17 Innovation Labs worldwide which are considered to be "open, collaborative incubation accelerators that bring business, universities, governments and civil society together to create sustainable solutions to the most pressing challenges facing children and youth." (UNICEF 2013a) They have a mandate to be user centric and seek to support ideas and facilitate innovation projects of affected communities (UNICEF 2013a).

From the above, the definition of innovation spaces and Labs are broad and varied, but as Bloom and Faulkner (2015) note, these terms are actively being used to Label and brand innovation practice across several UN agencies. It is evident the UN Labs seek to model social innovation frameworks – they seek to be open, collaborative, and consist of a network of diverse actors employing skills, tools and technologies to fresh ideas, to enable new things to emerge.
There is however a need to understand what these spaces truly are and to also explore the effectiveness of these units. Some Labs have been running for about 9 years. The UNICEF Kosovo Lab for example was introduced in March of 2010. Traditional conversations of exploring their effectiveness have however not yet been integrated into the debate even though in practice, innovation labs and spaces are aware of the need to better measure what they are doing from an early stage (Harvey, 2014). As Betts stated in 2014 at the inaugural Humanitarian Innovation Conference: "there can be no innovation without evidence"; unless we can measure the impact of pilots and have metrics – standards for measurement – for what success or failure mean, then attempts to innovate are likely to be dead-ends,

and potentially even harmful. He notes that there are few good metrics for innovation, and monitoring and evaluation standards in the area remain underdeveloped.
Bloom and Faulkner (2015) confirm this by also noting that at UNHCR Innovation, the need to create new metrics and measures of impact is being motivated by the unique nature of their work and the fact that existing frameworks for impact in the organisation are not suited to the new methods and projects that are being undertaken.
Currently, some UN innovation spaces are themselves capturing as much of their progress as they can, which in large part has been shared openly in an attempt to allow others to learn about their work (kosovoinnovations.org).
Most agency websites showcase an array of innovative projects and initiatives they are involved in. However, the progress on measuring the impact of Innovation Labs in the UN is still limited and there is still a lack of clarity around impact measurement (Farmer 2011; UNICEF Stories 2013a; Allio 2014; UNHCR 2014).

Due to the lack of centralised regulations, some UN Agencies, for example UNICEF, have developed DIY guidelines to support the establishment of new Labs and innovation spaces. The guiding principle stipulates that work conducted in Labs should be "user-centred, be built on experience, be sustainable, open and inclusive, and scalable." (UNICEF 2012) In the absence of clear regulations and management, Labs have developed organically. However, in response to calls to streamline Lab models, the UN Innovation Network was established in 2015 (www.uninnovation.network). This is comprised of a collection of innovation representatives from different UN bodies working together to share experiences, lessons learned, and minimise duplication of innovation activity across the system. Further to this development, UN Global Pulse motioned in 2011 that it was looking to streamline innovation across the UN. It advocates for one innovation unit for the UN and suggests that this would help agencies better learn from each other (Farmer 2011). Advocates for this single entity site the great diversity across agency Innovation Labs operational around the world as a problem. Lepage (2014) notes that each Lab operates quite autonomously and there is a great range of focus – technology, data, youth advocacy, emergency response, supply chain processes etc – depending on the needs of the communities in which they work.

The diversity in focus is not necessarily a problem. What however provides grounds for contemplation is whether a more systematic and organised approach and model of innovation could be more suitable for humanitarian innovation to occur.
The gap in understanding concerning the effectiveness of Innovation Labs within this system generates the main justification for this research; to identify and define a suitable model for humanitarian innovation based upon results of identifying the contingent factors that define the effectiveness of a current innovation Lab model.

It is expected that such a model would also answer the calls for a more streamlined approach and provide a model to be emulated and shared by all agencies in the space The model will also define and provide metrics for measuring effectiveness that is currently absent in many innovation units. Furthermore, the model offers a pathway towards overcoming the humanitarian – development nexus by focusing on processes and outcomes that can span spatial and temporal distances, thus recognising the need of longer-term displaced communities to flourish.

Tiesinga and Berkhout (2014) also suggest that whilst the location and design of a physical Lab space are important for facilitating innovation, “work in the field is often just as crucial, especially to ensure a strong human-centred approach.” (Tiesinga and Berkhaut 2014, p. 46) Adding to the debate, Obrecht and Warner (2016) also reiterate that management methods of innovation processes, i.e. coordination mechanisms are equally relevant to ensuring the successful diffusion of solutions.

Obrecht and Warner (2016) note however that as the system seeks to develop a more mature innovation management practice, an important limitation is the lack of empirically grounded research into the specific features of project-level innovation. To date, they argue that, there has been little explanatory research into the factors that contribute to successful innovation processes. As a result, understanding of best practices for humanitarian innovation remains limited (Obrecht and Warner, 2016).

1.6 Conclusions

Global displacement figures stood at 70.8 Million by the end of 2018. In the spirit of humanitarianism, global humanitarian actors consisting of states, national governments, international organisations, non-governmental organisations, private sector actors, military,

faith-based organisations and private individuals are all responding to the challenges of meeting the needs of displaced people. However, with numbers rising and associated complexities, the humanitarian system faces grave challenges. Betts and Bloom (2014) argue that a better understanding of the potential and purpose of the innovation cycle and an innovation mind-set can bring great benefits to the humanitarian system.

In light of this, innovation, which is a process that guides new ideas into implementable and scalable solutions, is seen as an imperative to addressing new and existing challenges within the humanitarian space. Accordingly, agencies within the UN system have responded to engaging with humanitarian innovation by setting up Innovation Labs. UN Innovation Labs come in different forms, as virtual or physical spaces, as mobile and with transient endpoints. There are varying types. Some agencies provide guidelines for setting Labs up but there are no fast rules associated with that. Whereas there is the understanding that Labs need to be user centred, the lack of clarity and the exposure to subjective interpretation has resulted in Labs organically developing. There are calls from within the UN requesting a streamlined approach and for a single unit of operation. This has consequently led to the setting up of units like the UN Innovation Network.

Whilst there are positives to a “free” and open innovation approach, the question arises as to whether a better conceptualized approach and model of innovation could be a more appropriate method for humanitarian innovation to occur. The core problem as identified by Obrecht and Warner (2016) is how to innovate successfully in the humanitarian context. In their opinion, there remains little understanding of how to manage innovation successfully, especially within the particular constraints of the humanitarian system and the specific operational challenges in the humanitarian contexts. This problem is exhibited in the following three gaps: Firstly, Obrecht and Wagner (2016) note that very few humanitarians have a clear understanding of what distinguishes innovation from other forms of programming, and fewer still have successfully developed the institutional spaces and resources required to effectively manage innovation. Secondly, there are no common definitions of what success looks like in innovation and little guidance on how to evaluate innovation. Thirdly, despite the emergence and growth of specific units focused on innovation, there is still limited practical guidance on how to achieve successful innovation in the sector. Existing research on humanitarian innovation is largely descriptive, with little

or no critical analysis of the process, the outcomes, lessons learned and emerging best fit practices (Obrecht and Warner, 2016,).

The above propositions express significant functions that need consideration in the development of a single innovation model. Process, environment, structure, roles, skillsets of actors as well as management of these, and a human centred approach are all relevant factors in defining and operating a suitable model.
Consequently, the question under deliberation here is whether the innovation lab model currently employed by UN agencies is effective for the development and diffusion of humanitarian innovation? In answering, this research will focus on investigating current organisational structures, processes and practices, actors and roles of actors to identify and define contingent factors for measuring the effectiveness of existing Lab models.

Chapter two focuses on innovation concepts and models of innovation, whilst chapter three completes the review of the relevant literature for this research by looking at the literature on innovation management and innovation ecosystems. It goes on in that chapter to look at contingency theories and the literature on performance and effectiveness.

Chapter 2 – Innovation, Innovation Models, and Living Labs

2.1 Introduction

This chapter explores the Innovation, Innovation Management, Living Lab model and Innovation Ecosystem literature for the following reasons.

Firstly, to develop an operating definition of the key concept of innovation that will be used in the study, it looks at some of the different way's innovation has been defined in the literature to develop a definition for this study.

Secondly, in order to understand how innovation is achieved, this study examines the literature on the processes and types of innovation, as well as spaces where these processes take place. This will be applied later on in the study to address the gap and call for understanding what the UNICEF Innovation Lab is and is achieving (Bloom and Faulkner, 2015).

Thirdly, it engages with the literature on Innovation Labs and examines particularly the literature on the Living Lab model as a potential model that best describes the UNICEF Innovations Lab. It selects this model based on similarities identified during a pre-field work engagement with the Lab in January 2016. With regards to this model, the study develops a conceptual framework based on the attributes of this model, which it intends to use in its analysis of the UNICEF Innovations Lab.

Finally, it looks to the innovation studies and ecosystem literature for guidance in determining stakeholders involved in innovation ecosystems, their roles, as well as the relationships and dependencies within such networks (Ramalingam, Rush *et al*., 2015). This would be used to determine key actors and their roles, relationships and interdependencies in the UNICEF Innovations Labs' innovation ecosystem.

2.2 Innovation Management

Innovation management emerged as a discipline in the 1890's with Edison's innovation factory (Simsit *et al*., 2014). These authors note that Edison changed the image of the sole inventor by converting innovation to a process with recognized steps practiced by a team of inventors working together – laying the basic design of the Research and Development (R&D) department.

These steps are streamlined to a major extent in all industries and include idea generation, concept development, feasibility studies, product development, market testing and launch.

Rush *et al*., (2014) note that innovation management explores the process of how innovation can be managed in a conscious fashion and how individuals and organisations can learn and develop such capabilities. It is the discipline of managing processes in innovation and includes a set of tools that allow managers and engineers to cooperate with a common understanding of goals and processes.

In their work on crisis-driven innovation, Rush *et al*., (2014) discuss humanitarian innovation in light of the much broader and mature studies on innovation management. They argue that within the contexts of humanitarian crisis, innovation may be a matter of survival in some instances and note that within such context's innovation activities need to be managed effectively. In their opinion, effective management of innovation in this space could potentially alleviate huge negative effects of crisis situations. Hence, innovation management within this sector needs to address two major issues:

a. How innovation can be best organized in and for this sector?
b. What are the roles for key actors - donors, agencies and mostly users in innovation processes?

They consider whether there are lessons to be learned from mainstream innovation management that may be applicable in such settings.

A review of the humanitarian innovation management literature (HI) shows that initial research began around 2009 (Bessant, Rush *et al*., 2014). Ramalingam, Rush *et al*., (2015, p. 3) cite the work of ALNAP (Ramalingam, Scriven *et al*. 2010) as a key study on humanitarian innovation that also led to the establishing of the Humanitarian Innovation Fund "an agency with the remit to provide both a funding route for entrepreneurial ideas in the HI space and also to raise awareness and build capacity in the field". They consider other publications like the Humanitarian Emergency Response Review of the UK Government's aid efforts (DFID 2011), the University of Oxford's Humanitarian Innovation Project work on bottom-up and user driven innovation, especially amongst refugee groups (Betts and Bloom 2014), and *Medecins sans Frontieres* (MSF) review of medical innovations (Bradol and Vidal 2011) as efforts made to document the management of humanitarian innovation.

Rush et al., (2014) observed that in reviewing the activities in the space, it was evident that there was a growing use of design-led approaches in public, social and development innovation diffusing into the humanitarian sector. Models like User-led innovation had begun gaining popularity within the sector.

In the previous chapter, the reviewed literature identified gaps pertaining to:

a. The understanding of what innovation means within the sector (Betts and Bloom (2014);
b. What UN Labs truly are and are achieving (Bloom and Faulkner, 2015).

In addition to these gaps, Rush *et al*., (2014) and Ramalingam, Rush *et al.,* (2015) observe the need to strengthen skills capacities and enablers of innovation. Furthermore, they recognise the need for strengthening and facilitating ecosystem interactions and relationships, and innovation management process. They observe a lack of knowledge and understanding of actors and their roles in innovation activities in the humanitarian space. They argue that the innovation ecosystem in this space needs to identify whether roles are understood and played, as well as that relationships are in place and functioning.

To effectively address these gaps this research examines the literature on some of the definitions of innovation before engaging with the literature on innovation processes and the types of innovations that are achieved. It explores spaces in which innovation activities take place and where innovation occurs. The entire processes of innovation and its actors are then examined through the lens of the Living Lab model to identify a conceptual framework for the later analysis of the UNICEF Innovations Lab. The innovation ecosystem literature provides this study guidance in identifying stakeholders, actors, roles, relationships and dependencies in these relationships, which will be used later in this research to analyse the Labs' innovation ecosystem.

2.3 Exploring the Concept of Innovation

In order to develop an operating definition of the key concept of innovation that will guide this study, the following paragraphs discuss some of the definitions postulated by the literature on innovation.

Change

Levine (1980) related innovation to *change* and particularly within the context of organisations. He noted that innovation can be operationally defined as any departure from the traditional practices of an organization (Levine 1980, p. 3). Wilson had previously argued that innovation is "a fundamental change in a significant number of tasks" (Wilson, 1966, p. 196). Both look at innovation from an operational, tasks or practices related

perspective conducted by or within an organisation and identify the feature of *'change'* as an essential element for understanding innovation.

Newness

Innovation has also been defined in the literature with regards to *newness*. Zaltman *et al*. (1973, p. 10) view innovation as "any idea, practice, or material artefact perceived to be new by the relevant unit of adoption". Drawing on prior research by Schumpeter and Kirzner, Johannessen *et al*., (2001) developed a "newness" scale that addresses six areas of innovative activity: new products, new services, new methods of production, opening new markets, new sources of supply and new ways of organizing. They single out "*newness"* as the common denominator of innovation (p. 27). In their view, newness in an idea, practice, process, item or product is innovation.

Organisational practice

Damanpour and Evan (1984, p. 393) provide a definition similar to the earlier concept around *change*. It focuses on the broader area of organisational innovation. They see organisational innovation as "the implementation of an internally generated or borrowed idea, whether pertaining to a product, device, system, process, policy, programme, or service, that is new to the organisation at the time of adoption". This definition highlights source of innovation as a key element of organisational innovation: *internally generated or externally borrowed*. Internally generated ideas are those that have their source within the organisation, for example, ideas generated by the organisations own research and development team. Externally burrowed allude to ideas acquired from externally located sources, for example from other firms or academic institutions through licensing agreements.

Adoption and Use

Downs and Mohr (1976, p. 701) focus less on the developing or making of innovation by firms and more on the acquiring and use of innovations. They define innovation through the lens of the adoptive unit arguing that innovation is "adoption of means or ends that are new to the adopting unit". This emphasis of adoption in the definition of innovation has also been raised by such authors as Schoonhoven et. al who observed that: "although innovation has been widely studied… much of the research is about innovation adoption and diffusion" (Schoonhoven *et al*., 1990, p. 179). Ravichandran (1999, p. 256) agrees,

acknowledging that while "most studies on innovation… appear to focus on innovation, in content they pertain to adoptions only." Thus, adoption and the adoptive unit appear to be an essential aspect of innovation. It portrays innovation as a verb - the adopting of innovation.

Other adoption-oriented authors also emphasise *use* in their understanding of innovation adoption. They argue that *use* is relevant in defining innovation since research departments in many organisations create or invent things that may lie unused for a long time. Later, the inventing organisation or an entirely different one, may make the first *use* of this thing. "The first user, we believe, should properly be considered the innovator" (Becker and Whisler, 1967, p. 463). Consequently, *unused* inventions are not innovations until they are used. Kanter also adds to this by defining innovation as "the process of bringing any new problem-solving idea into use" (1983, p. 20).

Problem Solving and Meeting Needs

Kanter (1983) defines innovation with regards to meeting needs – as problem solving. Defined through the lens of problem solving implies using innovation to solve a problem of the unit of adoption and thus meeting the needs of the adoptive unit. This definition broadens the scope of innovation beyond organisations, adoption, adoptive units and use by introducing the understanding that problems can be identified everywhere and are not restricted to organisations.

Processes and Outcomes

Innovation has also been defined in light of processes and outcomes of such process activities. Myers and Marquis define innovation as a process creating a solution of value: "as proceeds from the conception of a new idea to a solution of the problem and then to the actual utilisation of a new item of economic or social value" (1969, p. 1).

Whipp and Clark (1986, p. 1) also define innovation as a process - a type of action or activity that is used to create a product envisaged by an entity, an organisation, or an enterprise. They argue that innovation is: "the ability of an enterprise to envisage and deliberately create a new product (including its components) which may involve, by intention or indirectly, changes in the production process and the form of work organisation". Here we see the introduction of three types of innovation as the result of innovation activities: product, process and organisational (changes in the form of work

organisation) innovation. Paul Nightingale (1998) also discusses innovation as a process that moves from an initial, ill- defined conception of a problem, through a series of sub-problems, to a finished technology" (Nightingale, 1998, p. 689).

2.4 Characteristics of innovation Processes and Ecosystems

Processes, Flexibility, Routines, Role Play and Group Action

The broader literature on innovation, considers innovation management as the discipline of managing processes in innovation. Vala *et al*., (2017) note that it involves developing processes and routines, that are considered critical for business success and value creation. It explores how innovation can be managed in a conscious fashion and how individuals and organisations can learn and develop such capabilities (Rush *et al*., 2014). They note that, learning to innovate is achieved by building behavioural routines, and then embedding them in structures, procedures and policies. These learning routines integrated and associated with organisational structures can facilitate innovation as they accelerate knowledge diffusion, its absorption, and transfer (Lam, 2005).

According to Vala *et al*., (2017), the essence of innovation lies in the capacity to identify opportunities and then proceed to those actions needed to explore their potential and create value. Such actions involve processes which are actually composed of several processes and routines aiming at value creation inside an organization. In convergence with this, previous work of other authors has viewed routines as ways of carrying out the innovation process and repeating it (Bessant 2002; Pavitt 2002; Zollo and Winter, 2002).

Rush *et al*., (2014) identify processes like; learning by doing, learning by collaborating, learning from interaction with users, learning through failure, learning through using, learning by exporting, as examples of learning processes.

Describing routines, Vala *et al*., (2017) note that key routines centre around opportunities exploration, project definition, selection and implementation, and continuous learning. Interaction with consumers to listen to their needs, and following closely the activities of competitors, taking part in specialist gathering like fairs and conferences, represent routines during such processes. In the humanitarian context interactions with the affected community, facilitating the gathering of community members at skills training workshops and at events that showcase innovation efforts can represent such routines. It also involves keeping up to date with relevant technological improvements.

Routines are thus central to innovation in that they define innovation processes.

Flexibility and Time

The idea of innovation processes being flexible and spanning time was put forward by Van de Ven et al., (1999, p. 16). They define the innovation process as "a nonlinear cycle of divergent and convergent activities" allowing the process to take precedence over the actual outcomes. Outcomes are viewed as 'by-products along the journey' than as 'bottom-line' results" (Van de Ven *et al*., 1999, p. 12). These arguments firstly present the importance of *flexibility* in the innovation process and see it not as a rigid linear process. Secondly, it is seen as a journey, spans time, and requires time. Thus, the process becomes very important and invariably the activities within the process are in some cases more determinant than the actual outcome.

Roleplay and Group Action

Another key characteristic of innovation process is the evidence of actors. Kirzner (1979) discusses the reliance of innovation processes on the interplay between different distinctive roles. Ramalingam, Rush *et al*., 2015 also note that as understandings of the innovation process increased in sophistication, recognising the role of multiple actors in the process and the importance of key relationships (Ramalingam, Rush et al., 2015, p. 10). They argue that innovation is not to be perceived as a solo act, but rather as a dynamic and emergent process that is the product of multiple actors and their interrelationships. Generally, the literature presents two types of roles: the individualistic and cooperative role. Kirzner emphasises the role of the individual and their specific quality in recognising opportunities hitherto unnoticed. In contrast to the individualistic perspective, some others view the co-operative element as a defining characteristic of innovation processes. Van de Ven (1986 p. 591) for example, describes the innovation process as "development and implementation of new ideas by people who over time engage in transactions with others within an institutional context". Becker and Whisler (1979) also make the cooperative effort a distinguishing feature between innovation and invention where invention is "the creative act of the individuals" and innovation is "a co-operative group action" (Becker and Whisler, 1979, p. 463).

This chapter doesn't review the points of tension and convergence between these theories but rather notes that, despite the varying opinions, it is evident that innovation processes involve actors who assume in either case distinctive roles in innovation activities.

2.5 Types of Innovation

Innovation has also been defined in light of the '4 P's' of Products, Processes, Positioning and Paradigm. Discussing innovation outcomes, Francis and Bessant (2005) describe how the company Komatsu sought to improve quality, reduce costs, develop innovative products and devise new methods of sales and financing. They argue that Komatsu did more than develop new or improved products. They improved processes, changed their marketing, and thought about their company in a new way (as a global, not Japanese firm). The authors conclude that innovation is not confined to improving products: it can be targeted in four main ways:

P_1 - innovation to introduce or improve products;

P_2 - innovation to introduce or improve processes;

P_3 - innovation to define or re-define the positioning of the firm or products;

P_4 - innovation to define or re-define the dominant paradigm of the firm.

The authors think that the 4 Ps provide a structured approach to examining the opportunity for innovation. There are also linkages between them and as Tidd *et al*., (1997) have observed, (and in comparison, to all other definitions presented above), the 4Ps can be variations of reframing, either concerned with what offerings an organisation provides or what identity it pursues.

Based on the above definitions, innovation may be defined in terms of a verb or noun. It may be a change to the process (verb) or the outcome (noun) of innovation processes. Innovations can bear in themselves processes that lead to the manufacturing of products. Hence, innovation process outcomes may either be a product, process or organisational change. As problem solvers, innovations address a need and thus create value, to be adopted by a unit for use as a solution to their needs.

Innovation Spaces – Cooperative Group Action

Another distinctive characteristic of innovation processes is that they usually occur in dedicated spaces that are conducive for activities. In the literature, creating dedicated physical spaces to foster innovation processes have increasingly become of interest. Wagner and Watch (2017) note for example that universities, research institutes,

incubators, accelerators, innovation centres, co-working spaces, start-up spaces and more have grown at a considerable pace across the globe.
This is also echoed by Osorio *et al*., (2019) who note that there is a strong emergence of new spaces to foster innovation all over the world.

Descriptions of innovation spaces have been varied, with the use of such spaces typically influencing how these physical locations have been described. As early as 1988, Nunamaker et al., described them as writing spaces employing materials for visualisation (post-it notes, paper, pens, cards) and information and communications technologies (ICT) to support brainstorming and distributed group working.
Griffin and Kacmar (1991) have described them as a room or set of rooms designed for spatial re-configuration and participant observation. Later work described them as facilities for encouraging creative behaviours and supporting innovative projects through the provision of appropriate resources, visualisation and prototyping facilities, with the ability to reconfigure new projects (Lewis and Moultrie, 2005; Moultrie, Nilsson *et al*., 2007).
Prefontaine (2012) notes that innovation spaces, as physical environments, provide opportunities to: engage with people, ideas and technologies; experience participatory culture; and acquire the literacy and skills needed to prosper in the 21st century.
More recently, they have been discussed as being responsible for an increase in the capability of new product development, as well as decreasing time to market, and are usually aligned with the firm's or organisation's strategic intentions and scope (Gey, Meyer and Thieme, 2013; Villani, Rasmussen and Grimaldi, 2017).

Based on the above, innovation spaces appear a key characteristic in innovation processes. These spaces have been given different names. As we have seen in chapter one, across the UN, such innovation spaces are also being introduced and used for innovation activities. Bloom and Faulkner have however queried what they are. To help address this question, this research reviewed some of the different innovation spaces to identify their key characteristics that could guide this work.

Makerspaces

These innovation spaces have a focus of making, fabricating or manufacturing innovations, Makerspaces and Fab Labs are often used interchangeably. Both bring together people,

tools, skills, and resources in a single physical location for the purposes of designing, prototyping, and DIY manufacturing.

Holm (2014) notes that though Makerspaces and Fab Labs have separate origins, they have been developed to have similar structures and use. In his dissertation "What are Makerspaces, Hackerspaces, and Fab Labs", Holm (2014) notes that Makerspaces (also commonly known as Hackerspaces and Fab Labs), are generally understood to be community workshops where members share tools for professional gain or hobbyist pursuits. These spaces attract individuals who identify as makers and support members by spreading the cost of industrial tools and gathering community to share knowledge, time, and effort on projects. These spaces can serve individuals, for-profit companies, non-profit organisations, or educational institutions. They are collective organisations that share knowledge and provide open access to equipment, community, and education, in what is often referred to as "the democratization of invention" (Blikstein, 2013; Gershenfeld, 2008; Mikhak *et al*., 2002). Makerspaces, like Fab Labs, also promise to turn participants into makers, creators, and innovators, and to increase interest in science, technology, engineering, arts, and mathematics (STEAM) fields (Osorio *et al*., 2019). They have been influenced by the fact that do-it-yourself and do-it-together projects tend to be carried out in friendly atmospheres. Furthermore, the availability of information via the internet has increased access to high-grade tools and the desire of people to engage in making /producing/fabricating tangible items have also influenced the growth of this culture.

Hackerspaces

The literature shows that Hackerspaces arose as computers began to spread beyond academia and for use by individuals because there was a desire to work together on projects, learn from each other and join in a community of shared interests (Levy, 2001). Kostakis *et al*., (2014, p. 3) define them as "physical, community-led places where individuals, immersed in a hacker ethic, are to be met with on a regular basis engaging with meaningful, creative projects."

Steven Levy described hackers as believing that "essential lessons can be learned about the systems – about the world – from taking things apart, seeing how they work, and using this knowledge to create new and more interesting things." (Levy, 2010, p. 28) Moilanen (2012) listed several other terms that they claimed are used to describe Hackerspaces, including "Fab Lab, Techshop, Open Source Hardware" etc., to name a few.

Colegrove's (2013) study argues however that Makerspaces, Hackerspaces, Fab Labs and so-called Co-working spaces are not synonymous. They posit the idea that Fab Labs are focused on digital fabrication and specifically equipped with tools for that purpose, such as laser cutters, milling machines and 3D printers. On the other hand, Hackerspaces are dedicated to computers and technology, and are particularly attractive to those working in the digital domain. Colgrave (2013) observes though that all three above are derivatives of Makerspaces, which can "house all three subtypes and be part Hackerspace, Fab Lab, and Co-working space." (p. 3)

Fab Labs

Fab Labs originated directly from the Massachusetts Institute of Technology's (MIT) Center for Bits and Atoms and the course "How to Make (Almost) Anything". MIT has since retained greater control over the term Fab Labs. They have established guidelines for which organisations can use that term. There is a Fab Foundation website which is however user maintained. The website denotes four characteristics of a Fab Lab that must be adhered to by an organisation wanting to use the name: public access, support and subscription to the fab Lab charter, a common set of tools, and participation in the network of Fab Lab (Holm, 2014).

Fab Labs are far more likely to include concepts relating to educational institutions such as college, school, and university; as well as having a greater focus on students, which is nearly absent from hackerspaces. This observed difference probably relates to many fab Labs not being independently standing organisations, rather existing within schools and libraries.

Creative Spaces

Creativity must not be confused with innovation. Govindarajan (2010) suggests that creativity means "coming up with the big idea", while innovation needs an efficient process of "execution" that will transform the idea into marketable goods and services. The core principle behind creative spaces is to maximise opportunities for face-to-face meetings, which make it possible for the exchange of tacit knowledge. The concept of tacit knowledge has received a great deal of attention in the extant literature (Moriset, 2014; Howells, 2002; Leamer and Storper, 2001). Many regard the production and exchange of tacit knowledge as "a key determinant of the geography of innovative activity." (Gertler 2003, p. 79). Moriset (2014) notes that the production and exchange of tacit knowledge

include social and cultural components and require some intimate trust between participants. This level of trust can only be achieved through close contact during in-person meetings, which occur in selected places. Such spaces are characterised by co-working and co-creation activities of creative people.

Innovation Labs.

In addition to the above some innovation spaces, particularly within the sector of interest for this research have adopted the use of Innovations Labs to describe spaces used for innovation activities. Innovation Lab (I-Labs) is a term more commonly seen in the physical and natural sciences. It is used in the innovation literature to represent spaces for innovative activities participated by like-minded collaborators on a problem and typically involving users. The ensuing paragraphs present some of the descriptions of this model of innovation before discussing the model in some of its notable forms.

Lewis and Moultrie (2005) proposed the concept of Innovation Laboratories. According to them, *context* determines how innovation spaces are transformed into Laboratories involving practices such as creativity and prototyping, conducted within an environment of co-creation. They further suggest that an Innovation Laboratory may be considered as a means to generate creative behaviours and support innovative projects through good management of resources whilst taking advantage of the capability to restructure new projects (Lewis, Moultrie, 2005; Moultrie *et al*., 2007).

Referring to Innovation Laboratories, Osorio *et al*. (2019) argue that, across the globe, organisational structures to foster innovation processes through uniquely designed environments, creative and inspiring cultures, and high-tech equipped, have emerged. They observe that Innovation Laboratories are innovation intermediaries considered as semi-autonomous organisations within real complex contexts allowing all related actors to interact under a "somewhere else feeling" away from everyday problems with the purpose of creating communities of knowledge, strengthening people’s innovative and technological competences and imbuing values of sharing and collaboration towards a common objective or project. Osorio *et al*., (2019) further argue that in considering innovation spaces as Laboratories, it is necessary to think about how they encourage creative behaviour for the people within them, not just referring to them as customers and employees, but as users.

Lewis and Moultrie (2005), had previously noted that one of the main objectives when designing an Innovation Laboratory is to consider the fact that the users need to be in a space, that reduces the hierarchy and supports participation.
Consequently, an Innovation Laboratory is a suitable physical environment offering the necessary resources to stimulate the creativity of users in innovation projects working in a dynamic environment (Lewis, Moultrie, 2005; Moultrie *et al*., 2007). Based on this, Wagner and Watch (2017) have argued that such environments foster the democratisation of innovation, where all users are elevated and empowered to articulate how a space should be moulded to support their needs and ambitions. These spaces are used to boost the capability to generate new products (Gey *et al*., 2013; Villani *et al*., 2017).

With particular focus on Labs emerging in or out of crisis situations, Bloom and Faulkner (2016) also argue that Innovation Labs are embodied in different ways as they are shaped by their local context including their team experiences and their partners' interests. Each one of them differs in their configuration, the practices they perform and the outcomes they achieve. They conjure a sense of a safe haven for experimentation, focused problem solving and solution creation.

The above representations seem to lead to a fuzzy distinction of other spaces such as Living Labs, Fab Labs, Makerspaces, Hackerspaces, Enabling spaces, or Innovation spaces. Osorio *et al*., (2019) note that Innovation Laboratories perform analogously to all these other innovation intermediaries making it more difficult to notice the boundaries among all these concepts.
Bason, 2013 and Mulgan, 2014 describe how the surge of Innovation Labs can be linked to open and user-centred approaches that foster and support co-creation, co-design and co-production. Their observation makes the growth in trend of user driven and lead user innovation models (see Hippel 1986; 2005) a major contributor to the spread of Innovation Labs. According to Tonurist *et al*., (2015) these models have in turn been powered by the growing popularity of open innovation models.[5]

[5] Open innovation models involve strategic, managed exchanges of information with actors outside of the boundaries of an organization, aimed at integrating their resources and knowledge into an organization's own innovative process.

Explaining the characteristics of Innovation Labs, Kao (2002) argues that innovation lives in *places*, i.e. needs a home. Kao compares them with the atelier of an artist, suggesting that organisations, just like artists' homes, need a place where the creative process is at the centre of activities. This 'place' is where the innovation process is a professional discipline and not a rare, singular event, and where people can meet, interact, experiment, ideate, and prototype new solutions.

Bellefontaine (2012) also note that Innovation Labs tailor space to the nature of the work, by incorporating collaborative space and heads-down space with flexible furniture configurations to accommodate creativity and changing future needs. These surroundings, combined with cutting edge collaborative tools and technology, sends the message that the Lab is an experimental place where traditional thinking, intolerance to risk, silos and resource flows are deliberately interrupted, encouraging participants to look at problems in new ways. The space and the philosophy work together to create an ecosystem for innovation.

In contrast to the usual workplace, Innovation Labs are designed to create a certain ambience that allows creativity to flourish in an environment that is stimulating and nonthreatening. They further note that, in addition to the architectural uniqueness of these spaces, these centres have varying processes in place to facilitate individual and team creative thinking such as thinking of existing problems in a new way, generating new ideas and thinking about how these ideas could be implemented. Echoing this viewpoint, Lewis and Moultrie (2005) conclude that Innovation Labs aim to encourage 'out-of-the-box' thinking by eliminating the traditional environment, such as rectangular rooms and tables.

Based on the review of definitions above, this research considers innovation in two ways: as a noun and a verb. As a noun, innovation refers to outcomes of innovation processes – product, services, processes and organisational programmes. Such innovations should have an element of change and be new to the unit that adopts them. As a verb, innovation is defined in this research in terms of processes of innovation. Innovation is in this case an activity or activities that are new to those participating in such processes.

In both cases innovation processes involve distinct actors who play different roles during innovation activities. These definitions of innovation will guide this research in establishing what innovation means and particularly within the context of the UNICEF Innovations Lab.

Part of the key characteristics of innovation are the activities occurring in Lab spaces. Lab models, such as the unit of interrogation considers itself to be, employ innovation models that are typically open and collaborative in nature. In order to identify the model employed by the unit of analysis, this research looks to the literature on innovation models.

2.6 Models of Innovation

Models of innovation explain innovation processes and describe the nature in with innovation occurs. They do this by outlining the actors, activities, routines and outcomes involved in such processes. In seeking to identify the model of innovation employed by the unit of analysis, this research reviews in the ensuing paragraphs the literature on the openness of innovation and user innovation. The openness of innovation activities by the Kosovo Innovations Lab, as well as the involvement of users in innovation processes have been presented as characteristics of the Lab and discussed in chapter one. Hence the next few paragraphs present the understanding presented of these concepts in the literature.

2.6.1 Innovation Openness

Relating the terminology to the meaning used in “open source software” (Raymond, 1999) and “open science” (Dasgupta and David 1994), Baldwin and Von Hippel (2011) note that innovation is “open” when all information related to the innovation is a public good – non-frivolous and non-excludable.

Chesbrough’s (2003) use of open differs from the above. It relates rather to firm "openness", to the acquisition of new ideas, patents, products, etc., from outside its boundaries, often via licensing protected intellectual property (Chesbrough, 2003; Baldwin and Von Hippel, 2011).

Innovation in such cases has often been driven by private investment and innovators (enterprises, producers etc) expecting profits from innovation investments and using some of these profits as new investments in innovation processes.

Research however has shown that both individuals and firms often voluntarily "freely reveal" what they have developed (Baldwin and Von Hippel, 2011). In these cases, innovation becomes a public good; where information, is revealed and made voluntarily available by the innovator to all interested parties (Harhoff *et al*. 2003). Given the public goods nature of humanitarian responses, this research considers innovation outcomes from the Kosovo Lab as voluntarily available information and accessible to all.

Baldwin and Von Hippel (2011) note that the practices visible in open source software development have been important in bringing the phenomenon of free revealing to general awareness. However, the authors note that free revealing of innovations has a history that dates long before the advent of open source software citing the likes of Nuvolari (2004); von Hippel and Frankenstein (1979); Lim (2009), Morrison *et al*. (2000); Franke and Shah (2003); Gault and von Hippel (2009) and de Jong and von Hippel (2009).
Apart from the free revealing of information another major characteristic of the openness of innovation is the collaborative nature it assumes. This attribute has been documented by Raymond (1999); Benkler (2002); Franke and Shah (2003); de Jong and von Hippel (2009) and Baldwin and Von Hippel (2011).

2.6.2 User and Open Innovation

Baldwin and von Hippel note that traditionally, economists, policy makers and business managers have assumed that the dominant mode of innovation is a "producers' model"; that is, it has been assumed that the most important designs for innovations originate from producers and supplied to consumers via goods and services (Baldwin and Von Hippel 2011). However, as these authors note, the producers' model is only one mode of innovation. Two increasingly important additional models are innovations by single-user firms or individuals and open collaborative innovation (e.g. open innovation involving universities and academia). The authors note that each of these forms represents a different way to organise human effort and investments aimed at generating valuable new innovations.

2.6.3 User Innovation - Definition and History

Users, as defined by Baldwin and Von Hippel (2011), are firms or individual consumers that expect to benefit from using a design, a product, or a service. In contrast, producers expect to benefit from selling a design, a product, or a service to users. Users note these authors, enjoy a unique position in that, it is their willingness to pay for a product that determines the value of innovation to producers. In this regard, they are unique also because they alone benefit directly from innovations. Historically, users have been presented as both individual users as well as user firms. The importance of individual users has long been documented as essential in the development of innovations (Smith, 1937). Rosenberg (1976) also presented users as user firms who were critical to the development of innovations, particularly in the U.S. machine tool industry. von Hippel (1976) also

attributed the development of approximately 80% of the most important scientific instrument innovations, as well as the major innovations in the semiconductor market to users.

Innovations in the sports industry have also tended to be developed by users being involved in the development and modification of consumer products to better serve the personal needs of consumers (Shah, 2000; Hienerth, 2006).

Thus, from the literature, it is obvious that users have long been involved in significant product and process developments and modifications in many fields. Their involvement in models of innovation, particularly in the below model of innovation is discussed below.

2.7 The Living Lab Model of Innovation

As observed above innovation spaces come in different forms - from Maker Spaces to Innovations Labs. In seeking to identify the model of innovation employed by the Lab, this research looks to one model that bares similarity to the UNICEF Innovations Lab – the Living Lab model. Similarities observed during my pre field work phase relate to the openness of innovation and the involvement of different actors, including the involvement of potential users of solutions in innovation processes. Other similarities relate to the UNICEF Lab organising and offering innovation activities in purposefully chosen spaces – creative spaces. These spaces appear to focus and foster innovation activities.

Thus, this research intends to use the literature on Living Labs to identify key attributes of this model of innovation. It will derive the operational definition of the Living Lab model for this research from the different definitions provided in the literature. This study will develop this operational definition by focusing on the following attributes:

a) Space;
b) Context;
c) Actors;
d) Processes;
e) Model;
f) Types of outcome.

These attributes have been derived from the key elements discussed above in relation to defining innovation. This research is of the opinion that a suitable model of innovation for the humanitarian sector would encompass the above attributes.

Living Labs are well defined and globally recognised and implemented models of open innovation and therefore this research seeks to utilise this literature review on Living Labs to develop a robust conceptual framework to analyse its assumptions that UN Innovations Labs are indeed Living Lab models of open innovation. If successful, this would be the first empirically grounded work that identifies UN Innovation Labs as Living Labs.

History of Living Labs

As discussed previously, the conventional use of the term 'Laboratory' refers to an area or a place where researchers and scientists carry out specific experiments (Nguyen et al., 2011; Haider et.al., 2016). Historically, the use of the Living Lab concept has always focused on experimenting with users and this therefore gives the concept a huge emphasis on the involvement of users.

Prof. William Mitchell of the Massachusetts Institute of Technology (MIT) is accredited by many as the originator of the concept (Bergvall-Kåreborn et al., 2009; Budweg *et al*., 2011; Schuurman et al., 2011; ENoLL, 2018). It was conceived as a user-centered research approach in MIT. It involved an open innovation ecosystem operating in a defined context of for example, city, region or campus. The processes involved sensing, prototyping, validating and refining complex solutions in such contexts. Hence since its inception, this model of innovating has involved experimentation with emphasis on the participation of users.

Other studies (e.g. Følstad, 2008b; Leminen and Westerlund, 2016; Hossain *et al*., 2019) however suggest other pioneers in the field prior to Mitchell, such as Abowd and his colleagues at the Georgia Institute of Technology. It is significant to note that in both instances, the origins of the concept lie within the research space and involves innovation processes, with users at the centre of activities.

Operational Definition of Living Labs

As noted above, this research uses the varying definitions in the literature to help it identify an operational definition that will guide this study. Research into Living Labs in innovation studies began in the early/mid 2000s according to Ballon and Schuurman, 2015, Leminen *et al*., 2017 and Hossain *et al*., 2019. Over the last 20 years they have been represented in varying ways. Based on a review of the literature, the below table presents the main ways in which the concept has been described. Essential for my study, I have

categorised them under the main attributes listed above. This is used to develop the operational definition and conceptual framework to guide this research. In this research Living Labs are categorised under spaces, context, actors, processes model and outcomes. The operational definition of Living Lab that would be used to guide this research is developed around these attributes.

Based on the identified attributes, a Living Lab is considered in this research as an open innovation ecosystem where diverse actors representing different sectors and involving users, collaborate in a physical or virtual space employing a methodology to co-create, prototype, test and validate development programme, products, services and processes.

Table 2.7 – Conceptual Framework to Analyse the UNICEF Innovations Lab

Authors own Categorisation	Representation	Autor
Space	Physical or Virtual	Leminen, 2012
	Testing, development, validation, co-creation	Buhl *et al*., 2017; Leminen *et al*., 2017a
	Arenas	Almirall and Wareham, 2008
	Platform	Ballon *et al*., 2005; Molinari, 2011
Context	Region	Juujärvi and Pesso, 2013),
	Urban context and	Hossain *et al*., 2019)
	Smart cities	Ballon *et al*., 2011
	Environment	Bajgier *et al*., 1991; Intille *et al*., 2006
Actors	Public–private–people partnership	Molinari, 2011
	Public–private partnerships	Niitamo *et al*., 2006
	Users	Schaffers and Kulkki, 2007; Leminen, 2013; Leminen *et al*., 2012a; Leminen *et al*., 2014a
	Enabler and User	Leminen, 2013; Leminen *et al*., 2012a, 2014a; Leminen and Westerlund, 2012
	Intermediaries	Almirall and Wareham, 2008
Process	Tool	Edvardsson *et al*., 2012
	Methodology	Almirall *et al*., 2012
	Combined approach	Dutilleul *et al*., 2010
	Local innovation activity	Nystrom *et al*., 2014; Buhl et al., 2017;
	Co-creation approach	ENoLL, 2012
	Business activity	Schuurman *et al*., 2012, Schuurman *et al*., 2013; Veeckman *et al*., 2013
Model	Innovation system	Ballon *et al*., 2005; Eriksson *et al*., 2005
	Network	Lievens *et al*., 2011; Schaffers and Turkama, 2012; Tang *et al*., 2012
	Ecosystem	Leminen, 2013, 2015; Leminen and Westerlund, 2012; Leminen *et al*., 2014a, Nyström *et al*., 2014
	Regional system	Oliveira *et al*., 2006
Outcomes	Development project	Bajgier *et al*., 1991; Bengtson, 1994; Lasher *et al*., 1991

Source: Authors own construct

This research will use above attributes as an operational definition to examine the unit of analysis to see if it can be identified as a Living Lab. The aspect of development is

appropriate for the context of this research that focuses on developing solutions appropriate for a context in transition after a humanitarian crisis.

Hossain *et al*., (2019) validates the general need for understanding the key characteristics, activities and outcomes of Living Labs. Whilst above categorisation does that and thereby helps this research identify the model of innovation employed by the Lab in Kosovo, this research aims to ultimately examine and identify factors that influence outcomes and the effectiveness of the Labs operation within their context. This makes an analysis of the key elements of the model imperative.

In addition to identifying the key attributes of the Lab, this research has identified gaps in the literature related to two attributes and which are relevant for this research in identifying factors that influence the effectiveness of Lab operations. Firstly, as shown above in the conceptual framework, Living Labs are characterised as ecosystems and networks. Leminen (2015) however notes that there is a need to illustrate network structures of Living Labs. Secondly, Rush *et al*., (2014) and Ramalingam, Rush *et al*., (2015 have also noted that it is important to identify what are the roles of key actors in such Labs during innovation processes. Consequently, this research reviews the literature on networks and ecosystems, and then actors, and their roles.

2.7.1 Living Labs as Networks

Innovation Networks – Coordination, Actors, Roles and Outcomes

Leminen (2015) has extensively discussed Living Labs as open innovation networks. He argues that a Living Lab, by definition, consists of different and multiple actors, with distinguishing constellations of actor's, dependant on whether the Lab is a system or network.

A review of the literature on Living Labs as open innovation networks observed that there are different types of innovation networks. A widely accepted classification of network structure is offered by Doz (2001). Doz (2001) argues that a business network can be characterised by the structure of its network and its position. A focal business network is one that has a central role in activities and is structured or acts as a hub or the engine for innovation activities. This function is assumed to be that of the UN Innovations Lab and will be tested.

In contrast it could act as a node; a role where it is collaborating with the hub of the network. In line with this, Ojasalo (2008) notes that an innovation network needs an authority that coordinates cooperation among actors and for that matter stakeholders.

Dhanaraj and Parkhe (2006) on the other hand emphasise that hub firms orchestrate network activities without having hierarchical authority in the network. These authors further stress that orchestration involves knowledge mobility, innovation appropriability, and network stability which all have effect on innovations in network (Leminen, 2015). Leminen (2015) presents five approaches in the literature for examining Living Lab networks and these are represented below:

1) As a network of Living Lab networks (Mavridis *et a*l., 2009; Dutilleul *et al*., 2010);
2) As a Living Lab in an innovation system (Dutilleul *et al*., 2010);
3) As a cross-border Living Lab network (Lievens *et al*., 2011);
4) As a dual Living Lab network (Leminen and Westerlund, 2014),;
5) As a single Living Lab network having multiple stakeholders (Feurstein *et al*., 2008).

Leminen notes that even though the literature on Living Labs identifies them as networks, there are however surprisingly few attempts to illustrate network structures of Living Lab networks. Thus, the ensuing paragraphs discuss some of the notable studies that have attempted to identify actors in Living Lab structures.

2.7.2 Stakeholders in Single Living Labs

The literature distinguishes a multitude of sectoral stakeholders in Living Lab models. It presents two types of partnerships of this model. The first is based on public–private partnerships (‘3 Ps’) (Niitamo *et al*., 2006; Feurstein *et al*., 2008; Arnkil *et al*., 2010; Lepik *et al*., 2010; Almirall and Wareham, 2011, Leminen 2015), consisting of citizens, firms and public authorities, who jointly create, prototype, validate and test services and technologies (Niitamo *et al*., 2006). In this position, public refers to governmental institutions, whilst private refers to private sector organisations.

The second is based on public–private–people partnerships (‘4Ps’) (Bergvall-Kåreborn *et al*., 2009a; Arnkil *et al*., 2010; Ferrari *et al*., 2011; Molinari 2011; Westerlund and Leminen, 2011; Veeckman *et al*., 2013; Leminen and Westerlund, 2014; Leminen, 2015), where firms, public agencies, universities, institutes, and users participate in innovation activities (Westerlund and Leminen, 2011). Similarly, here public are public agencies like

government agencies. Private stakeholders are private sector representatives, whilst people refer generally to consumers.

This research will seek to identify the key stakeholders involved with the UNICEF Innovation Lab and thus the ecosystem structure of this Lab. To identify the roles stakeholder's play in innovation activities, this research reviewed the literature on roles of stakeholders in single Living Labs.

2.7.3 Roles in Single Living Labs

Leminen *et al*., (2012a) categorises actor roles in Living Labs into *"providers", "users", "utilizers",* and *"enablers"*. According to these authors, "*providers"* include educational institutions, universities, researchers, developers or consultants bringing knowledge and promoting solutions to problems. *"Users"* include end users, customers, or citizens to be studied or who are involved in innovation activities. "*Utilizers"* include a company or another organisation utilizing achieved results of innovation activities', and "*Enablers"* are usually financiers or area/city development organisations enabling innovation activities in Living Labs. *"Users"* roles have also been identified being may be passive or active. In certain Lab, they assume the role of an "*object"* or a "*subject"* of the study (Ballon *et al*., 2005; Leminen, 2011; Almirall *et al*., 2012; Leminen, 2015). The user role of "subject" involves them "doing" innovation and being an integral part of the process whilst, as an "object", innovation is "done" for the user and thus the user becomes a beneficiary of the process and the innovation. Some other identified roles in Living Labs include "gatekeepers", "champion" and "promoter". The gatekeeper role includes activities such as required information filtering and dissemination, information and communication exchange, assembling information from various sources and networking (Allen, 1970). The champion is often linked to the success or failure of innovations. A champion has been defined as "an individual who is intensely interested and involved with the overall objectives and goals of the project and who plays a dominant role in many of the research-engineering interaction events through some of the stages, overcoming technical and organisational obstacles and pulling the effort through its final achievement by the sheer force of his will and energy" (Materials Advisory Board , 1966).

Gemünden *et al*., (2007, p. 409) distinguish four promoter roles, which influence innovation success. They present the "*power"* promoter as the hierarchical power to steer a project, provide resources, and help to prevent forthcoming obstacles. The "*expert"* promoter conveys needed technological knowledge in an innovation process. The

"*process"* promoter relies on diplomatic skills to integrate the power promoter and expert promoter in an innovation process. The "*relationship"* promoter in turn uses strong personal ties to both internal and external actors.

This dissertation will utilise all the above role categorisations to help it identify the roles of stakeholders in its unit of analysis. Together with stakeholders, the UNICEF Innovations Lab belongs to what can be seen as a network. Operating in this environment constitutes being part of an ecosystem working together to achieve innovation. In order to examine the role of the Lab itself in this ecosystem and also the roles, partnerships and interdependences among stakeholders, this research looks to the innovation ecosystems literature for guidance.

2.8 Innovation Ecosystem

The concept of ecosystem has been used in a diversity of contexts. This review focuses on aspects of this literature related to key dimensions around actors, roles and relationships. This is in response to calls for better understanding of this in humanitarian innovation (Rush et al., 2014, Ramalingam, Rush *et al*., 2015).

According to Autio and Thomas (2014), the 'ecosystem' term has been applied in a wide variety of contexts outside its original application in biological systems. They note that management research has used the term to refer to a network of interconnected organizations that are linked to or operate around a focal firm or a platform. Comparing the concept to other network concepts, they argue that the explicit inclusion of use side participants in the ecosystem construct differentiates it from other networks in the innovation management literature. Other networks such as clusters, innovation networks, industry networks, focus mainly on production side participants, whilst user networks focus on the use side. Hence the difference with other network constructs in management research is that this network (ecosystems) covers both production side and consumption (use) side participants.

An innovation ecosystem is therefore "a network of interconnected organizations, organized around a focal firm or a platform, incorporating both production and use side participants, and focusing on the development of new value through innovation." (*Ibid.*, 2014, p. 3)

Ramalingam, Rush *et al*., (2015) also note that ecosystems include a supply side (sources of knowledge, of finance, of skills, etc), a demand side (end users, articulated needs) and various mechanisms and agencies responsible for connecting these. Importantly, the process is not linear; every stage has multiple interactions and feedback loops (p.10).
Similar to the discussion above on Living Lab networks, another key dimension of ecosystems is the existence of a focal unit around which participants are organized. Work around this focal unit has been carried out by different authors: for example, as a focal firm in the locality (Adner and Kapoor, 2010), a central hub firm (Iansiti and Levien, 2004), a platform (Cusumano and Gawer, 2002). The concept of focal or keystone firms and managed networks have become important in our understanding of innovation systems, as are notions of platforms and ecosystems (Durst and Poutanen, 2013, Rush *et a*l., 2014). Much earlier, Moore (1993) examined ecosystem thinking in relation to performance. They used the term to describe a set of producers and users around a focal organization that contributed to its performance.

Adner and Kapoor, (2010) considered ecosystems as being dynamic and purposive networks in which participants co-create value. This is also confirmed by Ramalingam, Rush et al., (2015). In this sense, ecosystems are collaborative arrangements through which firms combine their individual offerings into a coherent, customer-facing solution, and which allow firms to create value that no single firm could do alone. This means that an ecosystem may include participants from outside the traditional value chain of suppliers and distributors. As a result of the variety of participants in an ecosystem, it has been difficult to define the boundaries of ecosystems. Consequently, Gulati *et al*., (2012) notes that boundaries in ecosystem contexts are usually fairly open and permeable.

Another key element of ecosystems is the evidence of interdependencies. Oh et al., (2016) have argued that earlier work on innovation ecosystems did not specify the locations of the actors (geography being pertinent to innovation systems), or the kinds of interactions/ relationships among them. Adner and Kapoor (2010) sought to address this gap and showed in their work how innovation processes involve participants either upstream or downstream from a focal firm.
Like Adner and Kapoor above, Rush *et al*., (2014) note that in innovation ecosystems, there are interdependencies that could support or constrain innovation. They argue further that, there is scope for actors to intentionally shape the strategy and direction of a system.

After discussing different types or models of ecosystems, these authors argue that the different distributions of roles and activities, as well as power, knowledge, and resources, throughout the ecosystem can have important implications for its shape and evolution.

The humanitarian innovation ecosystems literature is scant. In their work on Innovation Management, Innovation Ecosystems and Humanitarian Innovation, Rush *et al*., (2014) emphasize the multi-actor characteristic of innovation. They observe, more generally, that while individual entrepreneurs, inventors, scientists, engineers, or designers certainly have an important part to play in innovation, the study of innovation has progressively recognised that numerous people and organisations are typically involved in the process. The process is typically and also necessarily a multi-party activity. Even the lone entrepreneur relies on others, e.g. for financial backing, specialist knowledge of technologies, equipment, distribution and marketing, legal advice. Ultimately, the lone entrepreneur will depend on their prospective users and customers to complete the innovation.
This makes the study of actors involved with the Innovations Lab within the context of this study critical. This research seeks to understand the ecosystem of the UNICEF Innovation Lab in co-creating value and assumes therefore that innovation within this context is a network of interconnected organisations, organised around a focal unit - the Innovations Lab in Kosovo. The ecosystem in this context is a dynamic and purposive network where participants focus on the development of new value by co-creating innovative products and services for their needs - hence a defined purpose (Jackson, 2011).

Adner and Kapoor (2010) defined an innovation ecosystem to consist of only those participants (suppliers, complementors, customers) that were only one network link away from the focal firm or customer. Participants in this research will also be considered as those only one network away from the Lab. Identifying them and the roles, they play will be a focus of this research in order to determine the specific characteristics of this innovation ecosystem, and interdependencies. How they may have influenced the strategy and direction of the Innovations Lab in Kosovo will also be investigated. Further, evidence of and how the Lab has evolved over time (Moore, 1993), will also be a matter of interest for this research.
More than just mapping the key actors involved, innovation ecosystems are constructed social systems and seem to work best when there is clear governance and tangible roles.

This research thus considers Rush *et al*., (2014) suggestion to further explore the roles which could be played by humanitarian agencies and the potential for keystone actors who can help to make the humanitarian innovation ecosystem more productive.

2.8.1 Absorptive capacity

Closely linked to above is the notion of absorptive capacity: the ability of an organisation to find and make use of new external knowledge to create innovations (Cohen and Levinthal 1990; Zahra and George 2002.; Todorova and Durisin 2007). Absorptive capability is something which is learned and built up over time, essentially acquiring and embedding the routines which constitute an innovation management capability (Pavitt 1990; Bell and Pavitt 1993; Phelps, Adams *et al*. 2007; Rush, Bessant *et al*. 2007). For this research it would be interesting to identify how innovation is searched for and selected through routines and processes in this ecosystem.

2.9 Conclusions

This chapter set out to address four main things: Firstly, to develop an operational definition of the concept of innovation that will guide this study. Secondly, to examine the literature on the processes and types of innovation, as well as spaces where these processes take place.

Thirdly, it engaged with the literature on Innovation Labs and examined particularly the literature on the Living Lab model as a potential model that best describes the UNICEF Innovations Lab. Fourthly it examined the innovation ecosystems literature to determine key characteristics of such systems that would serve as a guide to analysing the structure of the UNICEF Innovations Lab in Kosovo.

Starting with innovation management literature, this chapter discovered that innovation management explores the processes of how innovation can be managed in a conscious fashion and how individuals and organisations can learn and develop such capabilities.

In addition to this, this research observed that innovation management within crisis situations need to address two things:

a. How innovation can be best organised for the sector;
b. What are the potential roles of key actors?

The reviewed literature also showed that within the humanitarian space, there is evidence of the use of design led approaches like user-led innovation to develop solutions for the sector.

In order to investigate what the UNICEF Innovations Lab is truly achieving, the chapter engaged further with the literature on innovation exploring the concept of innovation, processes and types of innovation and their outcome, before looking at the varying types of innovation spaces. It found out that innovation is represented in varying ways from change to newness in product, process or organisational practice. Adoption of use, problem solving, and meeting needs were other definitions provided in the literature. Innovation has also been described in light of processes and outcomes. Processes relate to a type of action or activity that is used to create a product envisaged by an entity, an organisation, or an enterprise.

Based on these definitions, the chapter looked further into the key characteristics of innovation process. It identified that innovation occurs through processes and learning routines integrated and associated with organisational structures which can facilitate innovation as they accelerate knowledge diffusion, its absorption, and transfer. Key routines centre around opportunities exploration, project definition, selection and implementation, continuous learning and interactions with consumers to listen to their needs.

The chapter also engaged with types of innovation. It considered the categorisation of types of innovation under the 4P's to describe outcomes of innovation processes. The first "P" relates to Product innovations which involve the introduction or improvement of products. Process innovations introduce or improve processes whilst Position innovation define or redefine the positioning of a firm. An innovation Paradigm defines or redefines the dominant paradigm of the firm. These categorisation of innovation types will be employed in this research to identify the outcomes of innovation efforts carried out by the unit of analysis.

As an operational definition of innovation for the research, this research defines innovation in terms of a noun or a verb. As a noun it involves the adoption and use of new and/or improved products, services, processes. As a verb it involves the adoption and use of new and improved processes and organisational practices in innovation. Some of these new and improved adopted processes may lead to new and improved products, services and

processes. Either as a noun or a verb, innovation processes and their outcomes occur in dedicated spaces, which made it necessary to engage with the literature on innovation spaces.

The literature shows that innovation spaces come in varying forms; from so called Makerspaces to Innovation Labs. Innovation Labs are relevant for this research because the unit of analysis uses “Lab” as the terminology to describe itself. The literature showed that Innovation Labs are spaces suitable physical or virtual environments that use and foster innovation processes by offering the necessary resources to stimulate the creativity of users in innovation projects. In contrast to the usual workplace, Innovation Labs are also designed to create a certain ambience that allows creativity to flourish in an environment that is stimulating and nonthreatening.

In addition to the definition of innovation provided above, this research describes innovation as an activity or activities that are new to those participating in such processes. Thus, the activity could be a new project or programme for those participating in it. Consequently, processes involve participants – actors, who play different roles during innovation processes and together model the innovation pathway. In order to identify the model employed by the unit of analysis, this research looked to the literature on innovation models.

The literature showed that models of innovation explain innovation processes and describe the nature in with innovation occurs. They do this by outlining the actors, activities, routines and outcomes involved in such processes. Drawing from the literature on open innovation, this review observed that in addition to Chesbrough’s 2003 definition, open innovation is also when all information related to the innovation is a public good - nonfrivolous and nonexcludable. This means that both individuals and firms voluntarily "freely reveal" what they have developed (Baldwin and Von Hippel, 2011). In these cases, innovation becomes a public good; where information, is revealed and made voluntarily available by the innovator to all interested parties.

In addition to above, other major characteristics of the openness of innovation are the collaborative nature it assumes and the involvement of users. In such collaboration’s there are innovations by single-user firms or individuals and open collaborative innovations involving entities like universities and academia.

The research chose then to examine an open innovation model that bares similarity to the UNICEF Innovations Lab – the Living Lab model. Similarities had been observed during my pre-field work engagement with the UNICEF Innovations Lab. The chapter engaged therefore with the literature on Living Labs with the goal of developing an operational definition of the Living Lab model of innovation that it could use to examine the UNICEF Innovation Lab approach to innovation. Using attributes derived from the key elements identified in the review of how this model has been represented in the literature. These identified attributes are used to develop a conceptual framework and an operational definition to guide this study. They centre around:

a) Space;
b) Context;
c) Actors;
d) Processes;
e) Model;
f) Types of outcome.

Based on these attributes, the Living Lab model is defined in this research as an open innovation ecosystem where diverse actors representing different sectors and involving users, collaborate in a physical or virtual space, employing a methodology to co-create, prototype, test and validate development new practices, products, services and processes.

Living Labs are also recognized in this chapter as networks consisting of different and multiple actors, with distinguishing constellations of actor's, dependant on whether the Lab is a system or network. A widely accepted classification of network structure is offered by Doz (2001) who argues that a business network can be characterised by the structure of its network and its position. A focal business network is one that has a central role in activities and is structured or acts as a hub or the engine for innovation activities. This function is assumed to be that of the UN Innovations Lab and will be tested.

With regards to the network structure and its actors, the review observed a multitude of sectoral stakeholders consisting of people, private firms and public authorities. This research will seek to identify the key stakeholders involved with the UNICEF Innovation Lab and thus form the structure of this network.

To identify the roles stakeholder's play in innovation activities, this research reviewed the literature on roles of stakeholders in single Living Labs. Rush *et al*., (2014) had suggested in his work on humanitarian innovation to further explore the roles which could be played

by humanitarian agencies and the potential for keystone actors who can help to make the humanitarian innovation ecosystem more productive. Thus, in the chapter the innovation ecosystems literature was reviewed. Relevant for this research, innovation ecosystems are dynamic and purposive networks in which participants co-create value. In this sense, they are collaborative arrangements through which firms combine their individual offerings into a coherent, customer-facing solution, and which allow firms to create value that no single firm could do alone. This means they may include participants from outside the traditional value chain of suppliers and distributors.

Rush *et al*., (2014) also notes that in innovation ecosystems, there are interdependencies that could support or constrain innovation. This makes the study of actors involved with the UNICEF Innovations Lab within the context of this study critical. This research thus seeks examine the effectiveness of the Lab (which is its primary research questions) by seeking to understand the ecosystem of the UNICEF Innovation Lab in co-creating value and assumes therefore that innovation within this context involve a network of interconnected organisations, organised around a focal unit of an ecosystem. The ecosystem in this context is a dynamic and purposive network where participants focus on the development of new and/or improved value in the form of products, services, processes and organisational practices.

Based on the literature on absorptive capacity, this research would also be interested in identifying how innovative ideas are searched for and selected through routines and processes in the UNICEF Innovations Lab ecosystem. To determine the key factors responsible for the effectiveness of the UNICEF Lab, this research engages with the literature on contingency theory to develop a theoretical framework that would guide the study.

Chapter 3 - Contingency Theory and Organisational Effectiveness

3.1 Introduction

This chapter provides an overview of the analytical framework that will be used in this study to assess the operation and effectiveness of the case study.

Contingency theory was chosen to examine the effectiveness of the Lab's operation for two major reasons. Firstly, contingency theory has in the past been used to examine the performance of organisations and particularly innovation centres. Secondly, it is derived from open systems theory which relates to organisations interacting with environments surrounding them.

The initial section of this chapter looks at the theory: understanding, history, critical considerations and conceptualisations. The second part introduces the structural contingency theory and the concept of structure. The third part discusses contingency concepts. The fourth section starts to develop the analytical framework to guide this research. It delves deeper into structural contingency theory and Leadership contingency theory from which it develops one section of the analytical frame. The fifth section looks at the concept of effectiveness and discusses how effectiveness will be measured in this study.

3.2 Understanding Contingency Thinking

Contingency theory (CT) is a dominant, theoretical, rational, open system model at the structural level of analysis in organization theory (Scott, 1992; Scott 2003; Betts 2003). It was developed in 1950 by the findings of leadership behaviour research conducted by researchers from Ohio State University (Donaldson, 2001; Nohria and Khurana, 2010; Abba, 2018). The basic assertion of contingency theory is that the environment in which an organization operates determines the best way for it to organize. It posits that organisational effectiveness is achieved by matching organisational characteristics to contingencies (Morten and Hu, 2008). "Contingency" is defined as "any variable that moderates the effect of an organisational characteristic on organisational performance." (Donaldson, 2001, p. 7)

CT is based on the notion that organisational processes are environmentally contingent (Engelseth and Kritchauchai, 2018; Thompson, 1967). The best way to organize depends therefore on the nature of the environment in which the organization is embedded (Betts,

2003). There is therefore no one best way to organize and different organisational configurations result in different levels of effectiveness (Galbraith, 1973; Betts 2003). Relating this to this study, there is hence no one-size-fits all approach to the practice of innovation, rather the effectiveness of innovation processes will be influenced by the contingent contextual or environmental factors to which they are exposed to.

3.2.1 History

Daft (2002) and (Betts 2003) observe that contingency approaches have been used to study many areas within organization management, as well as other sciences. The usefulness of this approach is reflected in organization theory textbooks. Smith and Farquhar (2000), as well as Chenhall (2003) observe that the theory was developed from the sociological functionalist theories of organization structure such as the structural approaches to organisational studies. These studies postulated that organisational structure was contingent on contextual factors such as technology, dimensions of task, environment and organisational size.

Similarly, Abba (2018) notes that relevant contingency factors include technology, environmental volatility, the size of the operation, the features of the organisational structure and its information system (Abba, 2018). Bastian and Andreas (2012 note however that organisational structure is the essential feature in CT since it is influenced by contingent situations until optimal fit is achieved.

Betts (2003) notes that one of the first contributions of research using a contingency approach was establishing the distinction between 'mechanistic' and 'organic' forms of organization and management. The mechanistic form was associated with a stable environment and routine technology. The organic form was associated with an unstable or turbulent environment and changing technology. Betts note that studies showed that different types of technology or technical systems made different demands on an organization. These demands were met by setting up an appropriate structure.

In addition to technology, Betts (2003) also observed that the size of an organization could explain many characteristics of its structure. Referring to the work of Lawrence and Lorsch (1967), they note that the contingency approach was further refined when it was shown that sub-units of the organization might have different sub-environments indicating the need for differing forms of organization. Consequently, in addition to structure, technology and size and environment(s) emerged as the primary contingency factors.

Others have also argued, that CT has upheld an approach to the study of organisational behaviour by seeking to explain how contingent factors such as technology, culture and the external environment influence the design and function of organizations (Bastian and Andreas, 2012; Abba 2018). This has led to CT being considered in the class of behavioural theory that claims there is no best way to organize a corporation, to lead a company, or to make decisions. Instead, the optimal course of action is contingent (dependent) upon the internal and external contexts or environments.

In explaining the distinction between external and internal environments, Lorsch and Lawrence observed that in the same manner that the organization is in constant interaction with its (external) environments, so are the members of that organization in constant interaction with one another; hence, organisational members (the subsystems) are also in a state of dynamic interaction. The interconnection of organisational members also produces an active interdependency where they recognise their reliance on each other for the internal health and survival of the organization. The types of relationships that prevail in the organization will depend on the nature of the task being performed, formal relationships, rewards, controls and existing ideas within the organization about how a well-accepted member should behave (Lorsch 2010; Lawrence and Lorsch,1967). Indeed, if an organization is to survive, it must strive to fit the character of the individual and thereby the cumulative character of individuals that build a structure, with the environmental system surrounding it in fulfilling its tasks. This internal environmental system is determined by such factors as detailed by Lorsch and Lawrence below.

Based on this, the internal environment of the unit of analysis is of significance. Tasks, formal relationships and controls, and existing ideas within the organization create an internal environment that affects the design of organisational structures. Thus, tasks and the desired organisational culture are also significant environmental factors. Organisational culture in this research refers to the internal relationships among team members that influence team dynamics and performance. The study will explore how team culture plays a role in the design of the structure of the UNICEF Innovations Lab.

Consequent to above, this study observes that it is important that there is a fit of organisational structure to internal as well as its external environments of the Lab. An equilibrium in these external and internal relationships will affect its relevance and efficacy.

3.2.2 Critical Consideration of Contingency Theory (CT)

This section will examine some objections and criticisms of CT, particularly with regard to performance and effectiveness.

The literature on CT has successfully established correlations between many environmental conditions and organisational design characteristics. However, a criticism of the contingency approach is that causation of performance/effectiveness is assumed but not explained. It has been assumed that because a set of environmental conditions and organisational structure are found to be correlated, fit is achieved and thus the cause for effectiveness. In CT thinking, that some organizations are able to exist for extended periods with a poor fit is deemed only possible because the industry for example was profitable enough to support a company operating sub-optimally.

In addition to above criticism, Betts (2003) also argues that assumptions in the theory also do not take into account "fashion" or habits of managers, who continue to do what they know to do, even when other potentially better solutions exist. Referencing Drazin and Van de Ven (1985), they note that finding out that there is a correlation between environmental conditions and organisational characteristics without considering effectiveness indicates selection, and not fit.

This research will seek to not only establish a relationship between environmental conditions and organisational structure, but also examine their fit and how this fit is a cause for positive performance i.e. effectiveness. The relationship between performance and effectiveness is discussed further below.

Other problems with CT are the assumptions that relationships between variables are linear and effects are symmetrical (Schoonhoven, 1981). However, Schoonhoven observes that some relationships between technology, structure, environment and effectiveness may be linear and others not.

The theory has also been challenged as being static and failing to deal with organisational change and adaptation (Abba, 2018; Galunic and Eisenhardt, 1994). Referencing Donaldson, (2006), Abba (2018) argues that the theory is often considered as being an equilibrium theory, in that organizations are presented as attaining fit and then being in equilibrium and so remaining static. However, Structural Adaptation to Regain Fit (SARFIT) is a disequilibrium theory of organizations. In SARFIT an organization only remains in fit temporarily, until the fit-based higher performance produces expansion. There is then an increase in contingency variables, like size or diversification, which leads

the organization into misfit with the existing structure. Thus, in the SARFIT view, fit and misfit are each temporary state that alternate with each other. An organization in fit tends to expand into misfit, which provokes structural adaptation into a fit, which then leads to further expansion into misfit. This cycle repeats itself over time. As the organization moves between fit and misfit so it has resultant higher and lower performance, respectively" (Abba, 2018 pp. 45 - 46).
Donaldson (2006) also argues that it is not sensible for organizations to move into a fit with their contingencies, because while the organization is changing its structure to fit the contingencies, the contingencies themselves change so that the organisational structural change does not produce fit (Donaldson, 2006).

With regards to the above arguments, this research will examine if the Lab has experience situations of SARFIT, where it has had to adapt to "re-fit" due to changing contingency variables.

3.2.3 Conceptualisation of Contingencies

As observed above, organisational design or structure is a key variable in CT studies. Together with leadership, they are two examples of many independent variables of CT. Structural Contingency Theory (STC) holds that there is "no one best way," - no single structure or structural type is optimal for all organizations. Instead, the structure that is most effective is the structure that fits certain factors, called contingencies. This makes structure an independent variable, while contingencies are described as dependent variable. Thus, dependent variables are those affected by independent variables.
Management or management style is considered an important variable in CT studies (Betts 2003). In this research management and management style are considered under the independent contingency theory variable of Leadership.

This study on the Innovations Lab considers such Labs as organisations and seeks to use the explanatory power of Structural Contingency Theory (SCT) and Contingency Theory of Leadership (CTL) to examine, identify and explain how a congruence of fit with external and internal variables discussed above influence and explain the effectiveness of the Lab under investigation. (Hollenbeck et al., 2002; Morton and HU, 2008). This

research focuses initially on STC in ensuing paragraphs and explains why it choose this theory for this study.

3.3 Structural Contingency Theory (SCT) and the Concept of Structure

SCT has been used to understand why projects fail (Sauser et al., 2009). Wadongo and Abdel-Kader (2014), have also employed it to examine how performance management affects organisational effectiveness in the non-profit sector. It was the first explanatory framework in organization theory. According to SCT the goal of an organization and its managers should be fit. Fit indicates consistency between a firm's processes and practices with contingency factors (Schneiderjans, 2015). According to Sayilar (2016) SCT emerged with the consolidation of organisational research studies developed by open system theory from the 1950s. They argue further that SCT studied the relationships between its basic concepts of organisation, structure and environment. It transformed the concept of structure into an observable social phenomenon with its functionality and its researchable variables like environment, technology, size and task.

It is grounded on organisational survival and success, hence like all concepts of contingency theory, the relationships between organizations and their environments are considered and analysed in terms of their contribution to organisational performance and effectiveness. The theory posits that an organization must strive to align the structure of the firm with factors in the external and internal environments (Donaldson, 2000; Schneiderjans, 2015).

Zbirenko and Andersson (2014) observe that an organisation is both its purpose and the mechanism constructed to achieve the purpose, i.e. the organisations structure. Bloisi et al. (2007, p. 710) define organisational structure as a grouping of people and tasks into different units to boost coordination, communication, decisions, and actions. Miles et al., (1978, p. 553) note that structure and the processes taking place inside the organisation are closely inter-related; it is hard to speak about one without mentioning the other. Thus, structure is interconnected with such concepts as leadership, and this mutual connection influences the processes or life cycle of an organization. Effective companies are those that have a structure aligned with the tasks to be carried out in order to achieve the strategic purposes of the organisation.

The above shows how structure influences effectiveness; by ensuring that structure aligns itself with contingencies designed to achieve strategic purposes of an organisation. This makes the concept of leadership of significance, since leadership is an instrument put in place to guide an organisation in achieving its strategic purposes. Aston Group[6] studies in 1960s defined the variables that made it possible to define organisational structure as measurable and observable phenomena. This body of research is responsible for clearly defining the organisational structure variables of: a) formalization, b) division of Labour and specialization, c) centralization, d) standardization and e) control. Organisational structure is hence described as a knowable, observable, measurable and functional instrument in the framework of SCT.

Although organisational theory has been criticized since the 1970s and lost its dominance with the development of other paradigms, like McKinsey 7-S framework, STC has remained relevant. According to Saliyer, (2016), in recent years, debates on the development of organisational research studies, STC's ability to optimize organisational integrity and its explanatory power have caused structural contingency theory to regain importance with significant revisions.
As far as this research is aware SCT thinking has not been used in measuring the effectiveness of organisations operative in the humanitarian sector. This study seeks to use it to identify possible contingent factors that influence organisational design and thereby the structure of a Lab in this space.

3.4 Contingency Concepts

3.4.1 Organisational Transformation

Similar to observation made Abba, (2018) with regards to Structural Adaptation to Regain Fit (SARFIT), and as well by Donaldson (2006) earlier, organisational changes occur which create a misfit- a "disequilibrium" and require that variables adapt to "refit". In SCT, organisational transformation describes a range of successive actions that are explained by change in contingencies. Structural transformation starts with changes in organisational contingencies. If there is, for example, diversification or variation in

[6] The Aston Group is the designation of a group of organisational researchers who pursued their own research between 1961 and 1970 under the leadership of Derek S. Pugh. Its official name was the Industrial Administration Research Unit of the Birmingham College of Advanced Technology. Birmingham College was renamed Aston University in 1966 and conducted much SCT research in the 60s.

organisational operations, change in technology use, a difference in market conditions, new competitors, introduction of new departments or units, or the organization repositions itself in the market with a new competitive strategy - all these things disrupt fit. SCT assumes that change in contingencies triggers a transformation to regain required structural design elements and some form of equilibrium. If organisational fit and structure adapt to the changed contingencies, then organisational performance can improve. If adaptation does not occur, organisational survival is unlikely. This can be a disruptive process marked by performance problems as a result of changes in contingencies. In such cases, the management determines the necessary transformations and when a new structural design is adopted, and the structure fits the new contingencies, then its performance improves, thus implying a high degree of effectiveness.

This understanding informs the analysis to follow. As noted briefly above, this research will examine organisational fit of structure with the internal and external contingency factors of the UNICEF Innovations Lab over the course of its existence, exploring transformation and adaptations that arose due to shifting contingencies over time. It will also look at the role of management (leadership) in providing direction, where necessary.

3.5. Developing an Analytical Framework

External and internal contingency factors of CT have been briefly discussed above. In this section in depth arguments are made of the key factors that will be used as part of an analytical framework to examine the effectiveness of the UNICEF Innovations Lab.

3.5.1 Environment

Environment is the first of five influential variables relevant to any explanation of variation in organisational structure. Technology, size, task and team culture are the others which will also be discussed. Each of these variables postulate the effects of a major contextual factor.

The environment argument refers to the degree of change that characterizes environmental activities relevant to an organization's operations. It has attracted the most attention as the major factor contributing to uncertainty among organisational management or leadership. The relevance of this concept to this research is based on the importance of this variable in determining the design of organisational structure and its influence on effectiveness. Environment in this research is considered to relate to and include the innovation ecosystem of the UNICEF Innovation Lab.

As previously discussed, the environment argument observes that the maintenance and existence of organizations depends upon exchanges or interactions with outside (external) parties, like the Labs innovation ecosystem in this study. The environment argument suggests that environmental conditions exercise critical constraints upon the choice of effective structural forms. This dependency upon the environment is seen to impose a degree of constraint upon those directing an organization.
Sadler and Barry (1970, p. 58) also argue that 'an organisation cannot evolve or develop in ways which merely reflect the goals, motives or needs of its members or of its leadership, since it must always bow to the constraints imposed on it by the nature of its relationship with the environment. They observe further that different environmental conditions and relevant for this research, different types of relationship with partners and stakeholders (ecosystem), might indeed require different types of organisational structural accommodation for a high level of performance to be achieved.
A number of writers have arrived at the same broad conclusion: that the higher the environmental variability and the uncertainty consequently experienced, the more the prevailing structure of organization should be adaptive, with roles open to continual redefinition and with co-ordination being achieved by frequent meetings and considerable lateral communication (Lawrence and Lorsch 1967). Environmental complexity refers to the heterogeneity and range of environmental activities which are relevant to an organization's operations.

Based on these arguments, this research will therefore examine the relationship between external actors (partners of the Lab in its ecosystem), internal factors like leadership and meeting strategic objects and goals, being effective.
For this research environment is considered to also involve natural and social elements of the environment. These elements entail cultural and context related social attributes that could be of significance in determining the Lab’s effectiveness and could help expand the general understanding of environment in SCT, particularly within the context of interrogation. These natural and social elements will be determined in the course of the study.

3.5.2 Technology

Contingency theory has sought to formulate broad generalizations about the formal structures that best fit the use of different technologies (Nohria and Khurana, 2010; Abba,

2018). Child (1972) argues that there has been considerable confusion in the literature as to what technology is and as to what aspects of organisational structure it may influence. They argue that the two most developed approaches to define technology in CT are probably found in Woodward's (1965; 1970), studies of the 'operations technology' of manufacturing organizations and in Perrow's more generalizable analysis of 'materials technology' (1967; 1970). Child notes that both Woodward and Perrow consider that the nature of technological variables presents important implications for the design of effective organisational structure.

This research adopts Perrows and Woodwards definitions of technology in CT. Hence, within the context of this research, operations technology refers to the equipping and sequencing of activities in the organization's workflow, while materials technology refers to characteristics of the physical and informational materials used in the Lab's activities. Later work from Scott (1990, 2003) builds on the work of Woodward (1965), Perrow (1967, 1970) and also Thompson (1967), claiming that three dimensions of technology are most significant for predicting structural arrangements. These are:

a. Complexity or diversity, referring to the number of different items that must be dealt with at any given time by the organization;
b. Uncertainty or unpredictability, referring to the variability exhibited by materials and/or work procedures to the extent to which it is possible to predict what problems are to be encountered or what procedures are to be carried out;
c. Interdependence, referring to the extent to which the items or elements involved in the work processes themselves are interrelated, so that changes in the state of one element affect the state of the others.

Sor (2004) summarises Galbraith (1980) position to above by stating that there was a relationship between the type, quantity and interrelatedness of the above types of information and the organisational structure needed to process them. Together with Scott (1990), Sor (2004) presents organisational structure as a mechanism for processing information – subduing it, summarising it, and simplifying it.

In this research, I will examine whether the above dimensions of technology are true in the case of the UNICEF Innovations Lab. It will seek to find out whether complexity or diversity, uncertainty or unpredictability, and interdependencies in work procedures and processes have predicted or influenced structural arrangements.

3.5.3 Size

Organisational size has been operationalized most often as the number of employees of an organization. The size argument has also a long history within organisational theory. For example, Pugh and his colleagues (1969a) found larger size to be the most powerful predictor of higher values on their main structural factor. Blau (1970) also produced data suggesting that increased size generates structural differentiation within organizations, and that structural differentiation in turn enlarges the absolute (though not the relative) size of an organization's administrative component.

This research will seek to analyse whether size plays a role in determining structural arrangements and consequently the effectiveness of the unit of analysis. Furthermore, size has also being linked to activity and to work strategy. This research will examine whether this is the case with the unit of analysis. This is important because in the humanitarian sector, the implementation of projects is often carried out by a small group of staff working with and through volunteers or local partners. Increasing size is therefore often not directly of relevance.

Child (1972) notes that, the relationship of size to organisational structure cannot, any more than that of technology, be regarded as deterministic. The need to cope administratively with a large number of organisational members and their activities may well impose constraints upon certain structural choices, especially in respect of functions which service the membership as a whole. To address these challenges, solutions have been offered in the literature like, breaking down a large unit into smaller quasi-independent ones (a common enough adaptation among large business and governmental organizations) and the nature of the functional activities may be modified through the application of different techniques or technologies in order that a different administrative system can be adopted. The computerization of systems provides an example. This argument will also be examined in this study to see whether for example the computerization of systems has taken place in the Lab to address administrative challenges.

In addition to how it relates to activities and work strategy within the Innovations Lab, this research also examines the relevance of the size argument by focusing on how the size, i.e. number of persons employed at the Innovation Lab affects the effectiveness of the Lab. It is supposed that because of the nature of its work, size doesn’t play a significant role but

rather efficient procedures and coordination among an adequate number of personnel is much more relevant. Adequate is seen here to represent the right number of purposefully trained personnel for delivering the tasks at hand. Thus, an adequate number of purposefully trained personnel would contribute more to ensuring the Lab is effective in achieving its goals.

Further to above, this research will investigate whether the size of the Labs' innovation ecosystems, as an external influence, has had any significance to its structural arrangement and thereby its effectiveness.

3.5.4 Tasks

Organisational tasks have been operationalised through task uncertainty and task interdependence (Graubner 2006). Task uncertainty refers to the lack of information about how to perform a specific task (Stock and Tatikonda, 2008). Task interdependence is the degree to which individuals perceive that they interact with and depend on others in order to carry out their work (Lin and Huang, 2008, Schneiderjans, 2015). As discussed in chapter two, there exist relationship and interdependencies between actors in innovation ecosystems. Thus, this research will examine the significance of task uncertainty and interdependence on the effectiveness of the UNICEF Innovation Lab.

3.5.5 Culture

Culture has been discussed above with regards to internal environments. It relates to team relationships and as previously noted this variable will be considered in this research as a contingent factor of structural arrangements. It might also have external influences like local culture, that would also be investigated.

In summary, the literature shows that context variables of environment, technology, size and task can influence the structure of an organisation. A congruence of these variables to structure would affect the organisations performance. The relationship of performance to effectiveness was reviewed in the literature and is discussed later in this chapter. Ensuing paragraphs look at the second independent variable of CT thinking - leadership

3.6 Contingency Theories of Leadership (CLT)

Ensuing paragraphs presents a review on the Contingency Theory of Leadership (CTL). It delves into four models of this contingency theory to help design, together with the structural contingency theory, the analytical framework that will guide this research.

According to Villori (2016), contingency theory is one of the most influential theories of leadership, management and organisational behaviour for several decades. Leadership, Villori further notes, has been identified in terms of individual traits, leader behaviour, interaction patterns, role relationships, follower perceptions, influence over followers, influence on task goals, and influence on organisational culture. Most definitions of leadership involve an influence process, but the numerous definitions of leadership that have been proposed appear to have little else in common. They differ in many respects, including important differences in who exerts influence, the purpose of influence attempts, and the manner in which influence is exerted. The differences are not just a case of scholarly nit-picking. Rather they reflect deep disagreement about identification of leaders and leadership processes.

Villoria (2016) notes however that CTL has had a strong theoretical background in behavioural science. In discussing the trajectory CTL has taken, Villoria argues that, while behavioural theories may help managers to develop particular leadership behaviours, they give little guidance as to what constitutes effective leadership in different situations. Critically, CTL emphasises the situational variables leaders must deal with, criticizing the idea of a universal set of traits associated with effective leadership. They also note that researchers in Ohio State University first identified two broad categories of leadership behaviour: consideration (or concern for the welfare of subordinates) and initiating structure (concern for the accomplishment of goals). Later, this theory was refined in different ways, such as the following four categories of leadership contingency theory discussed in this chapter.

As discussed previously leadership style is an important variable in contingency theory. This research seeks to therefore understand the influence of leadership on the effectiveness of the innovations Lab and thereby its possible application within the context of this research.

It will use the below four main categories of leadership contingency theory to carry out this investigation. It seeks to determine which style of leadership is employed in the Lab and how this affects the effectiveness of the Lab.

Firstly, and according to Fiedler's contingency model (1967), there is no single best way for managers to lead. Situations determine leadership style. The solution to a managerial situation is contingent on the factors that impinge on the situation. Fiedler looked at three situations that could define the condition of a managerial task: (1) Leader-member relations: How well do the manager and the employees get along? (2) Task structure: Is the job highly structured, fairly unstructured, or somewhere in between? (3) Position power: How much authority does the manager possess? These environmental variables are combined in a weighted sum that is termed "favourable" at one end and "unfavourable" at the other. Task-oriented style is preferable at the clearly defined extremes of "favourable" and "unfavourable" environments, but relationship orientation excels in the middle ground.

Secondly, the Situational model of leadership (Hersey-Blanchard, 1977) posits that the developmental levels of a leader's subordinates (maturity) play the greatest role in determining which leadership styles (leader behaviours) are most appropriate. Maturity is the willingness and ability of a person to take responsibility for directing his or her own behaviour. The key situational variable, when determining the appropriate leadership style, is the developmental level of the subordinate. As a result, there are four leadership styles:

a. Directing: The leader provides clear instructions and specific direction (task behaviour). This style is best matched with a low follower readiness level;
b. Coaching: The leader encourages two-way communication and helps build confidence and motivation on the part of the employee, although the leader still has responsibility and controls decision-making. This style is best matched with a moderate follower maturity level, specifically when the follower has willingness to take responsibility but does not have ability;
c. Supporting: The leader and followers share decision-making, but the leader provides support and encouragement (relationship behaviour). Participating style is best matched with a follower who has the ability to make things happen effectively but does not have willingness to take responsibility;

d. Delegating: This style is appropriate for leaders whose followers are ready to accomplish a particular task and are both competent and motivated to take full responsibility. Delegating style is best matched with high follower maturity.

They conclude that as the level of followers' maturity increases, the leader should begin to reduce his or her task behaviour and increase relationship behaviour.

The Path-Goal theory (House, 1971) combines two popular theories – goal setting and expectancy – into one. It suggests that effective leaders help those under their responsibility to attain their goals. Under this theory, leaders have the responsibility of making sure their subordinates have the needed support and information required to achieve the goals they are set or set. This theory upholds that effective leadership creates clear paths to direct their subordinates towards achieving goals and that ensure that no obstacles stand in the way to achieving same.

The Decision-Making Leadership theory, also referred to as the Vroom-Yetton-Jago Decision-Making Model of Leadership, argues that effective leaders size up situations, assess them and then determine how much support the group will give toward the effort, before adjusting style of leadership to fit.

This research seeks to measure the effectiveness of the Lab and thereby identify factors that are responsible for the effectiveness of the Lab. For leaders to influence the performance and effectiveness of organisations, they have to establish an organisational environment conducive for that. This research argues that the factors that influence the effectiveness of the team most directly stem from the leadership provided to its structure and to tasks to be carried out by the team. Leadership style in this case is therefore of significance and a contingency of effectiveness in the context of this research.

This research will use SCT and LCT to analyse the effectiveness of its unit of analysis. It will seek to establish the structure of the Lab and the key variables that influence it, and by virtue of their fit to the structure, positively influence performance and thereby effectiveness.

Secondly it will seek to identify the style of leadership in the Lab that positively influences performance and its effectiveness. Here it would look out for characteristics of leadership that directly influence the team and their performance in carrying out tasks.

The concept of effectiveness is key in this research since this research seeks to understand whether the UNICEF Innovations Lab is an effective model to allow innovation to occur in the humanitarian sector. Consequently, the ensuing paragraphs engage with the literature on effectiveness and how it can be measured.

3.7 Organisational Effectiveness - Performance versus Effectiveness.

In the early 1990s, a theory of job performance was proposed (Campbell et al.,1993). The theory defines performance as synonymous with behaviour. It is something that people actually do, and which can be observed. In organisational studies, it includes only those actions or behaviours that are relevant to the organization's goals and that can be scaled (measured) in terms of each individual's proficiency (that is, level of contribution). Performance is what the organization hires one to do and to do well. Performance is not the consequence or result of action, it is the action itself... [and] consists of goal-relevant actions that are under the control of the individual" (Campbell *et al*., 1993, p. 40, emphasis added).

Effectiveness is considered in this research as the evaluation of the results of performance. In reality, effectiveness is "controlled by more than the actions of the individual" (Campbell *et al*., p. 41, Ramalingam, Rush *et al*., 2015). To further highlight the difference between performance and effectiveness, McCloy (2013) proposes that we consider what it takes to be a high-performing sunglasses salesperson. The required characteristics are those that any good salesperson should possess knowledge of the product line, an outgoing and friendly demeanour, and excellent interpersonal (e.g., instructing, social perceptiveness) and communication skills and abilities (e.g., active listening, oral expression). Possessing all of these characteristics, however, will NOT guarantee effectiveness, nor will their absence guarantee ineffectiveness! This is because effectiveness depends on factors extraneous to the person's behaviour, such as location. Imagine that we know the Seattle salesperson to be a much higher performer (better knowledge of the product line, more outgoing and friendlier, etc.) than the Miami salesperson. Despite this, the Seattle salesperson yields lower sales than the Miami salesperson. Thus, the Seattle salesperson is a better performing—but less effective—salesperson. In this explanation, effectiveness is measured by the factor location, in other words, effectiveness is explained and is contingent upon location.

McCloy (2013) notes that it is at the level of performance that organizations have the greater capacity to influence results with appropriate interventions. Thus, appropriate interventions that influence individual and team actions directly influence the organisations effectiveness. Organisational effectiveness is therefore a measure of organisational performance (Mausolff and Spence, 2008; Lecy *et al*., 2012). However, there appears to be little agreement on how to define and measure organisational effectiveness and what it constitutes. This research seeks to address this gap within the context of interrogation and looks to the literature for guidance in determining domains of effectiveness it can use in its analytical framework.

Lecy *et al*., (2012) notes that several authors have operationalised the effectiveness construct. For example, Beamon and Balcik (2008) define effectiveness as the extent to which clients' needs are being met and see efficiency as being how effectiveness is achieved in relation to resources used. In their study of the non-profit sector which focused on organisational effectiveness that considered intentions, missions, visions and objectives, Benjamin and Misra, (2006) concluded that organisational effectiveness is the extent to which a non-for-profit organisation accomplishes its mission and meets its objectives and goals. However, they note that performance measurement involves measuring factors such as inputs, outputs and outcomes, with an emphasis on outcomes. Outcome measures refer to those measures that indicate a qualitative difference in the lives of those served by the organization or programme, not simply a count of those served or what they have received (Lindgren, 2001; Benjamin and Misra, 2006).

This research borrows from these thoughts and supposes that the organisational effectiveness of the UN innovations Lab is the extent to which the Lab accomplishes its mission and meets its goals and objectives. It is thus imperative that the goals and objectives of the UN Innovations Lab are determined, and that the effectiveness of the Lab is measured against these goals and objectives. It also seeks to measure the Lab's effectiveness based on qualitative differences in the lives of those served by the Lab and its programme, meeting the needs of those it serves.

3.7.1 Measuring Effectiveness

Theories around measuring effectiveness can be summarised into four measurement approaches, namely a) goal attainment approach, b) systems resource approach, c) reputational approach and d) multidimensional approach (Lecy *et al*., 2012).

A goals attainment approach emphasises that organisational effectiveness can only be measured by progress towards achieving goals. However, this approach has been criticised particularly in the non-profit sector since NPOs typically lack single and specific goals. Where they do, this approach can be useful. However, to address this limitation, systems resource approach has been proposed, which emphasises organisational survival. Under this approach, organisation effectiveness is viewed as the ability for NPOs to utilise their environment to gain scarce and valuable resources to achieve goals (Ritchie and Kolodinsky, 2003). The approach has been critiqued for its focus on financial variables such as expenditure and revenue to measure effectiveness. As a consequence of this, a reputational approach has been proposed.

The reputational approach relies on the subjective measures of perception of multiple key stakeholders to measure organisational effectiveness (Herman and Renz, 2004). It is based on the belief that organisational legitimacy will enable a non-profit to operate in a particular complex sector with multiple stakeholders. The approach has also been criticised due to stakeholders' lack of consensus on effectiveness, particularly in the humanitarian and development sector where there are no primary stakeholders with decision making rights (Wadongo *et al*., 2014).

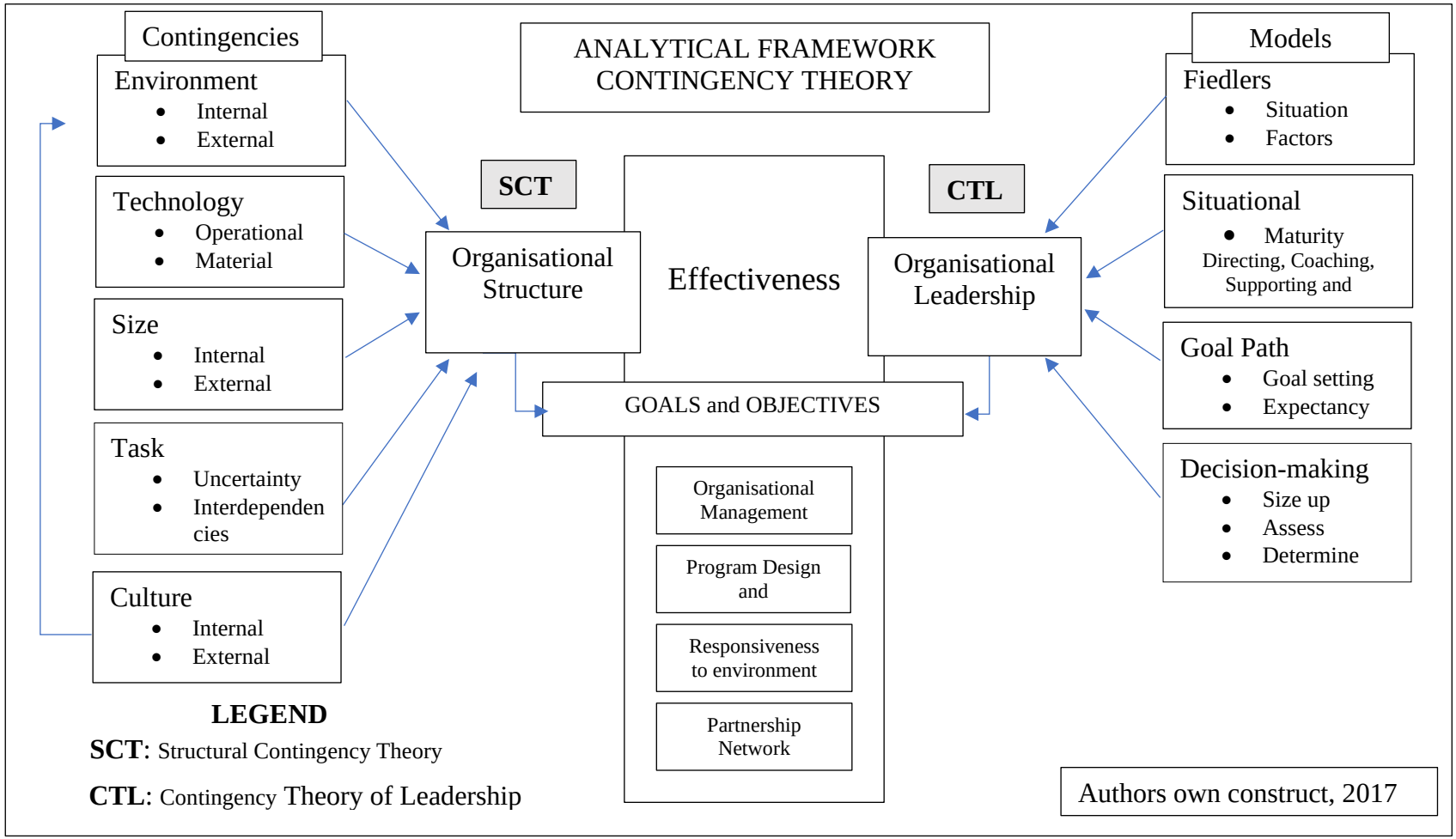
In a bid to address the weaknesses of these four approaches, multidimensional models of effectiveness have been put forward, incorporating aspects of goal attainment, system resources and reputational dimensions of effectiveness at different organisational levels (Kendall and Knapp, 2000; Kaplan, 2001; Sowa *et al*., 2004).

Lecy *et al*. (2012) proposes a model which summarises four multidimensional domains of NPOs effectiveness; organisational management, programme design and implementation, responsiveness to environment and partnerships and networks. This model incorporates elements of goal attainment, resource systems and reputational measurement approaches. In their model, organisational management domain focuses on activities, processes and outcomes of NPOs' own governance and core management systems. The programme design and implementation domain measure the effectiveness of specific projects and programme related to the goal attainment approach. The responsiveness to the environment domain relates to NPOs' capacity and outcomes in relation to resource mobilisation, resistance to political and other negative external influences, to ensure future survival and sustainability. Partnerships and networks incorporate capacity and outcomes of collaborations with other stakeholders in either horizontal or vertical forms across

economic sectors. It is the view of this research that these four domains capture the complex relationships among the indicators of effectiveness and would employ these as part of its theoretical framework to analyse the effectiveness of the UN Innovations Lab.

Despite the potential benefits of the multidimensional model, research has shown that they are difficult to implement in practice, particularly in NPOs, due to their complexity, information overload and lack of resources and experience in such systems (LeRoux and Wright, 2010; Moxham, 2009; Carman, 2007; Lecy *et al*., 2012).
Due to the nature of the Lab's programme which appears to focus on skills development and innovation through programme, this research looks to the multidimensional model of measuring effectiveness. It assumes that key elements of the Lab's work relate to programme development and implementation, resource mobilisation and measures to ensure sustainability, as well as collaboration with key network partners and considers these as essential goals to achieve effectiveness. Hence, it will consider in this study the three domains as put forward by Lecy *et al*., (2012): the programme design and implementation domain, the responsiveness to the environment domain and the partnerships and networks domain to interrogate the general assertion that the Innovations Lab is effective and worth emulating. At this stage of this study, this research does not see a relationship of the Labs effectiveness to the organisational management and domain and has consequently not developed any assumptions on this needing testing in the field. However, it acknowledges that governance and core management systems might influence the main strategic and implementation plans for setting up and running the Lab and would be cautious to observe and document such evidence, should they arise during data collection and the analysis of same.

Table 3.7.1 – Analytical Framework to Measure Effectiveness



3.8 Conclusion

The chapter set out to develop an overview of the analytical framework it would employ in this study to assess the operations and effectiveness of the UNICEF Innovation Lab. Contingency theory was chosen firstly because it has been used to examine the performance of organisations and particularly with regards to innovation. Secondly, it is derived from open systems theory which relates to organisations interacting with environments surrounding them. Thirdly, it has been used to study organisational effectiveness by matching organisational characteristics to contingencies.

In this research, performance is what the Innovation Lab does by way of actions in achieving its strategic goals and objectives, whilst effectiveness relates to what it has achieved of these goals and objectives. Effectiveness considers the Lab's performance (actions taken by its structure and team) and possibly other contingent factors yet to be determined. Thus, a fit of all variables would explain organisational effectiveness.

This research focuses on two independent variables of CT; Structural Contingency Theory (SCT) and Leadership Contingency Theory (LCT). It seeks to use the explanatory power of both theories to examine and identify contingencies and explain how a congruence of fit between the organisations structure and these variables influence and explain the effectiveness of the Lab. Fit indicates consistency between an organisations processes and practices with contingency factors. This research expects that a fit of contingencies to the innovation's Lab structure would explain both processes of adjustments and enhanced performance that would help evaluate the Labs effectiveness. To analyse the effectiveness of the UN Innovations Lab, this study thus employs both theories.

SCT

Structural contingency theory was reviewed in this chapter with its basic variables of environment, technology, size and task. Culture was reviewed with regards to team culture, as an internal environmental factor.

The basic assertion of contingency theory is that the environment in which an organization operates determines the best way for it to organize. Thus, organisational structure is influenced by the environment in which it operates. Consequently, it is important that there is a fit of the organisational structure to internal as well as its external environments. An equilibrium in these external and internal relationships will affect the organisations relevance and efficacy. These internal and external variables are described as

contingencies and moderate the effect of an organisational characteristics on organisational performance.
For this research environment is considered to also involve natural and social elements of the environment. These elements entail cultural and context related social attributes that could be of significance in determining the effectiveness of the Lab. This could help expand the general understanding of environment in SCT, particularly within the context of interrogation.

To measure the impact of the environment as a contingency on structure, this research will look at the degree of change that characterizes environmental activities relevant to an organization's operations. It will also look at the different types of relationship with partners and stakeholders (ecosystem), that might indeed require different types of organisational structural accommodation for a high level of performance to be achieved.
Two aspects of technology were considered. Operations technology refers to the equipping and sequencing of activities in an organization's workflow, while materials technology refers to characteristics of the physical and informational materials used. In determining how technology plays a role in predicting structural arrangements, this research looks at the relationship between the type, quantity and interrelatedness of the types of information and workflow processes that the organisational structure would need to engage with in order to carry out its tasks.
Size has been considered in the literature as being the most powerful predictor of higher values on the structural factor. This research will seek to analyse whether size plays a role in the effectiveness of the unit of analysis. Since size has also been linked to activity and to work strategy, this research will consider how these have impacted on the size of the Lab given that in the humanitarian sector, implementation of projects are often carried out by a small group of staff working with and through volunteers or local partners. Increasing size is potentially therefore not directly of significance.
Task has been operationalised in structural contingency thinking through task uncertainty and task interdependencies. Task uncertainty refers to the lack of information about how to perform a specific task, whilst task interdependence is the degree to which individuals perceive that they interact with and depend on others in order to carry out their work. As discussed in chapter two, there exist relationships and interdependencies between actors in innovation ecosystems. Thus, this research will examine the significance of task uncertainty and interdependence on the effectiveness of the UNICEF Innovation Lab.

LCT

With regards to LCT and its influence on effectiveness, the chapter discussed four models of this theory. Firstly, the Fiedler's contingency model argues that there is no single best way for managers to lead. Situations determine leadership styles and hence the best leadership style that influences effectiveness is contingent on the factors that impinge on the situation. This study will investigate if the identified leadership style is impacted by any situation(s) and what are the factors that impinge on the situation.

Secondly, the Situational model posits that the developmental levels (maturity) of a leader's subordinates plays the greatest role in determining which leadership styles are most appropriate. Maturity is the willingness and ability of a person to take responsibility for directing his or her own behaviour and work. The key situational variable, when determining the appropriate leadership style, is thus the developmental level of the subordinate which is defined by the following four categories: directing, coaching, supporting and delegating. These have been defined and explained in the chapter and will be used to investigate what leadership style is employed in the unit of analysis to achieve effectiveness. Mature subordinates require less directing and should be capable of taking on more delegated work.

Thirdly, the Path-Goal model fuses goal setting and expectancy into one. It suggests that effective leaders help those under their responsibility to attain their goals. Under this theory, leaders have the responsibility of making sure their subordinates have the needed support and information required to achieve the goals they are set or set. This theory upholds that effective leadership creates clear paths to direct their subordinates towards achieving goals and that ensures that no obstacles stand in the way to achieving same. This study will investigate if this is the style of leadership evident in the UNICEF Innovation Lab.

The Decision-making model argues that effective leaders size up situations, assess them and then determine how much support the group will give toward the effort, before adjusting style of leadership to fit. Similarly, this research will investigate whether leadership is conducted in the Lab employing this method or any of the above.

Using SCT and CTL to analyse the effectiveness of its unit of analysis is new. As far as this research is aware contingency thinking has not yet been used in this way to measure the effectiveness of organisations operative in the humanitarian sector. This study will seek to identify how the contingency factors discussed above (and possibly others yet be

identified) have influenced the structure of the UNICEF Innovations Lab and thereby its effectiveness. Secondly it will seek to identify the style of leadership in the Lab that positively influences performance and the Lab's effectiveness. Here it would use the different models presented above to identify which leadership style is most prevalent in the Lab.

Since this study seeks to measure the effectiveness of the unit of analysis and to determine if it is an effective model for innovation to occur in the humanitarian space, the literature on effectiveness was also reviewed. Effectiveness is considered in this research as the evaluation of the results of performance. Performance is defined as the activities of the Lab to achieve its objectives. In practical terms, it relates to programme offered by the Lab. It is thus imperative that the goals and objectives of the UN Innovations Lab are also determined, and that the effectiveness of the Lab is measured against these goals and objectives.
Lecy et al. (2012) proposes a model which summarises four multidimensional domains of effectiveness: organisational management, programme design and implementation, responsiveness to environment, and partnership networks. This study will seek to measure the effectiveness of the Lab using these domains.

In accordance with Repko (2007), this study seeks to translate its contributions to the notable research traditions on organisational studies, particularly the body of literature on structural contingency theory and leadership contingency theory, and their application in Innovation Laboratories within the humanitarian context
The following chapter discusses the methodological approach to be employed this study.

Chapter 4 - Research Strategy: Methodology, Methods and Ethical Considerations

4.1 Introduction

One of the biggest decisions to be made in any research project concerns the choice of a research strategy. Denscombe (2014, p. 3). notes that, there is no single pathway to research: there are always options and alternatives. Crotty (1998) emphasises that, firstly what methodologies and methods will be employed and secondly, how choices related to this are justified is of paramount importance. In his opinion choices of methodology and methods reach into the assumptions about reality that the researcher brings to their work. The purpose of this chapter is to present the methodology and methods chosen that are acceptable in the discipline of social geography and innovation management, and appropriate for answering the research question at hand. It is also influenced by development research and scholarship.

This research borrows from Crotty (1998) in formulating four main questions which will be addressed in this chapter:

a) What methodology governs the choice of and use of the research methods?
b) What research methods will be employed?
c) What theoretical perspective lies behind the chosen methodology?
d) What epistemology informs this theoretical perspective?

Motivations for this research include firstly, the lack of systematic research into the form of Innovation Labs currently operating within the UN system, their aims and objectives, the impact they have had so far and how these can be measured (Bloom and Faulkner, 2015). Secondly, Obrecht and Warner (2016) have also noted that, as the system (humanitarian) seeks to develop a more mature innovation management practice, an important limitation is the lack of empirically grounded research into the specific features of project-level innovations. They emphasize the lack of explanatory research into the factors that contribute to successful innovation processes, concluding that, understanding of best practices for humanitarian innovation remains limited. Thirdly and after extensive engagement with the available literature, it appears that discussions on understanding effectiveness and factors that determine the effectiveness of UN Labs have not yet been integrated into the debate.

This research will seek to fill these gaps in knowledge and understanding. The overarching research question guiding this study is "are UN Innovation Labs effective innovation models in addressing the needs of communities affected by crisis?". This question will be addressed through an in-depth empirical case study analysis of the UNICEF Innovation Lab in Kosovo, one of the oldest Innovation Lab within the UN humanitarian system, and a model which has been replicated in other humanitarian settings over the last decade.

4.2 Research Methodology, Case and Challenges

Crotty acknowledges that research methodology is a strategy or plan of action. It is a research design that shapes the choice and use of particular methods, linking them to desired outcomes (Crotty, 1998, p. 7). A chosen methodology therefore needs to unambiguously describe and also give account of the rationale behind the choice. The rationale behind the choice consequently provides reasoning for the ensuing choice of methods and particular forms in which these methods will be employed.

In addressing the choice of methodology, this study observes firstly that UN Labs are typically situated within a physical environment, that is, in a defined geographical and cultural setting, as well as in a facility that can include virtual or physical spaces. They are typically organised by UN agencies which serve as the principal organisers and managers of innovation activities within this space. Secondly the Labs are typically organised around different stakeholders/actors, playing different roles. Innovation goes through a coordinated process often employing different technologies (tools and mechanisms) to achieve desired outputs and outcomes. This research therefore chose to employ a case study approach for its inquiry. The UNICEF Kosovo Lab was selected for this investigation as it is a self-contained entity with distinct physical, social, environmental, and political boundaries (see Denscombe, 2011, p. 54).

In line with Eisenhardt, this study considers the case study methodology as a research strategy which focuses on understanding the dynamics present within single settings' (Eisenhardt 1989, p. 534). Choosing this methodology provides this research with the possibility of conducting and collecting in-depth accounts of events, relationships, experiences and/or processes occurring in the particular instance of the of the chosen Innovations Lab.

The Lab in Kosovo has been in existence since 2010 and has been considered by UNICEF as successful particularly because of the number of youth and adolescent it has reached and provided training to. The workshop programmes it offers are deemed successful and are being replicated across the globe: Montenegro, Jordan, Iran, and Vietnam. Consequently, the Lab is a template for emulation and replication.

The prospect of getting some valuable insights to answer the research question, depends on being able to investigate the workings of the Lab in depth and through a systematic analytical lens. To gather insights and understandings, a preliminary field study of the site was undertaken early in the study. This was followed by a six-months on the ground engagement in data collection within the Lab in year two of the study.

In collecting the needed data, this research paid attention to the detailed workings of the relationships and social processes within the Lab and also within the context of its geographical location. In utilising the contingency theory analytical approach, it included extensive data collection on the operations, activities, and dynamics within the Lab and also on the wider, external environment and influences. End-products, outcomes and results all remained of interest, but the real value of the case study was that it offered the opportunity to take the necessary time to investigate the complexities of relationships and contingencies in the given context. This exploration of relationship dynamics, operations and processes within the Lab, combined with an examination of the external contingency factors influencing the workings of the Lab, such as national and organisational policy analysis, situational analysis of the post-conflict setting, social and cultural factors within the Kosovo context all combined to provide deep insights into the opportunities and challenges of the Innovation Lab. It sought not only to map the innovation landscape and ecosystem functioning's, but also to understand why things happen as they do within the investigated setting. To understand the effectiveness of the Lab, it was necessary to understand how the various facets of the context were linked together and interact (Denscombe, 2011, p. 56).

The case study approach also suited an ecosystems approach which seeks to explore interacting and interconnected systems, rather than isolated factors that may or may not have a bearing on the effectiveness of the Lab. It viewed the case as a whole, in its entirety, and was thus able to discover how the many parts affect each other. This approach required the use of a variety of types of data and a combination of research methods (including interviews, focus group discussions, document analyses and surveys) as tools for the

investigation. This mixed method approach further allowed for triangulation of the data and verification of the findings.

In satisfying another requirement of the case study approach, this research looked at something that already existed- the UNICEF Innovations Lab in Kosovo. The Lab is not a situation, artificially generated for the specific purposes of the research. It already exists and is operational. Hence this research did not impose controls on variables more typical to traditional deductive scientific experiments. The case is a naturally occurring phenomenon. It existed prior to the research project and continues to exist after the research has been completed.

4.2.1 Selecting the Case

The case was not randomly selected. It was purposively selected following initial research and on the basis of identifiable attributes. As noted above, the Kosovo Lab, located in Pristina, the capital of Kosovo, is one of the first UNICEF initiated and supported Innovations Lab. Kosovo is a disputed landlocked territory and partially recognised state in Southeast Europe. Long-term ethnic tensions between Kosovo's Albanian and Serb populations have left the territory divided, resulting in inter-ethnic violence and the Kosovo War of 1998–99. As a post-conflict setting, Kosovo has struggled to rebuild its economy and its communities, marked by high levels of unemployment, lack of opportunity pathways, and a high degree of specific needs relating to the damages of conflict on the community and surrounding natural environment. Youth Unemployment Rate in Kosovo stood at 57.3 percent in 2019 (Tradingeconomics.com, 2019). The rate averaged 54.47 percent from 2012 until 2018, reaching an all-time high of 61 percent in the fourth quarter of 2014 and a record low of 50.5 percent in the first quarter of 2017. The Kosovan population experienced widespread disruption and displacement before and during the period of the Kosovo war of 1998-99. The current population began the process of resettlement and reconstruction in the early 2000s. Due to the contested nature of the peace agreement, political tensions remain high in the region. Tensions between the Kosovo Albanian and Serbian communities also remain high.

The focus of the Lab, since its inception and in line with UNICEF mission to support children and youth development, has been youth engagement and empowerment through a number of pathways and intervention models. The Lab was set up in 2010 initially as a

project by the UNICEF Innovation Unit, New York. It was called the “By Youth for Youth” (BYFY) project. Its focus was to promote technology related innovations that would benefit the work of UNICEF as an organisation and its work with youth and adolescents in Kosovo. Initially work was on ICT and real-life projects. This BYFY project evolved overtime., into the form of an Innovation Lab 2013 with a specific mandate to support the needs of the c.a 500,000 strong young population of Kosovo. This case study was deliberately chosen on the basis of its distinctive features of being an Innovation Lab that allows innovation to occur through its structured training programmes. As one of the oldest Innovation Labs in operation, it has influenced the emergence of similar Labs across the UN humanitarian system. Thus, an examination of its effectiveness is both timely and relevant, as this model continues to be deployed in highly sensitive contexts, addressing the needs of some of the most vulnerable populations around the world.

4.2.2 Challenges to this Methodology

A number of challenges have been raised against this approach including the generalisability of results and the lack of rigour.

Due to the inductive theory building approach and use of qualitative and ethnographic methods to gather detail, rich insights, sceptics points to the challenge of generalisability of the results (Denscombe 2011, Yin 1984). That is, they argue, that the results cannot be generalised beyond the temporal and spatial conditions of the case study site. Thus, the value of the insights is time and space bound and limited. Denscombe (2011) notes that such questions should not be ignored in the hope that readers of any research findings will overlook the point. He suggests that in the name of good practice, researchers who decide to choose a case study approach should pre-empt possible criticism by acknowledging this limitation and avoiding attempts to generalise the findings.

Yin (1984) identifies two further objections to the case study approach. First, case studies are often accused of lack of rigour. Yin (1984:21) notes that “too many times, the case study investigator has been sloppy, and has allowed equivocal evidence or biased views to influence the direction of the findings and conclusions”. He argues that validity and generalization continue to be challenging aspects in designing and conducting case study evaluations, especially when the number of cases being studied is highly limited (even

limited to a single case). He suggests triangulation as part of the ways to address the problem (Yin, 2013, p. 321).
Secondly, case studies are often labelled as being too long, difficult to conduct and producing a massive amount of documentation (Yin, 1984). Yin (1993) also considered case methodology 'microscopic' because of the limited sampling cases. In the face of such concerns, Denscombe argues that case studies should not be considered as a 'slice of the cake' whose function is to reveal the contents of the whole cake. Instead, the point of a case study is to gather rich and deep data, that can be systematically analysed and use to build theories that can provide insights, understanding, and explanations of social phenomena in a given context.

In accordance with views proposed by Yin (2013, p. 321) this case study was conducted as an in-depth inquiry into a specific and complex phenomenon (the Innovations Lab), set within its real-world context. To strengthen validity and as a critical part of its data collection, the study conducted and documented direct observations of the events and actions as they actually occurred in the local setting (e.g. Erickson, 2012, p. 688; Maxwell, 2004, 2012). It then employed methods of triangulation[7] to strengthen the validity of the inquiry and the trustworthiness of the findings (Yin, 2013, p. 221; Patton, 2002, p. 556−563).
The study acknowledged the challenges associated with generalising the findings of this research to other Labs, particularly because of the immense importance and specificity of context (see Byrne, 2013 and Woolcock, 2013). Recognising this challenge, this research does not seek to generalise its findings to other Labs but rather expects that the developed analytical framework can be used in other similar Lab settings to evaluate the effectiveness of the Lab.

Thus, the case study approach was chosen because it was most suitable for this small-scale research and to meet the needs of this type of research, by concentrating efforts on a single case study site. Secondly the chosen approach took a holistic view on things. By focusing on particular instances, this approach allowed this research to take a holistic view (rather

[7] Data source triangulation is a technique that facilitates validation of data through cross verification from two or more sources. In particular, it refers to the application and combination of several research methods in the study of the same phenomenon.

than one based on isolated factors) and to look in depth at the subtleties and intricacies of a complex social phenomenon. The approach also facilitated the use of methods and multiple sources of data like interviews, surveys, document analyses and focus group discussions. The study was also conducted in a naturally occurring setting. This was particularly suitable for circumstances where it was not possible to manipulate features of the setting for the purposes of the research, like during Lab innovation programmes. The study remained focused on investigating phenomena as they naturally occurred and there was no necessity to impose controls or implement changes to key factors or variables.

4.3 Research Design – Concepts, Methods and Tools

4.3.1 Pre-understanding

Bryman and Bell (2011, p. 414) make reference to the concept of pre-understanding; the prior knowledge that the researcher has about an organization, context, or specifiable phenomena. In their narrative, pre-understanding is often gained through, for instance, literature reviewed and in this particular case, also through the preliminary fieldwork conducted on the UNICEF Innovation Lab in Kosovo. Bryman and Bell argue that pre-understanding can be perceived from both positive and negative points of view: on one hand, the researcher is familiar with the history, key events, and specific jargon of the industry (Bryman and Bell, 2011, p. 414), on the other hand previous knowledge could mean strong assumptions and preoccupation as well as overconfidence (Saunders et al., 2009, p. 151). An immediate challenge therefore was to ensure that pre-understanding did not hinder this research from understanding undercurrents and inner problems of the chosen case, as well as to also ensure that opinions going into the research were not pre-set, leading to prejudicial interpretations and bias. To address this possibility, this research formulated its “pre-understandings” (which were both influenced by reviewed academic/grey literature and the preliminary fieldwork from 2016) into assumptions that it tested in the field by collecting data that could be analysed and interpreted. Reflective field journals and continuous reflective efforts also guided the research and helped to remove and reduce bias.

4.3.2 Data Collection and Methodological Tools

The way to collect necessary data is tightly connected with research purpose, research strategy, and design (Saunders et al., 2009, p. 151). According to Creswell (2009), data

collection in a case study occurs over a sustained period of time. Since the purpose of this research centres around gaining deeper understanding of the case under study, this research chose qualitative methods, which in principle are connected with gathering non-numerical data (Bryman and Bell, 2011, p. 386). Qualitative research also lines up with the later to be discussed research philosophies, because it focuses on processes and often delivers accented sense of change and flux (Bryman and Bell, 2011, p. 404; Saunders et al., 2009, p. 324).

4.3.3 Sampling

Choosing a good sample is crucial for conducting qualitative research (Miles and Huberman, 1994, p. 27). The first step towards choosing a right sample is setting boundaries, which will correlate with available time and resources (Miles and Huberman, 1994, p. 27).

The chosen approach meant that the research was limited by/to the geographical location, i.e. the organization and the people working there and attached to the Lab in some way or form relevant to the research (Bryman and Bell, 2011, p. 60). The characteristics of an appropriate sample depended therefore on the nature and the purpose of the research. The purpose of gaining a deeper insight into the workings of the Lab and its exogenous contingencies, and the analytical framework that will be used to assess effectiveness, required qualitative methods. A qualitative approach typically seeks to assess a small number of cases, going deeply into the qualitative features of these cases, rather than narrowly over a wide number of cases, more typical in quantitative research. Also, this approach used a purposive sampling model to identify specific cases relevant to the study (Miles and Huberman, 1994, p. 27). In this study, data was collected through 65 semi structured interviews, 50 surveys, 2 focus group discussions, and an analysis of policy documents and other relevant content material. Consequently, the research employed a non-probability quota sampling technique with elements of self-selection (Saunders et al., 2009, p. 233, 236). In practical terms, using quota sampling required the researcher to divide the organisation into groups- and then access representatives from each of these groups.

The main participant groups included users of the innovations, senior management (UNICEF Innovation Headquarters), middle management, junior management (UNICEF Kosovo Office), employees of the Innovation Lab Kosovo, key external stakeholders (like funders, implementing NGO partners, academia, external mentors) and other participating

members of innovation processes. The quotas were divided as follows: users- 10, senior Management -3, middle management -5, junior management employees -5, key stakeholders -10 external mentors (academia) and participants -27. Given the small size of the Lab, all Lab staff including local management participated in interviews and surveys. Thus, the sample was thoroughly representative. A self-selection process was only observed with programme participants (who were also users) and external mentors. Only those who volunteered to participate were interviewed or participated in surveys and focus group discussions (see Saunders *et al.*, 2009, p. 241).

The initial stakeholder mapping exercise was conducted during the preliminary field work. Invited to the 2016 "Activate Talks" [8]– this research was able to identify all stakeholders invited to participate in this event. Initial contact was also made with representatives of key stakeholders at this event. A review of this list was carried out during the main field work and verified with the Head of Operations of the UNICEF Mission to Kosovo and the Adolescent lead of the Innovations Lab. Both are responsible for dealing with key stakeholders of the Lab.

The below diagram provides a detailed overview of the sub -questions that guided this study and the corresponding research method(s) used to collect the data.

Table 4.3.3 – Research Sub-questions and Methods

Research sub questions	**Interviews**	**Surveys**	**FGD**	**Document Analysis**
1. History/Form/Structure				
What is the Innovation Lab?	√	√		√
Key contextual factors determining their formation?	√			√
What structure do they assume	√	√		√
What are they designed to achieve?	√	√		√
2. Innovation/Process/Features				
What is innovation	√	√	√	√
Key elements of the innovation process	√		√	√
3. Dimensions of Effectiveness				

[8] In 2016, UNICEF initiated the Youth Activate Talk Series, with two primary intentions: 1) to create a space for young people (children, adolescents and youth) to network and hear from other young people regarding ideas and actions being taken to create positive social, economic or environmental change; and 2) to showcase to decision-makers that young people can and must be engaged as positive "agents of change" in order to create more peaceful, healthy, equal, prosperous and sustainable communities.

What is effectiveness?	√	√	√	√
How is it measured?	√	√	√	√
Parameters of an effective model	√	√	√	√

Source: Authors own construct

4.3.4 Interviews

A key method, widely used in qualitative research, is the interview (Bryman and Bell, 2011, p. 201). Qualitative interviews can be divided into structured, semi-structured, and unstructured subcategories, dependent on the level of formality and appropriateness to the context (Saunders *et al*., 2009, p. 320). Structured interviews imply a strictly defined set of questions for every interview, while semi-structured are based on a set of questions that can be varied dependent on the situation (Saunders *et al*., 2009, p. 320). Unstructured, or in-depth, interviews are absolutely informal, guided only by the list of topics that might be discussed (Saunders *et al*., 2009, p. 321).

This research conducted semi-structured interviews in order to understand, for example, what necessitated the establishment of the Lab, to identify what the Lab is achieving, and the project level features of innovation activities. Semi-structured interviews were carried out with all participants across all groups. This method also helped the research focus on areas that were accentuated by respondents especially during the preliminary field work, particularly with regards to mapping out key stakeholders.

In order to conduct interviews a list of possible candidates was developed based upon the identified groups of key stakeholders. Details of people to contact was provided by the Innovation Lab leads. Additional names were added to this list where necessary and upon recommendation of interviewees, if they felt that others would be better placed to answer research questions. This however only happened three times.

Potential candidates were then contacted either via telephone or email and interview times arranged. Interviews were conducted at locations chosen by the individuals to be interviewed. Interviews were conducted only with individuals who gave their prior consent to participate in them. Interviewees were allowed to at any time call off the interview and leave, if they wanted or needed to do so. (see Appendix 2 for consent form)

4.3.5 Focus Group Discussion (FGD)

Focus group discussions are a method of collecting qualitative data by engaging a group in discussion to learn of their collective experiences and to explore group dynamics

(Wilkinson, 2011, Neuman, 2011). Discussions are conducted in a moderated environment set around a predefined framework of questions, but with space for collective reflection and deliberation (Bedford and Burgess, 2001). An advantage of this method is that as different stakeholders (in this case, drawn from programme participants, users, external mentors) are brought together to discuss, interact, and share their experiences of the Lab, it helped to explore differences in meanings, and group dynamics through the process of collective deliberation, as participants explore to the phenomenon under investigation (see Conradson, 2005). Criteria used to select participants included their first-hand knowledge of and engagement with the work of the Lab. Discussion groups were deliberately small in number, with 8 participants per session. Two sessions were conducted during the fieldwork. The researcher moderated the discussion, encouraging open and free reflections and deliberations around a pre-defined set of questions (see Neuman 2011; Marshall and Rossman 2006).

Of the participating members of the focus group discussions, only four participants, also participated in the interview and survey stages of the study. These participants were mentors of teams. Similar questions like those used during interviews were employed. They comprised of open, closed and probing questions associated to pre-defined themes. In order to have a diversity of opinions and to encourage participation within the two focus groups, each group was made up of a mixed group with the female gender in each case, dominating in ratio 60% - 40%. Participants were identified and selected at programme workshops. Each group consisted of a facilitator (member of staff of the Lab), participants (a representation of students attending the workshop), a mentor (purposely trained to lead a team participating in the Lab's workshop) and a representative of a donor organisation). Although the option of single gender FGDs was offered, this was declined by all participants, claiming there was no problem or need for it. It was observed that the female voices at each FGD emerged more strongly than their male counterparts. The mixed group was used to explore how both men and women conceptualise the innovation process. It brought out a diversity of views and enabled participants to debate the effectiveness of the innovation processes and consequentially that of the Innovation Lab itself.

Participants were willing to challenge each other's views, and this provided an opportunity to explore the diversity of perspectives and the dynamics of group interactions within the Lab. Furthermore, the socially oriented nature of the group discussion enabled the participants to be understood in a more social setting. The dialogic format allowed space

and time in the sessions to explore unanticipated issues as they arose. Data collected at FGD's was also used to verify and confirm information collected through interviews.

Focus groups are often criticised for their inability to allow individual perspectives to come out more visibly as the group opinions may overshadow personal perspectives (Conradson 2005). To address such issues, this research complemented the focus group discussions with key informant interviews. Both interviews and focus-group data provided qualitative data, which were recorded, transcribed and analysed, by searching for themes that occurred across both methods. This research thus used the recorded discussions for a thematic analysis.

4.3.6 Surveys

Qualitative survey research is a research methodology used to gain in-depth information about people's underlying reasoning and motivations. The end goal is to develop a deep understanding of an issue. According to Groves *et al.* (2004, p. 4) “the survey is a systematic method for gathering information from (a sample of) entities for the purpose of constructing quantitative descriptors of the attributes of the larger population of which the entities are members.” The qualitative type of survey does not aim at establishing frequencies, means, or other parameters but at determining the diversity of perspectives within a given population. This type of survey does not count the number of people with the same characteristic (value of variable) but it establishes the meaningful variation (relevant dimensions and values) within that population (Janson, 2010).

Surveys were conducted with Lab staff and users of innovations and the previously identified management team members. Participants were identified during a visit to the Lab and asked to participate in the survey. Again, consent was given before surveys was conducted. Participants were also given the opportunity to share their survey with the researcher via an online tool and email. In such cases Kobo Tool was used that allowed data to be securely collected and stored online. The research employed open ended questions similar to those in the interviews, to later facilitate triangulation. Surveys were important in this research for also elucidating aspects of Lab processes and outcomes, as well as help the research to understand the structure of the team, team tasks and elements of the team climate.

4.4 Research Philosophies: Theoretical Perspective and Epistemology

Crotty (1998) suggests that there exists an interrelationship between the theoretical stance adopted by the researcher, the methodology and methods used, and the researcher’s epistemological perspective. As depicted above, the choice of methods employed in this research were influenced by the research methodology chosen- the case study methodology. This methodology, in turn, is influenced by the theoretical perspectives adopted by the researcher, and, in turn, by the researcher’s epistemological stance.

This methodology permitted space for the primary actors to engage in knowledge sharing and co-creation; and how the data provided understandings and insights into the lived experiences of the participants. Cuba (1997), Crotty (1998) and Bailey (2008) suggest that

every research needs to be explicitly embedded in a defined philosophical framework (Saunders et al., 2009: 108). Such philosophical frameworks are rooted in particular ontological and epistemological world views. Thus, explicitly outlining this framework is an important activity to explain the underlying research assumptions that inform the study concerning the nature of reality and how knowledge is to be generated and constructed through the process.

Within the philosophy of science, there are three dominant epistemological perspectives – objectivism, constructionism and subjectivism. Objectivism holds the stance that meaning and meaningful reality exists apart from the operation of any consciousness. Thus, meaning is only discovered. Constructionism opposes this, arguing that truth and therefore meaning come into existence in and out of engagement with the realities of the world. Meaning is therefore not discovered but it is constructed, influenced by social, historical, geographical, and economic factors and is subject to change over time and space. As Crotty (1998, p. 8) notes, different people may construct meaning in different ways, even in relation to the same phenomenon and hence the need to provide evidence (data) to support assertions. A third epistemological stance is subjectivism. Here meaning does not come out of an interplay between subject and object but is imposed on the subject by the object. In this knowledge stance, the object makes no contribution to the generation of meaning. (Crotty 1998, p. 9)

This study is rooted in a constructionist perspective – in seeking to construct understandings of the effectiveness of the operation of this Innovation Lab by those who interact and shape this space. Furthermore, and in keeping with this perspective, the research is inductive in design. Through the inductive approach, the researcher engaged in processes of pre-understanding through engaging with the research site and key actors in advance of the study design. On the basis of this constructed pre-understanding, the research design emerged, and research plans were established and agreed with the potential participant groups.

4.5 Triangulation

As an inductive, qualitative, research design, aimed at exploring a complex context, and uncovering diverse understandings and perspectives, this research combined multiple methods, both to collect rich and deep data, and also to ensure the credibility and

trustworthiness of the research process and its findings (Seale 1999). In this case, the objective was to increase confidence in the findings through the confirmation of a proposition using two or more independent measures (Heale and Forbes, 2019). The combination of findings from two or more rigorous approaches provided a more comprehensive picture of the results than either approach could do alone. Though complex and sometimes challenging, it had an advantage of testing the robustness of the data and increasing the soundness of the research findings.

According to Davies and Dodd, reliability and trustworthiness are promoted by combining methods and data sources to cross-check information (Davies and Dodd 2002). Creswell also claims that triangulation minimises the biases associated with using a single method and data source (Creswell 2009). Others argue that triangulation increases the 'rigour and depth' of research outcomes. It also allows the researcher to learn and understand phenomenon by 'observing from multiple perspectives' (Norman and Yvonna, 2002, p. 8; Neuman 2011, p. 164). Consequently, this research used triangulation to promote reliability and trustworthiness, minimise bias, increase the rigour and depth of research outcomes by observing from multiple perspectives.

Neuman (2011) identified four approaches to triangulation: measure, observer, theory and method. Triangulation of 'measure' takes multiple measurements of the same phenomenon. For example, in this research establishing what innovation means to stakeholders was measured by using data from both interviews and surveys. Employing such multiple sources/measures, increased the trustworthiness and credibility of the responses.

The triangulation of 'observer' is where multiple persons bring multiple or alternative perspectives, backgrounds and social characteristics to bear on a phenomenon (Neuman 2011). It involves using multiple theoretical perspectives to plan research or interpret data. This can provide an opportunity to use multiple lenses to view the social world. In this research this insight was to be gained by interviewing different stakeholders on for example, what they see as effective innovation or their understanding of strategies that helped define the structure being used in the innovation Lab to develop and diffuse innovation. Here alternative perspectives from multiple observers helped interpret the data.

Triangulation of 'method' comprises combining varied methods- mixing qualitative and quantitative approaches in data collection and analysis. This was essential and useful in this study because each approach had its strengths and combining them made the research

findings more rigorous. Bryman (2006) argues that triangulation of research methods is good for convergence, corroboration and validation from different methods. In this research, it allowed for complementarity because by using mixed methods, I could illustrate, elaborate and clarify how results from different methods complemented each other. It also enabled me to have a more comprehensive and complete understanding of the issues under study as suggested by Bryman (2006).

Sometimes focusing on extraordinary events did not help me to understand the everyday events. To ensure trustworthiness and credibility of my research findings, the data interpretation was undertaken through comparing research participants' accounts with my observations and field reports I gathered whilst on site. Consequently, the credibility of my findings was ensured through reflexivity, being self-critical and through triangulation of the different data. In combining various methods, this research remained aware of the ethical obligations and relationship to research participants.

4.6 Research Ethics, Positionality and Reflexivity

4.6.1 Research Ethics

Research ethics and adherence to it is critically important in research. Basic ethical concerns relate to the possibility of harm that may arise during the course of the research. Two key instruments used to protect participants against potential harm are informed consent processes and research participants' anonymity processes (Silverman 2013b; 2001). Researchers are mandated to ensure the confidentiality of their research participants (Ryen 2011; Silverman 2010). It is also incumbent upon the researcher to ensure that the research is practicable (Marshall and Rossman 2006).

This study underwent a rigorous research ethics process as a requirement of the discipline of Geography, which is located in the School of Natural Sciences at Trinity College Dublin, where the researcher is based. In line with Trinity College Dublin's Policy on Good Research Practice, all research in the School of Natural Sciences (SNS) should be conducted according to the overarching ethical principles of "respect for the individual subject or population, beneficence and the absence of maleficence (research should have the maximum benefit with minimal harm) and justice (all research subjects and populations should be treated fairly and equally). Consequently, an Ethical review

conducted through a research ethics application process was required before this study commenced. Details of the ethical considerations and measures taken to reduce risks and mitigate impacts can be found in the appendices section of this thesis where a copy of the approved research ethic application has been included.

In this research anonymity and confidentiality were ensured through the use of pseudonyms. During fieldwork, all research participants were reminded that their participation was voluntary, primarily for academic purposes, and any recording will only be carried out with their consent (see Dowling, 2005; Limb and Dwyer 2001; Valentine 2001). This is in consonance with research requirements that specify that research always has to be carried out in an unconstrained way, and to make the decision to participate or otherwise be based on sufficient and accurate information about the research (Hammersley and Atkinson 2007).
Furthermore, participants were also advised to be free to withdraw from the research at any time. Adhering to these ethical issues was crucial for this research since research should not be perceived as exploitation. It must focus on elucidating the 'truth' or 'truths', while also recognizing the respectful relationship to the researched.

4.6.2 Positionality

Positionality explains the relationship between the researcher and researched (Crang and Cook 2007; Hammersley and Atkinson 2007). There is often the debate as to whether insiders or outsiders will be in an advantageous position to study a group or an issue (Miles and Crush 1993; Crang and Cook 2007; Rose 1997). However, knowledge is produced through dialogic processes; hence the outsider or insider status of the researcher can be of secondary importance in the research process (Miles and Crush 1993). It is the researcher's ability to negotiate barriers and opportunities that determine the quality of data produced, not necessarily his/her insider-outsider status during the research process.

Barriers and Opportunities

This was the first PhD research project to be undertaken in collaboration with the UNICEF Innovations Lab in Kosovo. Generally, the Lab team was very welcoming and supportive of the research. With a lot of international organisations working in Kosovo, the researcher was aware that he could be mistaken for someone working for an international organisation. As an adult male, the researcher was also aware that engaging with

particularly the female population in a predominantly Muslim Kosovo could pose a challenge. As an emerging researcher, the researcher was conscious of this being the first time conducting such research and the possibility of making mistakes. This made the researcher be aware and more self-reflective of his position.

The initial contact with the Lab, as previously noted, was in January 2017. The researcher had contacted the Labs lead via email about the possibility of carrying out research on the Lab and its activities. Consequently, he was invited to attend the "Activate Talks". Contact was then made personally with the Head of Office at this event. A follow up meeting ensued the next day at the Labs premises in Pristina. After some interrogation, the researcher was granted the permission to carry out the research by the Acting Head of Office and officially introduced to both Lab leads. Both Lab leads welcomed me to work with the Lab team and he was offered the possibility of working with the team at their premises in Pristina.

The first barrier experienced had to do with being hosted by UNICEF. Since the researcher was invited to and arrived at the initial workshop programme with UNICEF and was also introduced to participants by the Lab's team members, it was initially perceived by participants that he was a staff member of UNICEF. Consequently, respondents at initial interview session appeared to respond in favour of UNICEF's efforts in helping them and their country.

The researcher observed that UNICEF occupied a prominent and respected position in the minds of participants. This mindset influenced their perceptions of the UNICEF run Innovation Lab. It became obvious that this research was not going to get open and truthful answers to research questions, if the research was carried out in the presence of UNICEF staff or at their office premises. It became imperative to firstly reset understanding that the researcher was in fact an independent researcher. Secondly, the processes around access to participants and hosting of data collection activities –needed to ensure some privacy and space for the participants to engage openly and truthfully.

To address this barrier, interview, survey locations and focus group discussions were moved to locations outside of Lab programmes and the Lab office. Interviews were conducted at university premises of student and staff participants and in public spaces for other participants.

Secondly, it was imperative to remain conscious of the potential language barrier and also socio-cultural challenges that this research could face. As the researcher was coming from a different socio- cultural background to those participating in the study, he was aware that he would be encountering social values and norms with which he was not familiar. The researcher was also conscious of the potential cultural and language misunderstandings that could occur.

Thus, every effort was taken to ensure that this unfamiliarity did not cause misunderstandings that could be potentially detrimental to the research. As the research was to be carried out predominantly in English it was essential to ensure that all of the material was easily comprehensible to a non-native-English speaker. (English has become a commonly used language in Kosovo and the most spoken language after the local Albanian language, particularly by young people). Failure to do so could have possibly alienated participants and severely skewed the data. On two occasions, where it was necessary to conduct and complete interviews with key informants, the services of a translator were sought.

Kosovo is deemed a secular state with no state religion. However over 95% of the population profess to be Muslim. The researcher observed some challenges with interviewing female candidates alone as a foreigner and non-Muslim male individual. It appeared that some female participants and some male participants felt uneasy being interviewed alone by me.
To address this challenge, the researcher chose to interview all female participants in public spaces and in the presence of their peers. Two interview sessions were for example conducted with two – three female participants together in the open public reception area of the university.

4.6.3 Reflexivity

Researchers are encouraged to be self-reflective of the information they gather and what they report. Reflexivity is the ‘consciousness of self in facing the political dimensions of fieldwork and construction of knowledge’ (Nagar and Geiger 2007, p. 2). It entailed a recognition that knowledge is shaped by the fluid and changing social identity and positionality of the researcher (*Ibid.*).

Butz (2010, p. 146) advocated for critical reflexivity which focused on the need to 'produce knowledge and representations that self-consciously recognize the place of the researcher-self in the production of that knowledge', by subjecting ourselves and research setting to analysis. DeLyser (2010, p. 347) also warned researchers to move "beyond superficial notions of objectivity to embrace the unfolding positionality of each researcher in each research-engaged community; careful reflexivity is an obligation of writers to the community, to the readers, and to her or himself." This implies that researchers need to recognize that their responsibility go beyond themselves to the social groups they represent in our findings. The knowledge that is produced is also situated knowledge (Rose 1997).

During the study, the researcher focused on producing knowledge that self-consciously recognised the researchers place in the production of knowledge. The researcher embraced this positionality in the community they were engaging with. By recording interviews and maintaining a journal, the researcher was careful to ensure that the research outcomes weren't affected or influenced by their predispositions and pre-understanding of innovation and innovation mechanisms, but represented situated knowledge – knowledge coming from those being interviewed and surveyed, as well as participants of focus group discussions (Rose 1997).

4.7 Data Analysis and Interpretation

Data analysis and interpretation are critical components of the research process. It involves transcribing, reading, examining, coding, organising and interpreting data generated either manually or technologically. In data analysis, we explore how the data relates to the research objectives, conceptual and theoretical perspectives. Silverman (2013b; 2011) argues that data analysis goes on throughout the research process, from the conception and formulation of the research questions, data collection and final write up. It spans the entirety of the research process (see Silverman 2013a; 2013b).

The data for this research was analysed by initially transcribing the recorded interview data, identifying common and divergent ideas, developing themes and relating them to existing themes and identifying the emerging ones. Descriptive statistics such as tables, percentages and graphs were used to analyse the survey data to illustrate and/or present respondent ideas and views. In data analysis, coding and development of themes can be undertaken either theoretically or empirically (Silverman 2013b; Kvale and Brinkmann

2009). The analysis of the data for this research used both theoretical and empirical coding and themes. Theoretical or concept coding was used to develop themes and categories from existing literature and relating them to the new setting – the Innovations Lab in Kosovo (Graneheim and Lundman 2004; Elo and Kyngas 2007; Neuman 2011).
This was done in this research by employing categories from the developed conceptual and theoretical frames. The conceptual framework developed around Living Labs as presented in chapter two, seeks to determine the network structures of the Innovation Lab as a Living Lab network operative in an innovation ecosystem. It further seeks to identify key actors and their roles in such Labs during innovation processes. Consequently, the following themes were used for the analysis of the data: space, context, actors, process, model and outcomes.
Categories from the theoretical framework centred around structural contingency theory variables of environment, technology, size, tasks and culture factors, and leadership contingency theory styles presented in chapter three. The effectiveness of the Lab was also analysed based on how these contingencies influence the Lab in achieving its goals and objectives.

The analysis of the collected data was undertaken by manual methods and also engaged with technical mechanisms including Microsoft Excel and Nvivo which were used to diagrammatically represent analysed data. Data from documents were both analysed using existing themes and new themes emerging from the data.
Documents analysed included National Development Strategic plans, policies and internal reports of UNICEF Mission Kosovo, UNICEF Global Innovation Unit and reports from key stakeholders like Donors from 2008- before the introduction of the UNICEF Youth Project that led to the establishment of the Innovations Lab in Kosovo.
Manual analysis and interpretation were done by immersing myself into the interview data, listening, reading and understanding them, developing themes and interpreting the data (Broom 2005; DiCicco-Bloom and Crabtree 2006). This approach was essential because as Silverman (2013b) argues, interviews enable respondents to talk about issues that are of interest or affect them, hence the need to analyse people's opinions critically
Interviewees' opinions gave direct access to lived experiences of the people (Holstein and Gubrium 2011; Riessman 2011). My duty was to analyse these narratives as elucidating people's perceptions and experiences, to ensure interpretations are correct and accurate.
The data analysis was guided by the understanding that one can attach multiple meanings

to peoples' experiences (Holstein and Gubrium 2011). Thus, the stories of the effectiveness of the Labs work in achieving its objectives and those of participants were analysed. The accounts of interviewees were considered plausible accounts of what form innovation takes and what are the contingent factors that make it effective (see Silverman 2013a: 2013b).

Focus group and interview data were analysed based on above themes and criteria. Wilkinson (2011) recognised two approaches in analysing focus group data: content and ethnographic. Content analysis was undertaken by summarising the data gathered from the field. It involved inspection of the data, looking for prevailing themes and integration of quotes from discussions into the writing (see Braun and Wilkinson 2003). Ethnographic analysis comprised observation of and reflection on what transpired among the participants during the data collection activity. This involved selection of peculiar aspects of the discussion and subjecting them to critical analysis and relating them to other conceptual and theoretical perspectives and evidence. Analysing the data included looking for routine interactions and not essentially the 'extraordinary events', though those 'extraordinary events' were also important (Silverman, 2013a).

4.8 Conclusion

In designing a research strategy for this inquiry, this chapter set out to answer four main questions:

a) What research methodology will be used for this study?
b) What methods will be employed in data gathering?
c) What theoretical perspective lies behind the chosen methodology?
d) What epistemology informs this theoretical perspective?

This research chose to employ a case study methodology. It observed that the unit of analysis, like many other UN Innovations Lab, are structured within an environment in a defined geographical and cultural setting, as well as in a facility that is a virtual or physical location. It thus qualifies as 'a case' - a self-contained entity with distinct boundaries (Denscombe, 2011, p. 54).

The study also further observed that UN Labs are also typically organised around different stakeholders/ actors, playing different roles in supporting innovation processes. Innovation activities are conducted through coordinated processes that often employ different

technologies (tools and mechanisms) to achieve distinct outcomes. As a unit that represents other UNICEF Labs (other instances), it can be studied and illuminating the particular instance of the Kosovo Innovations Lab would allow this study to illuminate the general.

The chosen case study strategy allows this research to also focus on the dynamics to be seen and tested within a single setting, providing it with an opportunity to conduct and collect in-depth account of events, relationships, experiences and processes occurring in it. In order to understand why things, occur, the way they do, this approach permits this study to engage with the relationships and social processes within the Lab and its context. This approach is key to unravelling the complexities of relationships and contingencies in the selected context, bearing in mind that relationships and processes within the Lab and its social settings, are interconnected and can explain why things happen as they do. To understand the effectiveness of the Lab, it is necessary to understand how the various facets of the context are linked together. The case study methodology has helped this research to look at this Lab and its operations holistically, to identify the many parts that affect each other and has thereby allowed the use of a variety of data collecting tools for this investigation.
The Lab in Kosovo was selected on the basis of known attributes. It was one of the first UNICEF initiated and supported innovations Lab, located in Pristina, Kosovo - a country under reconstruction after years of conflict and war. It has a relatively large youth population with high youth unemployment, registered at 57.30 percent in the fourth quarter of 2018. It was set up specifically as a project facilitating the needs of young people of Kosovo

The main area of criticism by sceptics to the case study approach relate to the question of its appropriateness as a measure in explaining phenomena in other cases by generalising findings of one case. Sceptics question how representative is the case and do the findings not possibly only relate to the investigated case? Yin (1984) has also similarly argued that the question usually raised against case studies is about how one can generalise from one single case. He notes as well that case studies are often accused of lacking rigour, with researchers being sloppy and allowing biased views to influence their research findings. Despite such objections., this study considered this approach as the way to conduct this study – collect data, analyse the situation and arrive at certain concepts and propositions that explain what is happening and why, and in the particular setting where the Lab is

being investigated. This research further contests that to arrive at a sound understanding of the case, the study was not limited to investigating the case in isolation but examined the likely interactions between the Lab and its context, documenting direct observations of the events and actions as they actually occurred in the local setting, in order to strengthen its validity. Data source triangulation was further used to strengthen findings.
To address the issues around generalisation, this research envisages that the analytical framework developed for this study may be employed to similar Labs to measure their effectiveness.

The purpose of gaining a deeper insight into the workings of the Lab and the assumptions made regarding its effectiveness required a qualitative research approach as a consequence. A sample appropriate for this research corresponded to the following requirements: firstly, it was small, and secondly, it was purposive (Miles and Huberman, 1994, p. 27). For this research and in order to both fit the time limits and reach necessary levels of validity, data was collected through sixty-five semi - structured interviews, fifty surveys, two focus group discussions and an analysis of policy documents and other relevant content material. The research was conducted using selected samples rather than a use of statistical randomness. Consequently, the research employed a non-probability quota sampling technique with elements of self-selection (Saunders *et al.*, 2009, pp. 233, 236). In employing this self-selection method, this inquiry was careful to ensure that the research would achieve a high likelihood of the samples being representative of programme participants of innovation processes by allowing selection from groups directly participating in such activities.

This research conducted semi-structured interviews in order to understand for example what necessitated the establishment of the Lab, as well as to identify what the Lab is achieving, and the project level features of innovation activities. Interviews were carried out with individuals working in the Innovation Lab itself, key stakeholders, users of the innovations, participants in innovation processes and different level of management: senior, middle and lower management team members in both UNICEF Innovation Headquarters and the UNICEF Innovation Lab in Kosovo. Surveys were conducted with Lab staff and youth participants of Lab programmes. In moderated focus group discussions, different people (facilitating staff members student participants, mentors and representatives of donors) were brought together to discuss their experiences with the

Innovations Lab, it helped to explore differences in meanings that participants at these discussions ascribed to the phenomenon under investigation. In order to have a diversity of opinions and to encourage participation within the two focus groups, each group was made up of a mixed group with the female gender in each case, dominating in ratio 60 percent - 40 percent. Similarly, the female gender dominated in both interviews and surveys.
This research employed the constructionist stance to construct meaning to the phenomenon under investigation by engaging with the organisation and its objects. It sought to interpret the effectiveness of the Lab (object) in light of its constructs - structures, users, stakeholder/actors, roles/tasks, processes but also by engaging with its 'world' – environment, technology and size. Consequently, the validity of collecting data for analyses to construct meaning was given. Constructionism argues that truth and therefore meaning come into existence in and out of engagement with the realities of the world. There is therefore no meaning without mind. Meaning is therefore not discovered but it is constructed - constructed in and out of interaction between human beings and their world, and developed and transmitted within an essentially social context

Due to the complexity of this research and the diverse questions it sought to answer, this research, as can be observed above, combined varying methods to increase the credibility and trustworthiness of the research process and its findings. Triangulation in research is the use of more than one approach to researching a question. The objective in this research was to increase confidence in the findings through the confirmation of a proposition using two or more independent measures. The combination of findings from two or more rigorous approaches provided thus a more comprehensive picture of the results than either approach could do alone.
In the conducting of this research, participants were also advised to be free to withdraw from the research at any time. Adhering to these ethical issues was crucial for this research since research should not be perceived as exploitation. It must focus on elucidating the 'truth' or 'truths', while also recognizing the respectful relationship to the researched. The approved ethics application and its constituent parts thus guided this research.

In addition to negotiating barriers and opportunities, and identifying with the people under study, this research was also conducted with the view that the researcher occupies fragmented, multiple and heterogeneous positions in the process, and hence the need to be flexible and dynamic. The study also focused on producing knowledge that self-

consciously recognised the place of the researcher in the production of the knowledge. It embraced the unfolding positionality of the researcher in the engaged community. The research was careful to ensure that research outcomes weren't affected or influenced by predispositions but represented situated knowledge (Rose 1997).
The data for this research was analysed by initially transcribing the recorded interview data, identifying common and divergent ideas, developing themes and relating them to existing themes and identifying the emerging ones. Descriptive statistics such as tables, percentages and graphs were used to analyse the survey data to illustrate and/or present respondent ideas and views.

The analysis of the data for this research used both theoretical and empirical coding and themes. Theoretical or concept coding is concerned with developing themes and categories from existing literature and relating them to the new setting (Graneheim and Lundman 2004; Bos and Tarnai 1999; Elo and Kyngas 2007; Neuman 2011). This was done in this research by employing categories from the reviewed and discussed concepts around innovation networks and ecosystems and the theoretical frame based on contingency theory. For this research, newly identified themes were developed inductively from the research data.
Analysis of data were undertaken by manual methods, combined with other tools such Microsoft Excel and Nvivo used to diagrammatically represent analysed data. Data from documents were both analysed using existing themes and new themes emerging from the data. Content analysis was undertaken by summarising the data gathered from the field. It involved inspecting the data, looking for prevailing themes and integrating the quotes from discussions into the writing.
To ensure trustworthiness and credibility of the findings of this research, the data interpretation was undertaken through comparing research participants' accounts with the researcher's observations and other reports. Consequently, in this research, the credibility of the finding was ensured through reflexivity, being self-critical and through triangulation of the different data.

The analysis of collected data thus focussed on filling gaps in prior research and adding to knowledge in the areas of development studies, innovation research and organisational theory. This research crosses boundaries by delving into knowledge bases primarily in geography and business studies , seeking to provide results of its examination of a model

of innovation that would support humanitarian and development actors in resolving some of the challenging issues they are facing in meeting the needs of communities affected by complex emergencies.

It sought to address the gap in the literature pertaining to what Innovation Labs like the UNICEF Lab in Kosovo are truly achieving (Bloom and Faulkner 2015). But it also sought to understand how the Lab was established and what are the project level features of innovation in this Lab (Obrecht and Warner, 2016). It further engaged with the data to identify what model of innovation the Lab represents and the characteristics of same with the intention of providing the frame of a model of innovation that would allow for innovation to occur in humanitarian settings. It looked to the innovation management and ecosystems literature to identify actors and actor roles. It also sought to define dimensions or domains of effectiveness -areas where the Lab is evidentially successful in achieving its goals and objectives and to develop from that a list of contingent factors for effective Lab activities. It consequently sought to add to knowledge in innovation management, (particularly innovation ecosystems), humanitarian action and organisational theory and performance. The rest of this dissertation is organised as detailed previously.

The following codes were used for respondents in this study:

SM -	Senior Management (UNICEF Kosovo)
MM -	Middle Management (UNICEF Kosovo)
JM -	Junior Management (UNICEF Kososvo)
MEST-	Ministry of Education, Science and Technology, Kosovo
D -	Donor Organisation
Consultant –	UNICEF employed Programme Consultant
P –	Workshop participant
PEN -	Peer Educators Network (implementing partners)
B -	Private sector entity
ID	Internal; Evaluation Document

Table 4.8 – Respondent Legend

Interviews	**Surveys**	**FGD's**	**Document Analysis**
SM, MM, JM, MEST, D, Consultant, P, PEN, B	SM, MM, JM, D, B	SM, MM, JM, MEST, D, Consultant, P, PEN, B	ID

Source: Author's own construct

Chapter 5 - Historical Context and Causal Factors

5.1 Introduction

The purpose of this initial results chapter is twofold. Firstly, to provide the historical context and reasons for establishing the UNICEF Innovations Lab in Kosovo; secondly, to provide an in-depth analysis of the performance of the UN Innovations Lab. Drawing upon document analysis, interviews, surveys and focus group discussions, the chapter presents findings to this inquiry. This analysis is important for two reasons:

a. Since its inception there has been no focused empirical study on this model of innovation and what it is achieving (Bloom and Faulkner, 2015);
b. Secondly there is a lack of empirically grounded research into the specific features of project-level innovation (Obrecht and Wagner, 2016).

Providing empirical evidence is important because it will elucidate the purpose for the Lab's existence, the strategic reasoning behind it, and the goals and objectives of this entity. It also maps the key phases, processes and coordination mechanisms that allow innovation to occur.

The chapter is divided into two major sections. The first addresses the historical background and formation of the UNICEF Innovations Lab. The next section devotes itself to what is being achieved and to understanding key processes and coordination mechanisms of innovation activities carried out in and by the Lab. It concludes by summarising key findings into project level innovation phases and processes applicable to humanitarian spaces.

An analysis of the data showed firstly that the Lab was created as a solution to meet the demands of young people in Kosovo with alternative opportunities for education that provided them with skills needed by the Labour market. This was to offset the gaps in the mainstream educational sector. Secondly the project level features of innovation were identified in the programme offerings of the Lab. A diversity of skills learning programmes, structured in phases represent the innovation processes and features of project level innovation in the UNICEF Innovations Lab.

5.2 History of the Lab

The UNICEF Innovations Lab is a constituent part of the UNICEF Mission in Kosovo. As a programme, it reports to the Head of Programmes and, like most other UNICEF

programmes, it is financed through donor funds. It provides the youth and adolescent population with workshop programmes in innovation. It is supported in its operations by a local implementing partner - the Peer Educators Network. As will be discussed in the next chapter, a community of actors from different sectors support it in its activities. There appears to be a collaborative effort to work together to meet the needs of the youth and adolescent local population.

5.2.1 Building Human Capital

This research found out that the UNICEF Innovations Lab in Kosovo was established in March 2010 to support the reconstruction efforts following the conflict and to respond to the identified needs of the Kosovo government strategic development plan that specifically sought human capital development solutions for the youth and adolescent populations. Following a decade of conflict which included the dismantling of educational opportunities for the Albanian Kosovo population, the government was concerned that the traditional education model was not sufficient to meet the development needs of the State, the economy, or the society.

According to some of the longest serving members of the Lab's operational management team, there was overlap and convergence between UNICEF's core mandate of supporting youth development and the Kosovo government's national youth strategic development policies and action plans. Interviews and survey data conducted with Lab staff and members of UNICEF's implementing partner Peer Educators Network (PEN) indicated that the Lab was 'filling a gap' by providing an alternative to the traditional methods of education. 85% of interviewed respondents to the question: "What is the UNICEF's Innovation Lab in Kosovo", claimed (in summary) that the Lab was 'filling' a gap. Asked the same question, respondents from a focus group discussion involving Lab staff and student participants also noted that:

> *"It is addressing a gap in the current educational system in Kosovo by providing informal education, much needed in Kosovo."* (FGD P41; P42; P43; P44; P45, 2017)

With regard to the current educational system, the above participants made reference to the 'traditional methods' of teaching and the 'outdated' and 'old fashion' educational system and ways of teaching, that in their view, warranted "change" and "a new approach" to ensure employment:

"*Today's jobs, if there are any, can only be attained if you have the necessary skills……, and the traditional schools don't give you that.*" (FGD P43; P45, 2017)

It became imperative for this research to investigate and understand why these claims were made and how these claims might have influenced general perceptions and the perceived gap that warranted a change to education, leading to the introduction of a new "much needed" approach - the UNICEF Innovations Lab.

5.2.2 Educational Deprivation and Disruptions

The data showed that there was a general interest in improving the educational standards of young people in Kosovo due to disruptions in the educational provision and consequent deprivation of getting formal education caused by the conflict with Serbia.

According to independent narrations from Respondent SM64 and MM66, as well as Lowicky and Pillbury (2001), in the 1990's and as other regions of the former Federal Republic of Yugoslavia descended into conflict, the ethnic Albanian community in Kosovo organized to counter the increasing repression from Belgrade, the capital of the former Yugoslavia. Kosovo's autonomy had been revoked in 1989 and Yugoslavia took full control of the country's governance.

Documents analysed during fieldwork and interviews conducted with members of the Ministry of Education showed that, from 1945 – 1990, all Kosovar youth studied under the Yugoslavia education system. In 1991, Kosovars witnessed the expulsion of the Kosovo Albanian population from public institutions including schools for a period of approximately 8 years. To ensure that Albanians got some education, Kosovo Albanians set up a parallel system at all levels that met in homes and basements during that time. As can be expected, this parallel system was ill-equipped to meet the requirements and standards of acceptable formal education. UNDP (2006) notes that this parallel system had many deficiencies and the quality of education was relatively poor and the breadth of subjects was limited.

Many of those educated in Kosovo were educated in the under-resourced parallel system that did not require sufficient knowledge to continue to secondary school or for higher education. A large number also left school completely, unprepared to succeed in the labor market.

The data showed that in 1998 with growing tensions, non-violent protests turned into violent retaliatory attacks against Yugoslav authorities and Serbian communities by rebel ethnic Albanian forces. This sporadic violence was met with extreme force from the Yugoslav authorities, with tensions boiling over into a full-blown conflict in 1999. As the

conflict escalated, the education situation worsened, with schools becoming targets of the conflict and many getting destroyed. Resources became scarce and many teachers fled the violence (Lowicki and Pillsbury, 2001). This was also confirmed by interview respondents from both the Ministry of Education, Science and Technology and UNICEF senior management (Interview MEST74; SM64, 2017). All of this took a toll on adolescents and youth, who were also targeted with physical violence.

The conflict thus caused disruptions and deprived Kosovars from getting adequate formal education. This led to calls to address deficiencies in the education of the local Kosovar population and to improve human capital development in the post-conflict period.

5.2.3 Deficiencies in Education and the Prioritization of Human Capital Development

The UN Security Council Resolution 1244 marked the formal end of the conflict in 1999 and designated Kosovo as an internationally administered territory. For many years thereafter, the United Nations Mission in Kosovo (UNMIK) carried out responsibilities for governance and the development of provisional institutions (including schools) for self-government. Human capital development became a focus almost immediately. Sommers and Buckland (2004) noted that in 1999 UNMIK initiated a vigorous education reform process, which included plans to rebuild schools, and reinvent and improve education quality at the primary, secondary and tertiary levels.

> *"Today Kosovo is relatively stable and has an education authority headquartered in Pristina serving the vast majority of Kosovo learners residing in Albanian majority areas. Nonetheless, the Kosovo educational system still faces serious challenges."*
>
> (Interview MEST74, 2017)

The impacts of disruptions and deprivation have led to the focus on human capital development in Kosovo. Government strategic plans have required solutions to address the situation. According to one participant with experience in the educational sector over many years:

> *"As far back as the end of the conflict in 1999, many actors have been engaged in ongoing efforts to develop the society and improve the situation of youth across communities, including improving their educational offerings.*" (Interview D 8, 2017)

In addressing these requirements, UNICEF emerged as a key actor. As observed by one participant:

> *"UNICEF is mandated by the United Nations General Assembly, to advocate for the protection of children's rights, to help meet their basic needs and to expand their opportunities to reach their full potential. Hence in collaboration with governments and non-governmental organizations (NGO's), UNICEF is working to support government achieve the needs of its children, adolescents and youth."* (Respondent SM64, 2017)

In Kosovo, UNICEF's work takes a multi-sector approach which integrates education, health, child protection, inclusion and violence reduction strategies, and combines these in strategic collaborations with the Institutions in Kosovo and other partners to assure that investments in human capital development are prioritised (Unicef.org., 2018). Interview data with senior management suggests that in order to appropriately channel support, UNICEF works with local institutions and actors to identify areas of need. This was evidenced in UNICEF collaborating with others to help identify the needs of young people in Kosovo, as well as engaging with youth and supporting them in the development of an advocacy statement of need.

5.2.4 A History of Youth Activism, Relationship and Informal Learning Mechanisms.

According to historical documents, UNICEF began its work of supporting youth in Kosovo as far back as during the conflict of 1998/99 that displaced about 800,000 Kosovo Albanians. According to Lowicki and Pillsbury (2001), during this time Kosovo youth began organising themselves into youth-led action groups and UNICEF began developing relations with them. For example, the Kosovar Youth Council was formed in Albania (a neighbouring country) during the refugee crisis in 1999, and after the conflict the youth returned and organised in cities around Kosovo, undertaking everything from community clean up, to research and education advocacy. UNICEF supported dozens of youth action groups in refugee camps and towns counting about 280 active youth organisations and clubs (YOC) in 2001 (Lowicki and Pillsbury, 2001). Significant international support for youth targeted programming was evident during this time. About $6 million (USD) was spent on youth programmes within the year of the conflicts formal end (UNICEF, 2011). It must be noted that much of this UNICEF funding went to youth centres throughout Kosovo, which offered youth with a range of non-formal/informal learning activities for young people, in some ways filling gaps as the education system was interrupted by conflict (UNICEF 2011; Interview MM6, 2017).

Lowicki and Pillsbury (2001) note that post conflict youth programming efforts in Kosovo also focused on the development of youths' civic participation modelled on youth – to - youth research and advocacy undertaken by the Kosovo Youth Council (Lowicki and Pillsbury, 2001). Non-formal (informal) learning activities had been a part of the humanitarian response during the NATO intervention in the conflict. The introduction of UNICEF's 2010 initiative-the By Youth for Youth Project therefore was aligned to and a continuation of already existing youth programming efforts. Supporting the deficiencies in the formal education sector on one hand, and the demand for less traditional education activities, on the other hand, the Kosovo Youth Strategy and Action Plan of 2010-2012 (drafted in 2009) noted that:

> "*the overall situation of formal education in Kosovo is still facing a number of difficulties although major progress on the policy level has been achieved by the Ministry of Education, Science and Technology….., It is fair to say that informal education has not received a level of visibility and credibility that reflects the contribution it makes to individual development. This is a direct consequence of not being part of any certification system. Informal education has a less clearly framed curricula and much less "certification power" which gives it a weaker social and financial position."* (*KYSAP, 2009, p. 25; du Bois-Reymond, 2003, p. 8)*

The strategy document also unveils a significant interest in informal learning opportunities by young people in Kosovo. As per a survey conducted by government for the drafting of the development strategy for young people:

> "*quite a high number of young people in Kosovo attend courses outside the formal school system, mostly language and computer courses." (KYSAP, 2009, p. 25)*

There appears therefore to have been an existing strong interest in and demand for informal learning opportunities before the inception of the Innovation Lab programme and its predecessor in 2010. As discussed earlier, historical occurrences might well explain the strong advocacy for non-formal learning approaches. This demand for non-formal learning opportunities was also later represented in an advocacy document developed after a youth consultative process in 2010. This youth consultative process and its ensuing advocacy statement further influenced responses to pedagogical improvements in the educational and skills training sector in Kosovo (UNICEF, 2011).

5.2.5 Employing a Bottom Up Approach: Youth Consultative Process, Advocacy Statement and Pedagogical Improvements

A bottom-up approach implies working from the grassroots level upward, featuring community action, building on existing community strengths, and stimulating community-government collaboration (Wessells, 2015). In the case of this particular UNICEF initiative, working from the grassroots upwards implied working with the young people of Kosovo. It meant featuring the young people in problem identification and decision-making processes. It also meant building on the strengths of existing youth organisations and advocacy groups and stimulating engagement between the young people of Kosovo, the government and international organisations.

A UNICEF commissioned youth consultative process and its ensuing advocacy statement were a significant approach that influenced government in the drafting of a youth development strategy and action plan. This process also influenced UNICEFs programme strategy for the youth and adolescent of Kosovo. It involved and engaged with the youth and adolescent population to identify their need. Potentially, this inclusion in identifying and scoping out youth requirements, influenced the positive acceptance of UNICEF's innovation initiatives, as became evident in the data collection process.

The 2009 Kosovo Youth Strategy and Action Plan (KYSAP), involved many domestic actors and project stakeholders including The Ministry of Culture, Youth and Sports was responsible for drafting the Kosovo Youth Strategy and Action Plan, and the Department of Youth had established the KYSAP Secretariat for this purpose. Other external stakeholders in the process included GTZ, OSCE, UNDP/UNV, UNFPA, UNICEF, the World Bank and UNIFEM.

In addition to participating in the above drafting process, in early 2010 and in accordance with their organisational objectives, the UNICEF Regional Office for Central, Eastern Europe and the Commonwealth of Independent states, commissioned a nationally representative survey of youth opinions on education quality in Kosovo, in partnership with the UNICEF Mission in Kosovo, youth groups and civil society organisations including Peer Educators Network (PEN). Explaining this approach, a participant from UNICEF noted that:

> *"we […] align our programmes to the requirements of Government strategic development plans. However, we typically carry out our own assessment of the*

situation to ascertain the needs of those who we work for, in this case the adolescents and youth of Kosovo." (Interview Respondent SM64, 2017)

The results of this survey (seen here as part of a bottom up consultative process to identify youth needs), led to the establishment of what was named the "By Youth for Youth" Project". This project became the predecessor programme of the current UNICEF Innovations Lab in Kosovo. This survey was implemented by youth with assistance from an international research team and involved 517 survey respondents aged between 13-24 from randomly selected areas in Kosovo and 114 others in 5 focus groups discussions. The goal of this engagement with youth was to develop a youth advocacy statement summarizing their opinions and concerns (UNICEF, 2011.p. 1). On 10th February 2010, the Kosovo Youth advocacy statement developed by youth researchers and representatives from Kosovo's Youth organisations as well as individual youth representatives was presented to government. The main outcomes of this consultative process were:

1) The overwhelming majority, 93% wanted to achieve more education than they already had.
2) Large majorities[9] of youth expected that education would "*prepare them for work, improve their status in society, support good citizenship* and *the development of Kosovo, widen their perspectives* and generally *support all aspects of life*." (UNICEF, 2011, p.2)

According to this UNICEF report, 95% of respondents during the consultative research process stressed that:

"*there was a need for improvements in practical learning opportunities ....., especially more interactive and participatory teaching methods."* (UNICEF, 2011)

This resonates with what the KYSAP (2009) had previously incorporated in its reference to informal learning. It had noted that:

"*rather than learning "pure theory" from textbooks, young people "learn by doing". Due to the participatory nature of the activities (of in-formal learning activities), young people are forced to take responsibility for their own learning and engage actively in the process. Youth activities provide "real life" situations that cannot be replicated easily in a classroom. Learning takes place in specific contexts and is therefore more meaningful."* (KYSAP,2009, p.23)

[9] This is quoted from the above document. What 'large majority' means was unfortunately undisclosed in the reviewed documents.

The consultative process concluded in its report that, despite efforts made to rebuild and improve Kosovo's education system, there was still much room for improvement. Youth advocated for change and emphasized support for practical learning:

> *"that is accessible and inclusive and will allow them to generate a livelihood, build families and live healthy, thriving lives in Kosovo, without a need to migrate beyond Kosovo's borders."* (UNICEF 2011)

This also confirmed the opinions articulated in the KYSAP (2009) document that discussed the consequences of limited employment opportunities in Kosovo. It argued that limited economic opportunities are leading to variety of negative consequences.

> *"Some youth are turning to the black market, criminal activities or they become victims of violence or other deviant behaviour. Also limited employment opportunities force young people to look for a job abroad.*" (KYSAP, 2009)

The ensuing youth advocacy statement thus called on Kosovo's leaders to improve the quality of education (UNICEF 2011, p. 103). It also provided recommendations from the youth. Relevant to this research are the recommendations regarding:

a. Improving learning environment, that is improving policies that promote interactive learning, a positive teacher-student environment and improved communication;
b. Improving learning processes and systems;
c. Improving learning content – modernising school curriculum to be responsive to student needs and current workplace expectations as well as implementing practical learning opportunities and helping students move beyond theory to practical application;
d. The involvement of UNICEF in actively promoting the findings of the consultative process.

Two additional important observations made in the analysis of the data were that; firstly, elements of the youth strategy of 2009 seem to have been transferred into the youth advocacy statement of 2010. Particularly they focused on the need and introduction of informal learning opportunities. It would appear that the demand for informal learning opportunities seems to have been on the agenda before the youth advocacy statement. It would suggest the possible prior involvement of UNICEF in this regard.

Secondly, the UNICEF commissioned consultative process resolved in its findings that UNICEF had to be involved in actively promoting the findings of this consultative process. To be actively involved in promoting the findings of a self-commissioned consultation,

would suggest a potential power promoter role by UNICEF. This somewhat challenges the idea that this was a fully bottom up approach of involving young people in problem identification and decision making. As discussed previously, a power promoter is considered by this research as evident in a person or organisation's ability to steer a project, provide resources and help to ensure the success of undertakings and to prevent any potential obstacles (Gemünden *et al*., 2007, p. 409). A power promoter role would make interventions more of a top down nature, whilst this research argues that successful innovation models in this sector would have to employ bottom up approaches. UNICEF's role in innovation activities is discussed in later chapters. For now, it is important to note that the emergence of the Innovation Lab may not have been entirely bottom up or grassroots led but influenced by more powerful actors interested in supporting youth-led initiatives.

The below table presents a list of key objectives derived from the requirements of UNICEF reports and KYSAP 2009.

Table 5.2.4 – Identified Measurable Variables

Source	Need	Objective/ Variables
UNICEF, 2011, p.2.	Adequate education Practical learning	Achieve more/better education Prepare them for work Improve their status in life Support good citizenship Widen their perspectives Accessible and Inclusive
KYSAP, 2009, p. 23.	Need for improvements in practical learning opportunities. Limited employment opportunities	Learn by doing Informal learning activities Be responsible for their own learning Conduct activities in Real life situations
Advocacy Statement Youth Consultative Process	Better education Informal learning opportunities Practical learning	Improved learning environment - Policies promoting interactive learning - Positive Teacher-Student environment - Improved communication Improved learning processes and systems Improved learning content

		- Modernising school curriculum - Responsive to workplace expectations - Involvement of UNICEF in promoting findings.

Source: Author's own construct

5.2.6 Defining UNICEF's Strategic Goals

In actively promoting the findings of the consultative process, the collected data showed that UNICEF's priority areas for its intervention in Kosovo centred around Youth empowerment and securing economic and social development for the young people of Kosovo. It prioritized providing the young people of Kosovo with what it deemed as 21st-century skills.

Although authorities had endeavoured over the years after the conflict to improve conditions in schools that would ensure that youth were better educated to support their development economically and socially, youth discontent with the speed of government reports and actions remained high (UNICEF, 2011). This pointed to a need for UNICEF engagement. The approval of the youth advocacy document by government was considered by UNICEF as the right response to meeting youth requests for better educational solutions that empower them (Interview SM64, 2017).

As discussed above, the advocacy document had firstly pointed to the inadequacies in the educational system in providing the youth with 21st-century skills that would prepare them for the labor market (Interview MEST88, 2017). Secondly, it demanded support for empowering the youth by identifying organizations and institutions that together with the Ministry for Youth, Culture and Sports (MYCS), would help in the development of policies and action/ implementation plans for strengthening the role of youth in Kosovo continually.

Consequently, the Kosovo Strategy for Youth and Action Plan (KSYAP) of 2012 was also drafted in consideration of the youth advocacy statement of 2010. It was written as a development guide for the Kosovar youth for the period between 2013-2017. It detailed the commitment of the Department of Youth within the Ministry of Youth, Culture and Sport, the Government of the Republic of Kosovo, the donor community and other stakeholders (including UNICEF) to mobilize all resources, potentials and opportunities towards creating a more favourable environment for Kosovo's youth and the expansion of their potential in the field of economic and social development (Mkrs-ks.org., 2020)

The strategy aimed to improve the situation of the youth aged 15-24, and to establish a framework for all partners that in a direct or indirect way supported youth activities, to jointly achieve objectives in all areas related to the improvement of the position of youth in economic and social life. This Strategy for Youth (Mkrs-ks.org., 2020) consists of two parts: the policy document itself and the action plan.
This evidence-based policy provided a baseline overview of the circumstances of Kosovo Youth from their own perspective. It drew upon youth and adolescent attitudes and responses to "the call to make changes" in education, employment, health culture, sports and recreation. The policy document ranked strategic objectives in six thematic areas that affect the life of a young person: youth participation, education, employment, entrepreneurship, health, human security and culture, sports and recreation. A key objective was to support youth and adolescent in the field of *innovation and creative ideas*, a field which was considered as an important element that influences the provision of opportunities for youth and adolescent, in related fields of education, motivation to entrepreneurship and creation of opportunities for employment, capacity building and knowledge gain in the fields of information technology and other fields (Mkrs-ks.org., 2020).The policy also covered relevant topic areas on social inclusion e.g. gender, ethnicity, rural/urban youth and issues facing other marginalized groups. The ensuing action plan detailed a general approach that had to be considered during the implementation of envisaged activities. The data showed that for UNICEF, envisaged activities to support this plan focused on empowering the youth through innovation, media literacy and advocacy programmes (Interview SM 64, 2017).

UNICEF consequently played significant influencing roles in the needs assessment, the drafting of strategies, and implementation of action plans (activities) to address these needs. It assumed what can be termed a promoter role in all three instances, acting as a promoter of relationships and activities. Its role in innovation is further discussed together with the Lab's role in Chapter Six.

5.3 Innovation Outcomes – Organisational, Product, Service and Process Innovations

The data showed that both the By Youth for Youth project and the Innovations Lab were set up to address identified problems in the society and thus were intended to act as problem solving mechanisms. Through an examination of their activities, this research found out that there were four types of innovations resulting from activities:

a. Organisational innovations
b. Product Innovations
c. Service Innovations
d. Process Innovations.

5.3.1 An Organisational Innovation Addressing Multi-Sectoral Challenges

The results of the study indicate that, in the context of Kosovo, supporting the youth with innovation programmes were modelled on a multi-sectoral framework. This approach representing a new and innovative organisational practice for UNICEF. Innovation programmes were expected to influence the provision of opportunities for youth and adolescent; motivation to entrepreneurship; and the creation of opportunities for employment, capacity building and knowledge gain, particularly in the fields of information technology.

> "*It was expected that innovation would create new systems and applications that would serve not only for enhancement of youth knowledge and development, but also benefit other institutions, like Government Agencies and other institutions responsible for education, healthcare, child protection, etc*." (Interview SM64, 2017)

As previously noted, historically, the work of UNICEF, as mandated by the United Nations General Assembly, is to advocate for the protection of children's rights, to help meet their basic needs, and to expand their opportunities to reach their full potential. The introduction of innovation mechanisms seeks to achieve all three objectives and to support youth participants to reach their full potential. The Kosovo Lab intentionally adopted a multi-sectoral approach that integrates education, health, child protection, inclusion, and violence reduction strategies. It combines its interventions with strategic collaborations with institutions and partners to ensure that investments address needs across sectors, whilst prioritizing human capital development, i.e. youth development. UNICEF had plans to set up a network of in-country Innovation Labs and problem solvers around the world (UNICEF, 2005, p. 10) and the Lab in Kosovo was one of the first. OECD (2005) argues that innovation is not only the implementation of new or significantly improved processes, goods or services; but it can also be a new organisational methods or practices, workplace organisation or external relations. In this regard, the Lab was a new organisational practice for UNICEF and thus an organisational innovation.

5.3.2 Programme, Product, Service and Process Innovations

Interviews with previous participants of the innovation's Labs predecessor, the By Youth for Youth programme, confirmed that participation in the informal learning activities offered by the programme focused on developing youth skills in the area of information technology. The developed skills were used to develop new applications that addressed challenges in different sectors of the economy. According to Interview P48:

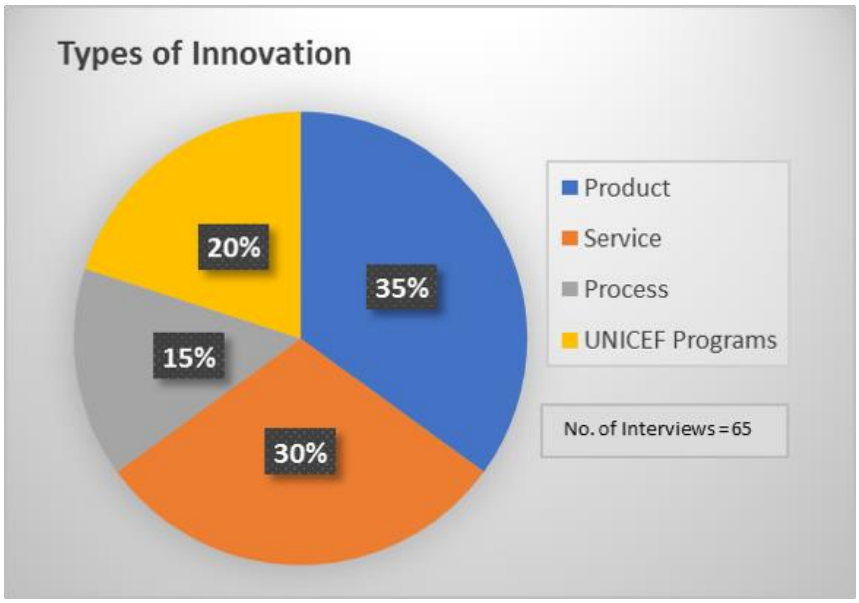
> *"we engaged in coding and learning information technology…how to develop software applications for different projects… developing applications for transport, for bus routes, for mothers and children…. vaccinations record, different applications for different sectors…."* (Respondent P48, 2017)

This research observed that this tradition of developing solutions for challenges faced in varying sectors continued through to current activities in the Innovations Lab. Documented and observed outcomes of innovation activities conducted by the Innovations Lab addressed issues for example, in the primary education sector, the transport sector, the volunteering sector, the philanthropic sector, and the healthcare sector.

In order to get a clearer picture of innovation outcomes emanating from the Lab's programmes, research participants were asked to list the types of innovation they had worked on. A list of 25 innovations were then categorised under product, service, process and programme innovations. Product innovations were generally taken to be tangible objects. Service innovations were considered generally as intangible and web-based solution. Solutions that improved processes of doing/accomplishing things were considered process innovations, whilst programme innovations referred to Lab programmes. 20% of interview respondents answered that they found Lab programmes like UPSHIFT, PONDER and PODIUM[10] to be innovations.

[10] UPSHIFT and PONDER and PODIUM are programs offered by the Innovations Lab to the youth and adolescent of Kosovo. They focus on social innovation, critical media literacy and advocacy respectively.

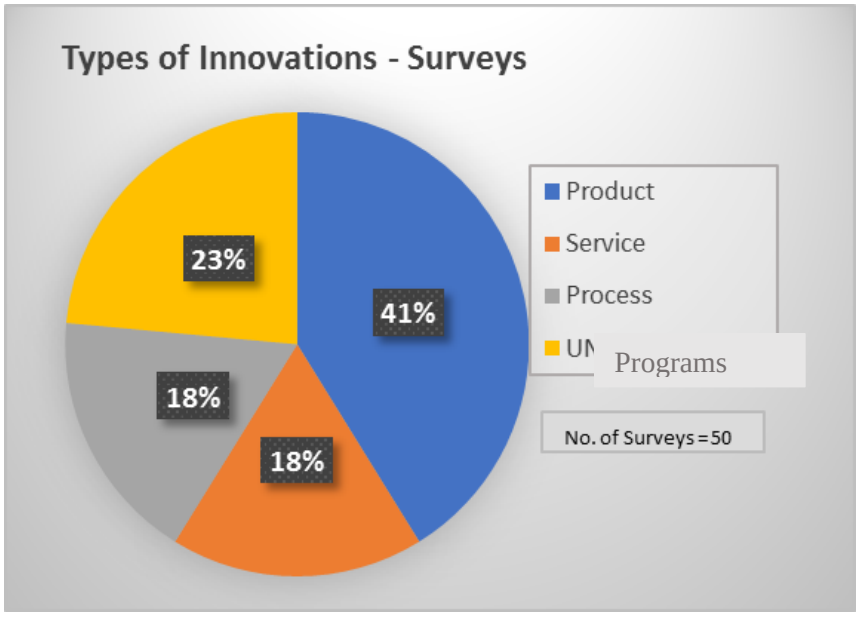
Figure 5.3.3a - Interview Results, Types of Innovation



Source: Author's own construct

The results indicate a higher number of product innovations and less service and process innovations emerged through the work of the Lab. Interview responses included Lab programmes as innovations. For example, 6 out of the 10 interviewed programme mentors considered the Labs programmes as new to UNICEF. All but one thought that the Lab itself was an innovation and new to UNICEF emphasising it as a programme innovation.

Figure 5.3.3b - Survey Results, Types of Innovation



Source: Author's own construct

5.3.2 Examples of Product, Service and Process Innovation projects (see Appendix 5)

Generally, the data showed that innovations emanating from Lab workshops sought to address local community needs. They were either product, service or process innovations.

3DX - An Inclusive Social Enterprise in Mitrovica (Service Innovation)

Outreach/Application

In 2017, the 3DX team of students applied to participate in an UPSHIFT Social innovation workshop. The team had observed that most young people with Down Syndrome in Kosovo, had little to no opportunities to gain further skills that could provide them with a job. The team saw a need for institutional mobilization for their integration in society, especially by providing them with professional skills and preparing them for employment and independent life.

The 3DX team consequently applied to participate in the social innovation workshop with this problem. They did so with the hope of developing a solution around 3D printing that could address the lack of skills training opportunities for young people with Down Syndrome.

Training and Development of Solution

The ensuing three day UPSHIFT training helped the 3DX team understand the identified problem in a much better way. They realised that if they could provide a skills training programme targeted at young people with Down syndrome, they could help them gain necessary skills that could provide them with a job and become more independent.

One of the team members, a psychology student with experience working with people with Down Syndrome, introduced the idea of developing a skills-based training programme around 3D printing. She had also been working with 3D printers in her spare time and her experience with her Down syndrome group suggested they would be in a position to learn skills around the use of 3D printers. The team therefore developed a skills training programme centred around the making of smart phone holders with 3D printers. The programme was designed to train people with Down Syndrome on how to design and use a 3D printer to manufacture an artefact for sale.

Prototyping and Testing

During the workshop the team identified the key challenges that persons with Down Syndrome have in learning and developing skills. They also presented the key stages of

their developed solution and demonstrated how their training programme teaches skills in the design, 3D manufacturing and packaging of products for sale.

Training, Start-up and Diffusion

The Innovations Lab provided mentoring to the 3DX team that has allowed them to set up a social enterprise associated with the Down Syndrome Mitrovica branch. The team provides their services at this centre and have organised a number (undisclosed number) of workshops engaging young people with Down Syndrome in the designing, 3D printing, Labelling and packaging of smart-phone cases. The initiative currently employees four young people, as well as two interns. The project has received significant traction, with orders for personalized cases (e.g. personalized with names or company logos) coming in from all over Kosovo. Some companies have placed orders for up to 100 cases for their employees.

***Shnet* (Health) - Mobile Education App (Product and Service Innovation)**

Outreach/Application

The Labs' outreach involving this project was to the University of Pristina. Here a team of psychology students presented a project that sought to address the problem of adolescents and youth in Kosovo receiving effective sexual education. The challenge that was recognised related to the cultural context. It identified that there were inherent misconceptions, incorrect information, stigma, and other issues related to sexual literacy of adolescents in Kosovo. The teams' application was successful, and they were invited to participate in a Social Impact UPSHIFT workshop in 2017.

Training and Development

The ethnographic research training and ensuing workshop training helped the team observe more clearly that the absence of sexual education could be the cause of social hazards including unintended pregnancies.

The team also found out that, sexual literacy was also still considered a taboo topic in Kosovo, and consequently sexual education in schools was rarely taught. Teachers appeared to skip entire chapters of the curriculum to avoid this subject since it felt uneasy to teach the subject.

The team also identified that a significant number of young people were forcibly married off as a result of unwanted pregnancies. They observed that pregnancies occurred in the first place due to a lack of knowledge on the proper use of contraception.
Addressing two major challenges to a local problem, *Shnet* developed and provides a mobile device application. The idea for the app was identified and designed at the three-day Upshift workshop. It gives users the opportunity to access information privately, unhindered and whenever they need it.
The app offers information in five sections: 'Let's Talk Sex', 'Sex Anatomy', 'Sex Facts', 'Safe is Sexy' and 'Know Yourself'. Basic facts and relevant information that the students identified as most critical issues affecting young people are provided. It is the first of its kind available in Albanian and Serbian—the two official languages in Kosovo—making relevant information available to a hitherto marginalized groups of young people needing basic sexual education.

Prototyping and Testing
A mock-up of the app was developed during the three-day workshop. Upon receipt of some funding a functional prototype was developed and tested among friends and colleagues.

Training, Start-up and Diffusion
With the assistance of follow-on mentoring sessions and the support of the Technology team of the Lab, *Shnet* finally organized a Kosovo-wide event on 22nd February 2017 to disseminate the app, which became available in the Google Play Store.
With the support of the UNICEF Gender Innovation Fund, *Shnet* released a new app with empirical, evidence-based content, developed in close cooperation with doctors, psychologists and university professors in November 2018. It now also hosts an innovative Artificial Intelligence in the form of a 'Chat Bot', which uses advanced algorithms to automatically answer questions users pose.

E-Bin - (Health and Hygiene) Electronic Bin (Product Innovation)
Outreach/Application
The E-Bin team became aware of the Social Impact Workshop organised and provided by the UNICEF Innovation Lab when the team had an outreach event at their university in Pristina.

Consequent to an application call in early 2017, the E-Bin team applied to attend a workshop held in May 2017 to address a problem of rampant contamination and consequent spread of disease in local hospitals.
The team had observed that patient cases caused by infection in local hospitals had been on the rise and considered that this might relate to local hygienic circumstances in hospitals.

Training and Development
The workshop helped them to identify a cause for infections - the handling of bins in the hospital wards. They found out through their ethnographic research approach that nurses and other health practitioners in hospitals had to physically touch bins to open them in order to dispose of used and even contaminated items. Often however these bins would already contain disposed items which might have been contaminated with all kinds of bacterial and viral infectious diseases. By touching these bins, staff could transfer diseases further to other patients.
Their solution was the E-Bin - a modern bin developed for hospitals to avoid physical contact with contaminated bins. The team came up with the innovative idea of creating a "smart bin" which works with sensors and opens and closes without physical touch.

Prototyping and Testing
At the end of the three-day workshop and with the help of university technicians, the students demonstrated how the E-Bin would work. The solution was well received and received funding from UNICEF for implementation.

Training, Start-up and Diffusion
As of the end of my data collection period, the E-Bin team were receiving start up training and hoped to raise enough funding to go into manufacturing.

KOVO - Online Platform for Volunteers (Organisational and Process Innovation)
Outreach/Application
The outreach process involved engaging with students who lamented a lack of internship opportunities to gain work experience. The team observed that this posed a significant problem to young people since the Kosovo labour market required them to have work experience in order to get a job.

The team also noticed that civil society organizations often had internship positions to offer volunteers and considered these offerings as opportunities for young people to gain work experience. However, volunteer experience was typically neither recognised nor accepted as credible work experience.
The identified challenge was thus defined as two-fold: in the first instance, there was no way of effectively notifying volunteers of internship opportunities available with civil society organisations. Secondly, finding a way to ensure that volunteer work experience was identified as relevant and credible, and accepted and recognized as such.

Training and Development
The solution to these challenges was to first of all create a possibility of linking civil society internship offerings with volunteers. After demonstrating the intended solution at a workshop, a match-making online platform was designed and developed by the team. It allowed civil society organisations to offer volunteer positions on the platform.
The platform also provides the possibility for volunteer seeking organisations with tools and resources to help enhance their community engagement programmes, whilst providing volunteers with resources to seek and secure great work experiences when volunteering

The second aspect of the solution dealt with recognizing volunteer experience as credible work experience. For this, the initiators lobbied with the government to come on board as a partner to oversee and manage the match-making platform. The Ministry for Youth Culture and Sports joined the team and worked with the team to develop the solution. The ministry currently oversees and manages the platform. Based on a legislative action which changed its internal processes, the ministry is able to recognize and certify internship positions as credible work experience making internships to be officially recognized as such.

Prototyping and Testing
The team received funding to develop the platform. It went through a couple of iterations and was often user tested, evaluated and updated throughout the development process.

Training, Start-up and Diffusion
KOVO is currently a fully operative online platform. The KOVO volunteer's management workshop is a two-day intensive workshop aimed at capacity building and knowledge

dissemination for civil society organizations and public institutions on volunteer management.
Currently the platform is being used by over 1000 registered users and offers a volunteers management workshop. The platform is a process innovation for managing volunteering opportunities.

5.4 Founding the UNICEF Innovations Lab in Kosovo – An iterative process

The results indicate that the Innovations Lab was created out of an iterative process - a technology and skills focused project (BYFY) which had been influenced by a co-working space model, a nexus for technologists, investors, young entrepreneurs, designers, researchers and programmers. Ensuing activities conducted in the Lab were thus influenced by the BYFY project, which in turn was influenced by activities of iHub, a co-working space model in Nairobi, Kenya started in March 2010 (Interview Consultant 1, 2017).

The Consultant noted that UNICEF Kosovo wanted to draw on the success of the UNICEF Innovations team worldwide. Earlier teams had created software-based systems to improve work done within UNICEF, with local governments, and non-profit partners. Consequently, the Kosovo Lab was designed taking inspiration from the open innovation ethos of participatory design, as well as innovations spaces such as iHub in Kenya (Consultant 1, 2017). iHub is an innovation hub and hacker space for the technology community. This co-working space is a nexus for technologists, investors, young entrepreneurs, designers, researchers and programmers (iHub, 2018).

As already presented, the implementation of UNICEFs strategy towards meeting the needs of young people in Kosovo, started in 2010 after the youth consultative process and the presentation of the youth advocacy statement. Consequent to that, in early 2011, UNICEF Kosovo established a technology focused programme that furthered the organization's strategic interests of engaging the youth of Kosovo and providing them with a practical, hands-on learning initiative with software-based systems. Both UNICEF Kosovo staff, as well as PEN staff (implementing partner) note that this technology focused programme was designed to be a new approach to informal learning- a skills-based learning programme (Interview SM64, 2017; Interview PEN26, 2017).

In the first two years of the BYFY project, it invited, taught, and supported young Kosovars to create and implement projects for other Kosovars. It provided support to groups of young people, some of whom had no real-world experience before, to write proposals, manage budgets, and implement their projects. The BYFY project also provided visibility to promising projects, connecting some projects to government institutions and other institutions (Consultant 1, 2017, Interview PEN26, 2017). Initially, projects were largely technology focused and mainly involved with developing ICT technologies for local needs and some international development needs (Interview MM66; JM37, 2017). According to Interview JM37, MM66, PEN26, (2017), it was not until 2013, that under new leadership, the Lab began to transition into three 'Pillars'(expression used by the Lab) – 'The Design Centre', the 'Youth Empowerment Platform', and the 'By Youth for Youth'. In due course, these three units constituted the Innovations Lab.

'The Design Centre' was set up to focus on service design and technology for development which spans developing software tools that speed up and improve data collection and analysis by UNICEF and their partners, to building platforms that are used by governments to provide rights holders with access to information, to exploring new technologies to improve service delivery for children. In a way, it took over the work of the BYFY project.

The 'Youth Empowerment Platform' (YEP), was established to offer new programme models for adolescent and youth empowerment and participation. An advocacy and media literacy programmes like PODIUM and PONDER represented their offering to the adolescent and youth of Kosovo.

Maintaining the original name, the 'By Youth For Youth' pillar focused on using approaches like UPSHIFT (a social impact/innovation programme), developed to train and support young people to build and lead innovative solutions that address challenges in their communities (Unicefstories.org, 2016).

Today (2019), nine years after the founding of the Lab as the 'By Youth for Youth' project, the programme structure has changed, and its offering has expanded to include two additional units with distinctive responsibilities. The original By Youth for Youth (BYFY) pillar offers: UPSHIFT and StartUP. The new Youth Empowerment Platform (YEP) offers PONDER, PODIUM, Kosovo Volunteers and the Know Your Rights campaign. The new Design Centre (DC) offers Techstitution (Interview JM2; JM3; JM5; JM6, 2017).

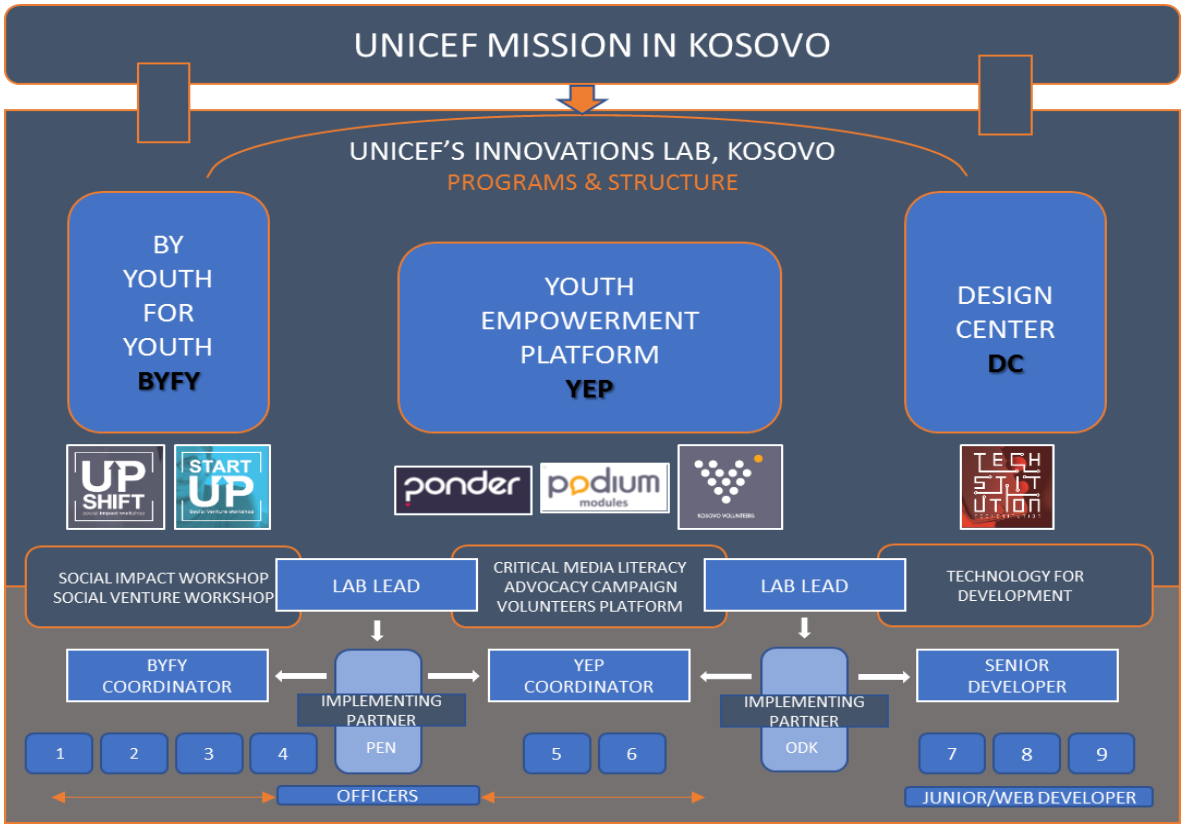
Through constant innovation, the UNICEF Lab continuous to develop new ways to address some of the challenges young people and their communities face in Kosovo. It has altered its initial By Youth for Youth programme to accommodate requirements in different

sectors of the economy by providing tailor made programmes. The diagram below represents the structure of the current Lab.

5.4.1 Structure of the Innovations Lab

The Lab is managed by two leaders – an Adolescent Development Officer and a Technology for Development Officer. They are responsible for all three pillars of the Lab's offering. Three coordinators work under this leadership to coordinate affairs of the three pillars. Youth Programme Officers/ Developers work under this structure for the individual pillars. The Lab reports to the UNICEF Mission Programmes Officer, who is also the Assistant Head of Mission.

Figure 5.4.1: Structure of UNICEF Innovations Lab, Kosovo



Source: Author's own construct

5.5 Project Level Features of Innovation

The ensuing paragraphs present findings of this research with regards to the specific features of project level innovation in the UNICEF Innovation Lab. Specifically, it presents processes for stimulating ideas, developing, coordinating and diffusing innovative solutions.

Obrecht and Warner have previously argued that as the humanitarian system seeks to develop a more mature innovation management practice, i.e. processes for stimulating ideas, developing, coordinating and diffusing solutions, an important limitation remains the lack of empirically grounded research into the specific features of project-level innovation. To date, they argue that, there has been little explanatory research into the factors that contribute to successful innovation processes and consequently, *"the understanding of best practices for humanitarian innovation remains limited."* (Obrecht and Warner 2016, p. 14)

As noted in the earlier sub section, the By Youth for Youth project became the Innovations Lab, an iteration from a technology focused programme to one focusing broadly on social innovative solution. It has also developed and implemented focal units within its structures that address varying areas of needs of young people in Kosovo. As we have also seen, the different pillars offer tailor-made programmes that are expected to provide adolescent and youth skills in the area of social impact, critical media literacy, advocacy campaigns for different societal issues, volunteerism and ICT. Innovation is thus conducted through diverse programmes that the Lab offers to the youth and adolescents of Kosovo through workshops. These programmes are employed as innovation processes, coordinated by the Lab and its employees. The key stages of these processes, i.e. the project level features of these processes are discussed in ensuing paragraphs.

5.5.1 UPSHIFT - Social Impact Workshop

The data showed that, UPSHIFT is an innovation process tool and the most delivered programme of the Kosovo Innovations Lab. It is the flagship programme of the Lab and has been replicated worldwide in over 17 countries (Interview Respondent MM50). It is considered the most effective programme of the innovation's Lab for teaching youth participants skills that help them to turn their ideas around solving identified societal challenges into innovative solutions that are prototyped and implemented.
In 2017 (the end of the data collection phase) the Kosovo Innovations Lab was being considered for declaration as UNICEF's Global Centre of Excellence/Hub for UPSHIFT/ Social Innovation. It convened a global group of UNICEF youth programme officers to Pristina to showcase its work and teach them how UPSHIFT is delivered in Kosovo. According to the Lab's internal measurements, in 2017 UPSHIFT achieved a capacity development of more than 3,000 youth and adolescent participants, with intensive, multi-month learning experiences delivered to nearly 600 participants (52% girls and women).

According to Lab reports, participant evaluation surveys conducted at the end of the training indicate a rise in professional competence, attractiveness to employers, confidence and empowerment, and community orientation. It also reports that since its inception, participants have initiated 170 youth-led ventures, reaching more than 180,000 people with products and/or services. More than 60% of projects have received support from public institutions or other investors; more than 90% of projects continue past the 3-month period of support anticipated by the model. Though not an explicit objective of the model, 20% of projects generated revenue, while nearly 40% of youth-led ventures consisted of multi-ethnic teams (Internal UPSHIFT Document, 2017).

The 2017 document also showed that the programme has been implemented in other countries – 17 in total. In December 2015, UNICEF Viet Nam deployed UPSHIFT; in March of 2016, UNICEF Montenegro implemented their first iteration of UPSHIFT as the cornerstone of the *Kreaktivacija* Youth Innovation Lab. In May of 2016, UNICEF Nicaragua, UNICEF Lebanon, and UNICEF Jordan began the process of localizing UPSHIFT for deployment in their respective offices (Respondent MM50, 2017). Critical to note is that this programme has been implemented in humanitarian and development, settings, as well as in rehabilitation settings like Kosovo.

Further, the 2017 document notes that UPSHIFT was developed between 2013-2015 by the UNICEF Innovations Lab, Kosovo in consultation with partners from the private sector, academia, NGO and other UNICEF offices and Missions. The programme is firstly based on state-of-the-art tools for innovation – innovation tools used also in the traditional, for-profit innovation space. The development of this programme was a joint collaboration with different actors; Laundromat Design, University College London/Goldsmiths, Bethnal Green Ventures, Frog Design, the New School, The Royal Danish Academy of Fine Arts Co-Design Research Center, UNDP, Peer Educators Network, UNICEF Office of Innovation, and UNICEF Country Offices including Kyrgyzstan, Montenegro, Viet Nam, and Lebanon.

UPSHIFT is also grounded in the seven Cs of resilience framework advanced by Ginsburg of University of Pennsylvania and Children's Hospital of Philadelphia. It includes competence, confidence, connection, control, character, contribution, and coping (HealthyChildren.org. 2019). It is also grounded in O'Neil's workforce readiness (O'Neil and O'Neil, 2014) and Lominger's professional competencies frameworks introduced in 1991. It was adapted from human-centred and user-centred design and design thinking approaches, Six Sigma, and SCRUM (Internal UPSHIFT Document, 2017).

UPSHIFT thus employs methods used in traditional innovation mechanisms and combines this with information received from collaborating partners working in the sector. By involving them in workshop activities and innovation processes, it taps into their specific knowledge bases gained through experience working in humanitarian and development settings. It is designed to help adolescents and youth become social innovators and social entrepreneurs by providing experiential learning in understanding community challenges and designing and building solutions in the form of products or services and starting and leading the ventures that deliver them (Internal UPSHIFT Document, 2017).

Programme Practices

The results indicate that UPSHIFT's content reflects practices from the business, design, product and service design and development, and social sectors. Its delivery is based on practices from non-formal education, experiential learning, and business education. Programme practices consist of:

1. High-reach, low-touch introductory training sessions in the use of ethnography for understanding communities and community challenges;
2. Participant-led market and user research and observation;
3. Intensive training and mentorship in the use of a variety of methods to synthesize their findings and define the problem,
4. Define and characterize users and stakeholders,
5. Ideate and model user-centred solutions,
6. Prototype key components of their solution,
7. Determine success metrics,
8. Analyse budget requirements, and
9. Develop compelling communications to "pitch" their solution
10. Resources and intensive mentorship for the implementation of select solutions;
11. Training in financial management, reporting, and other business processes;
12. Training in methods for business strategy development and business modelling;
13. Network building.

(Internal UPSHIFT Document, 2017)

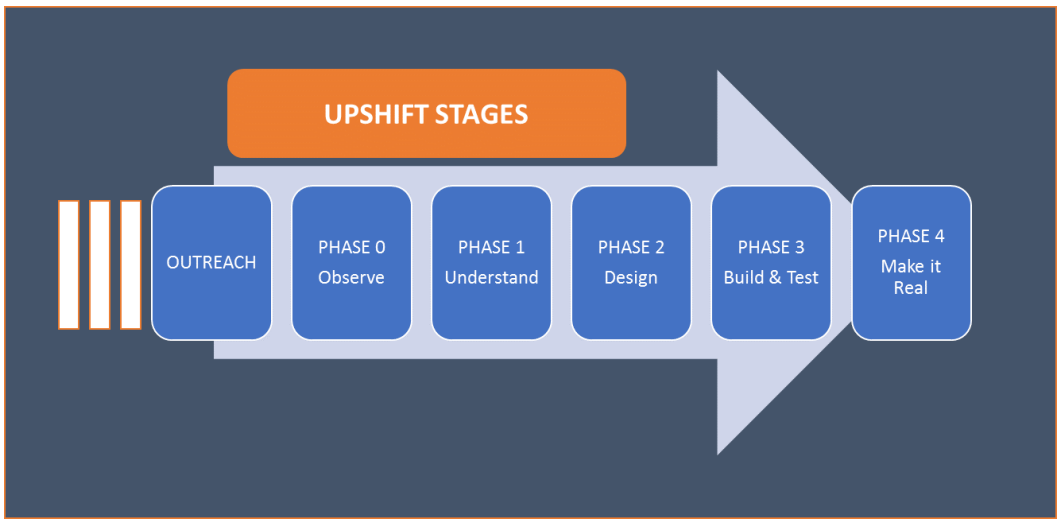
The Programme aims to be a comprehensive tool in training participants in problem solving skills. It employs current useful and state-of-the -art methods to ideate and develop solutions to identified problems. As it is considered the most successful of the Labs'

programmes, this research focused on identifying the project level features of innovation. The identified innovation stages are diagrammed and presented below.

5.5.2 Project Level Features of UPSHIFT

The UPSHIFT Programme is facilitated by a team consisting of the Programme lead, (who is also in charge of the BYFY and YEP Pillars), a Coordinator (directly responsible for the BYFY Pillar) and currently 3 Youth-led Project Officers. It also employs the services of external mentors, from other NGO's, academia and PEN their implementing partner.

Figure 5.5.1 Stages in the UPSHIFT process



Source: Author's own construct

Outreach Phase

UPSHIFT, the Social Impact Workshop begins with a mobilisation stage characterised by what is typically called an 'Outreach' phase. This phase entails visiting and engaging with future participants in their localities. Learning from failures or challenges implementing the By Youth For Youth (BY4Y) programmes, the outreach phase of the UPSHIFT programme, and for that matter other programmes of the Innovations Lab, to both inform and prepare future participants of the programme, programme dates and application process.

> *"In the past and during the time of the initial BYFY Project, we noticed that we always had the same people applying when we had a call. So, we introduced this current model…reaching out to people all over the country…going to them, telling them what we offer and encouraging them to apply…and if they do and the*

application aren't really up to standard, we help them to improve it and then to re-apply. We opened up UPSHIFT to everyone, every young person in Kosovo…." (Respondent PEN26, 2017)

Structured Outreach Process

The outreach phase is also a structured process that takes into consideration local institutional ethics and requirements. It encourages the engagement with local real-life problems.

"Outreach is done for about three weeks before a weekend programme. We visit Municipalities, speak to heads of municipalities who introduce us to schools, where we inform Heads of Schools to allow us to engage with their students. With their permission, we meet the students and tell them of our offering and how what we offer would benefit them by providing them with skills for life and skills for work. Our programmes and approaches are very different to what they are used to, and they get very interested. We encourage them to come up with problems in their communities and then apply." (Respondent 6, 2017)

Application Process

The structured outreach process was followed by an application management process, including a review and selection process. This was carried out by the Lab staff members and didn't involve other stakeholders:

"During Outreach, there is an official call for applications. We also use social media tools like Facebook to reach potential participants. We collect all applications and the team consisting of the officers, sit down, review and discuss the applications, and then a decision is made on which ideas and teams should be invited to participate. The choices are then discussed with the Programme Lead, and together a final decision is made on who gets invited to participate. All applicants are notified, both successful and non-successful applicants. Successful applicants are given time to confirm acceptance and they are then invited to what is called the Zero phase." (Respondent 4, 2017)

The results suggest that criteria for selection, choice, and decision making was lacking. There was no evidence provided on how and why applications were successful, giving rise to questions of fairness and transparency. A general observation made was that the

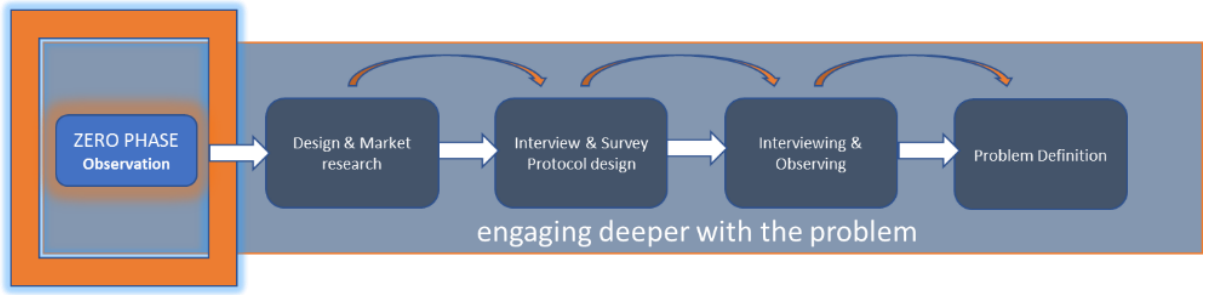
majority of applications accepted to programmes attended by the researcher focused on meeting some challenge faced by members of the local community. However, reasons that may explain the specific selection and decision-making process were not available.

The findings suggest, firstly, that the lack of involvement of key stakeholders (particularly potential users of the innovations) in the selection and decision-making process potentially reduces the chances of product acceptance and scaling up. Secondly, involving others might reduce any potential bias and provide other important perspectives to the identified problem. Thirdly, it would lead to greater transparency and accountability. These thoughts will be expounded later in the next chapter.

Observation Phase

Following the selection of projects, the observation phase was critical for defining the problem and allowing engagement with key stakeholders affected by the identified problem. Stakeholders are both those directly and indirectly affected by the problem. Upon identifying the issue, the zero phase of the innovation process is where the participants are taught to critically reflect on the issue at stake. They develop questionnaires and conduct surveys to gain better understanding of the challenges faced by the affected community (Respondent JM4; UBTM42; UBTP43; UBTP44, 2017). It involves designing and conducting market research, interview and survey protocol design, interviewing and observing and finally problem definition. This phase is also called the Observation phase**.**

Figure 5.5.2 – Zero Phase



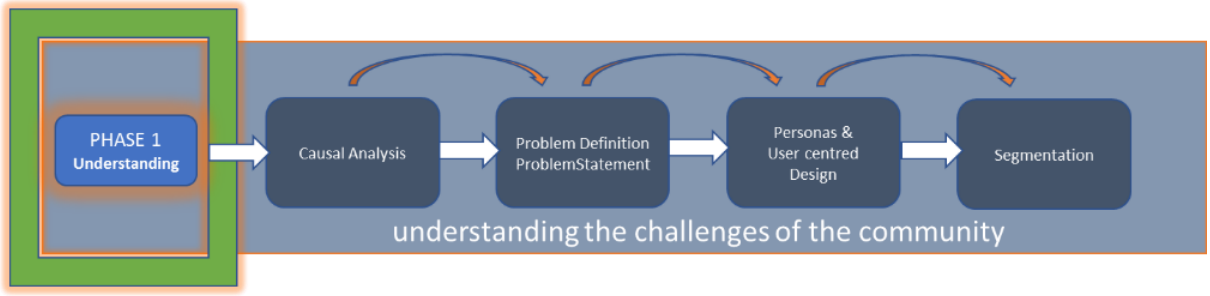
Source: Author's own construct

Understanding Phase

The next stage in the process is the Understanding (the problem**)** phase. It involves:

a. A Causal Analysis where the causes of the problem are identified.
b. Problem Definition and Problem Statement- defining and articulating the problem in a statement
c. Personas and User-Centred Design – identifying characteristics of the key stakeholders associated to the identified problem.
d. Segmentation- using above to categorizing the stakeholders into roles and possibly responsibilities.

Figure 5.5.3 – Phase One



Source: Author's own construct

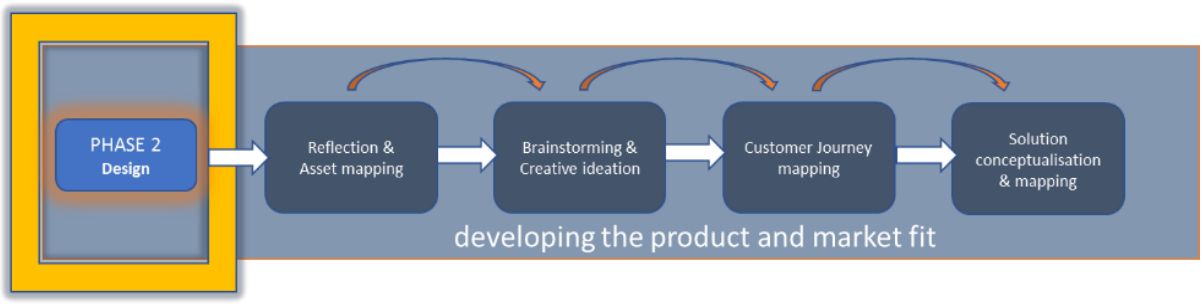
Design Phase

This phase is divided into three stages:

a. Identifying resources available to address the problem
b. Brainstorming around problem solutions, and
c. Mapping out how customer may access solution.

The Design phase is about reflecting and mapping out assets; mapping out the resources the team and its members have at their disposal to address the challenge. At this stage it is also about brainstorming and creative ideation- coming up with creative solutions to addressing the identified and well-defined problem. To facilitate appropriateness of solutions, this stage also includes developing the Customer Journey- mapping out how the potential customer accesses or will access alternative or new solutions. Modelling the intended solution, conceptualising and modelling it follows and finally the product and market fit is determined.

Figure 5.5.4 Phase Two



Source: Author's own construct

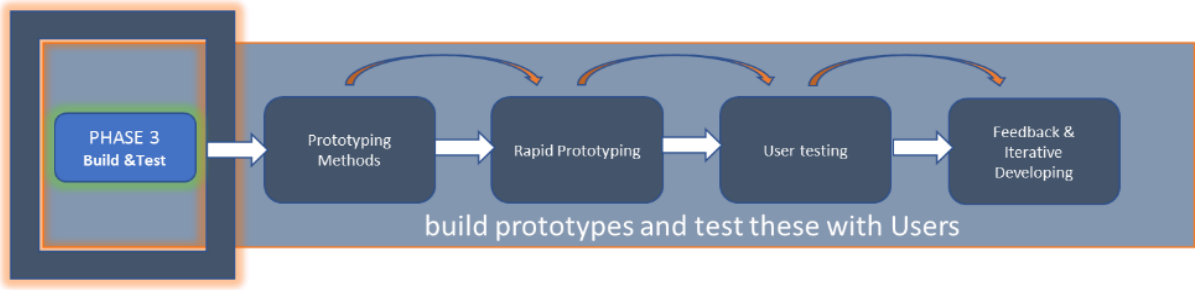
Build and Test Phase

The next face of Build and Test involves:

a. Rapid prototyping
b. Prototyping methods
c. User testing and
d. Working with feedback and iterative development

The participants are taught at this stage how to build prototypes and test these with Users. They are encouraged to work with the feedbacks they get from the users and iteratively develop the solutions further.

Figure 5. 5.5 Phase Three

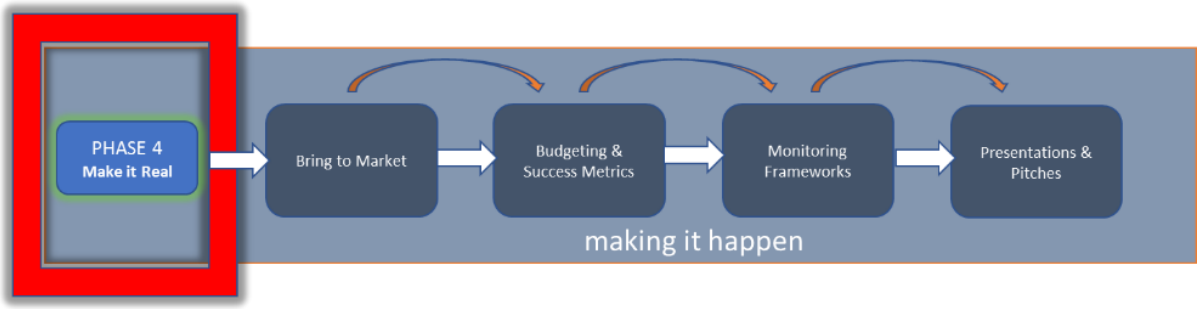


Source: Author's own construct

'Making It Real' Phase

The final stage is "Making It Real". At this stage things centre around bringing the solution to the user. Budgeting requirements and other success metrics and monitoring frameworks are discussed. Teams also learn to develop persuasive presentations of their solutions – the so-called 'pitches'.

Figure 5.5.6 Phase Four



Source: Author's own construct

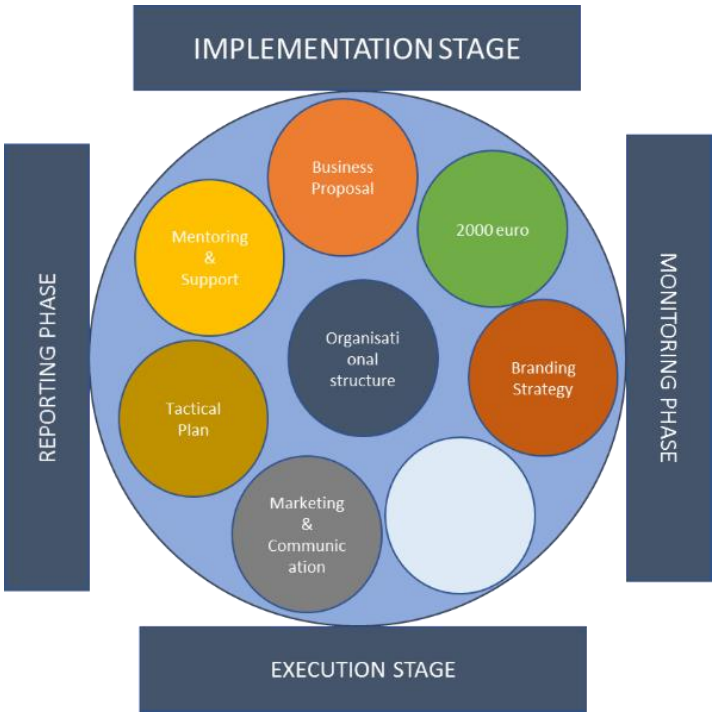
Presentations and Seed Funding

The presentation of solutions and design prototypes takes place at the end of the three- day workshop. Workshops are typically run at the weekends. During a typical UPSHIFT workshop, there are about eight to ten teams of three to five individuals participating. At the end of the workshop, five teams are selected as winners for the next phase which is called the implementation phase. It is a three-month long phase, where the teams receive a seed fund of 2000 euro to implement their solutions. They also receive mentoring and support from an Innovations Lab staff mentor (Respondent 6 and 50, 2017).

5.6 Innovation Implementation Stage

After the Social Impact workshop (UPSHIFT) the implementation stage ensues. Over this period, teams begin to implement their venture. They develop a business proposal and a tactical plan for implementing their ideas. They develop a branding strategy and develop a marketing and communication plan. They identify inputs and resources required to make the idea happen and design a suitable organisational structure (Respondent 2, 6, 50, 2017).

Figure 5.5.7 Execution Phase



Source: Author's own construct

Participants also learn about financial planning at this stage. They are also exposed to accounting and financial literacy, tax planning and procurement and resourcing needs. In the ensuing execution phase, they develop and deploy the product, implement a service offering to their product and learn how to mobilize stakeholders for the product. They also learn how to manage relationships and about marketing and communications. There is also a reporting and monitoring phase after this that involves Financial Reporting, monitoring and reporting KPI's, developing reports and planning Board Meetings (UPSHIFT Overview, 2017).

5.7 STARTUP – Social Venture Workshop

The data confirmed that a STARTUP phase was the final stage of the UNICEF Innovations Labs' innovation process. This researcher was not able to participate in any of these workshops during its study. Hence, evidence is based on analysed documents provided by the Lab. It is made up of four stages:

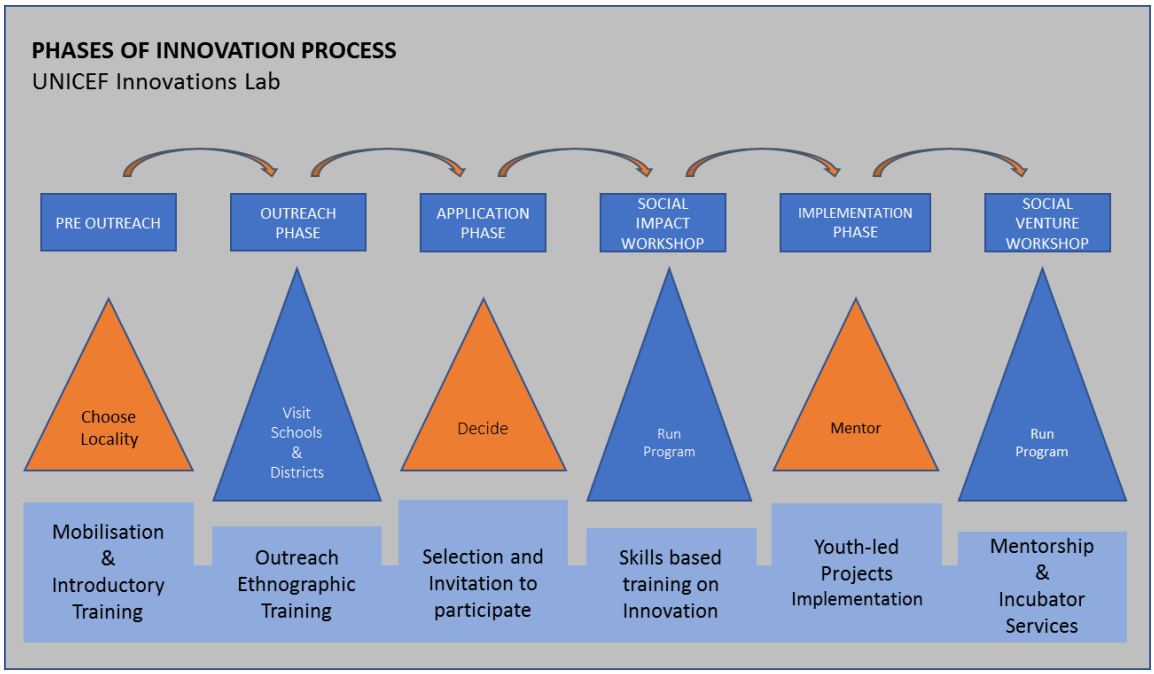
a. Research stage;
b. Strategy stage;
c. Business modelling stage;
d. Business planning stage.

The ‘STARTUP’ is a social venture workshop that is offered to successful teams after the three- month implementation phase. It is a two-day long workshop. The Social venture workshop teaches participants about Research, Strategy, Business modelling and Business planning. In the year before this research it had been offered about four times (Respondent JM4, 2017).
The Research stage involves knowing about the industry the innovation is situated in, the relevant competitors and substitute offerings to the innovation and finally conducting user and market research and analysis. The Strategy stage has to do with SWOT analysis (Strengths, Weakness, Opportunity and Threat analysis and key success factor analysis. The Business modelling stage is essentially employing business modelling toolkits like the Business model canvas to design a business model for the innovation. Lastly the Business plan employs tools like the Lean canvas or Agile start up methodologies to develop a business plan for the innovation. This also includes developing a financial plan.

The researcher observed that this workshop is not provided as often as the UPSHIFT workshop. No reasons were given for this. Rather, it seemed that the emphasis was placed on the UPSHIFT stages of the innovation process. The implementation phase also appeared to not be offered with such intensity and frequency as the UPSHIFT- three- day workshop. This suggests that even though the latter stages of the process are most critical for the commercialisation of innovations, less emphasis is placed on this aspect of the cycle. Consequently, although the primary goal of providing young people with informal learning opportunities and skills is achieved through the Innovation Lab and its programmes, the goal of entrepreneurship – the actual task of setting up enterprises that could provide work and address unemployment challenges in the society, is less or not at all achieved.

The Figure below presents diagrammatically the specific features of project-level innovation managed and organised by the Innovations Lab for the adolescent and youth in Kosovo.

Figure 5.5.8 - Stages of Project Level Innovation



Source: Author's own construct

5.8 Training Trainers

To facilitate this process, the data also showed that innovation processes in the Lab are typically managed by individuals or teams. Programmes are administered by both internal and external mentors also called volunteer professionals. Internal mentors are individuals working daily for the Innovations Lab. Depending on requirements for their workshops, external mentors are trained in a three-day event on methods to be used for the UPSHIFT workshop. They are usually from partner institutions and may be members of staff of the implementing partner, the Peer Educators Network (PEN) (Respondent JM6, 2017). During my research period, ten new trainers were trained. They all came from the partner institutions (universities) with whom the weekend programme had been planned.

The UNICEF Innovations Lab also offers other programmes that are similarly structured to UPSHIFT but with different foci. PONDER and PODIUM are such similarly structured activity-based learning programmes. They are programmes under the Youth Empowerment Platform (YEP). PONDER is a critical media literacy programme whilst PODIUM is an advocacy campaign programme. There are other YEP programmes like a training programme to train trainers to use the Kosovo Volunteers Platform - an in-house built job matching application for civil organisations and youth who wish to work as volunteers.

The Kosovo Volunteers Platform has the support and backing of the Ministry of Culture Youth and Sports. It required an administrative action from the Ministry to push it through. This administrative action involved introducing legislation that allowed the Ministry to recognise and accredit internships carried out by youth as acceptable work experience. Its significant contribution as an innovation is that it allows youth to be matched with an organisation that needs a volunteer. The youth get their volunteering time accredited to them as work experience, helping improve their rate of employability.

More recently the Lab has ventured into collaborating with tertiary institutions and offering their programmes to students at these institutions. A stronger collaboration has been forged with one of these tertiary institutions with the goal of accessing university research, laboratories, and know-how. The Lab hopes that such collaborations would help in prototyping ideas much more quickly. It would also help participants get more experience with developing and testing the functionality of prototypes. Further it would help in the certification process of products, services and processes emanating from programmes.

5.9 Conclusion

The purpose of this chapter was to provide the historical context and driving factors for establishing this Lab, and to identify and provide understanding of what this UNICEF Innovations Lab is achieving and how. It has done this by establishing why the Innovations Lab was set up, and what innovations outcomes emanate from activities. It also identified and presented project level features of innovation activities that explain how innovations occur.

The data showed that the UNICEF Innovations Lab, was introduced in response to requirements of government strategic development plans and corresponding action plans that sought to address the needs of young people in Kosovo. With the help of researchers UNICEF supported the carrying out of a consultative process fostered also by well-organized youth activism and local NGO partners. The ensuing advocacy statement influenced decision making as it requested for changes to be made to youth and adolescent education. It advocated for the outdated educational system of Kosovo to be overhauled. It also demanded the introduction of non-formal learning opportunities that would promote active learning, train and equip the youth of Kosovo with for work and for life, thus making them more employable. These skills were defined by UNICEF as 21st-century

skills as they implemented strategies to address the identified needs of adolescent and youth in Kosovo. UNICEFs approach was to provide projects or aid programmes that addressed multi sectoral challenges through innovation.
The research also shows that the current Innovations Lab started as a project for the youth of Kosovo named the By Youth for Youth project in early 2011. It was an activity based, technology focused project with youth, coordinated by a technologist brought in by UNICEF to implement this programme aligned to already similar existing projects, like the iHUb in Kenya. Between 2013-2015, and under new leadership, the project evolved into a programme that now offers other programme under three different 'pillars'; the BY4Y Pillar that provides skills based training programme in innovation addressing social needs, a Youth Empowerment Programme(YEP) that supports youth and adolescent advocacy and media literacy and the Design Centre, which is more technology focused and designs and develops technology solutions for UNICEF programme, and solutions for government agencies and institutions.

An analysis of the data provided information on a structured approach to innovation. Processes were coordinated using workshop guidelines and stage outputs were clearly defined. Participants were supported through mentorship and teaching manuals and other resources, to achieve stage outputs. The research observed that all participants who attended the workshops during this study, where new to this way of teaching and learning. Thus, the programme satisfied the requirements of the consultative process of informal learning opportunities. The study also observed the iterative nature of innovations unfolding through above phases, as problems went through the various stages of problem identification and definition, brainstorming and ideation, designing and development to prototyping. Prototypes were usually a mix of mock-ups and early functional prototypes, that were displayed during the final phase of presentation and selection of winners.
In all the three workshops that this research participated in, it observed that prototypes were never tested/validated with external stakeholders. The ensuing iterative phase of evaluating tests also never occurred. It can however be argued that, given the nature of the context, most problems identified affected participants directly and hence results were trialled, tested and often improved by them. All identified problems at all three workshops were problems participants were directly affected by, either personally or through family relations. Consequently, there appeared to be deeper understanding and knowledge of the challenges these problems caused. In most cases, participants and even Mentors and Lab

staff, became the testers of the solution and offered relevant advice on either improving the solution or designing a new and more appropriate solution. It was obvious that local/context knowledge helped Mentors perform better at their jobs. Interview Respondents MM2 and JM6 (2017) noted:

> *"…. because we come from Kosovo and live here, we are equally aware of these challenges and so we are able to advice better and often steer them in the right direction…."*

The data collected from earlier and present participants of the implementation phase of the process showed that more skills were taught and learnt. Prototypes were further developed. There was no evidence in the data collected that showed that solutions were well developed enough to scale them up for users to access them. All the solutions developed during this time were still at mock-up/prototype stage. It was evidence in the feedback received from Respondents, that lack of funding and practical commercialisation skills, like capital raising skills, collaboration and networking skills, and sales and marketing skills, were the main causes of these ideas not moving any further down the process of innovation. Although some knowledge of these skills was provided through mentorship, practical skills of achieving these was lacking.

The significance of these findings to the overarching research question is that, firstly, Humanitarian Innovations Labs need to be set up to meet identified requirements of affected communities. These requirements need to be identified through consultative processes with the affected community. A good representation of the community must partake in this bottom up approach. Resulting aid interventions, projects or programmes must be designed and be aligned to these specific requirements. Secondly in order to have the necessary impact and avoid stumbling blocks in the implementation of programmes, there has to be buy-in from government or governing bodies. Thirdly, humanitarian responses, projects and/or programmes should be managed with a degree of flexibility that gives room to iterate, adapt to local environment/circumstances. Even though programmes may be influenced by other existing programmes, space and people (local environment) play an important part in shaping programmes into more acceptable and adequate forms of the intervention.

As in the Kosovo case, each of the programmes offered feature specific innovation activities that are practically implemented at various stages of the innovation process. Based on the data analysed, the diagram summarises what this research considers suitable project level stages of innovation within this context:

Figure 5.10: Project Level Stages of Innovation in this Context

Source: Author's own construct

The project level innovation process in this context, begins with an outreach phase which involves mapping out the important responsible institutions for the community, i.e. target group and engaging with them to receive permission to work with the community or target group. The initial engagement with the community or target group involves briefing them about the programme being offered and the importance of participation. This stage ends with an application process where future participants form groups, identify and develop their idea, and apply to participate. Successful participants are invited to the next stage This initial stage is then followed by a skills-based training programme that works with them and their ideas to develop solutions. Successful ideas are selected based upon pre-identified criteria receive the necessary support to implement their ideas.

The third stage focuses on developing the idea into a prototype that can be tested. During this phase, support is provided to participants to ensure prototype is functional enough to test and validate. Once this process is satisfactorily completed, the next stage is ushered in. This stage is a training workshop on how to scale up the idea to make it address the purpose(s) for which it was developed. It involves learning and defining all that is needed to bring solutions to those who need it.

In the humanitarian context, support to implement ideas will be needed so the next stage involves building the needed partnerships to scale up the solution(s). These partners will include those from different sectors, like government, private sector, academia, etc. The final stage involves working together with partners to diffuse the innovation. Diffusion involves making ready the innovation for customers to be able to access and use it. Humanitarian Innovations Labs should thus be achieving programme innovations that when employed, produce innovations that can be accessed and used by the affected community.

The research also observed a lack of open and available criteria for selection and a lack of participation and transparency in the review and selection processes. In addition, the research argues that there was an over emphasis on UPSHIFT and less training on supporting the implementation and commercialization phases.

In following chapter, the study goes on to present an analysis of the data with regards to what model of innovation is employed by the Innovations Lab and the key characteristics of this model within the context of interrogation.

Chapter 6 – Conceptualising Lab activities: Network, Actors, Roles and Living Lab

6.1 Introduction

The purpose of this chapter is to present key findings with regards to how innovation is managed, the key actors involved in innovation activities, their roles and the relationships and interdependencies among actors that can be attributed to the identified ecosystem.
The data evidenced a context-induced open model of innovation based on a network of collaborating stakeholders. The data provides a list of these collaborating stakeholders, their different roles, linkages and interdependencies in this ecosystem.
As development collaborators, these actors collaborate on innovation processes conducted around the UNICEF Innovations Lab which functions as a hub, organising and managing innovation activities for the youth and adolescent of Kosovo. Their development collaborator roles are also discussed.
The chapter then presents the roles of individual actors in the innovation ecosystem. Collaborators are either active or non-active in innovation processes. They are directly or indirectly involved in innovation processes. They are situated either upstream, midstream or down stream of innovation processes and display strong or weak links to the Lab.
Further to above, this chapter presents results with regards to the strength of linkage and dependency based on a scale of 1-5, with 5 representing strong linkage and dependency. This is measured against the relationship of the key stakeholder to the Lab.
The individual roles of the Lab itself are then presented before the characteristics of the Lab as a collaborative network hub and a multi-dimensional actor hub are presented.
The ensuing paragraphs begin with the argument that the Lab employs a network form of open innovation. It is an essential part of an innovation ecosystem.

6.2 A Collaborative Network in an Innovation Ecosystem

The literature reviewed identified ‘network’ as one of the levers of successful OI processes (Chiaroni *et al*., 2011; Leminen, 2015). An analysis of the data collected showed that the UNICEF Innovations Lab employs a network form of open innovation. This research describes it as a collaborative network form of open innovation. It operates within an innovation ecosystem of actors that form this network. The UNICEF Innovations Lab fits this categorisation for the following reasons:

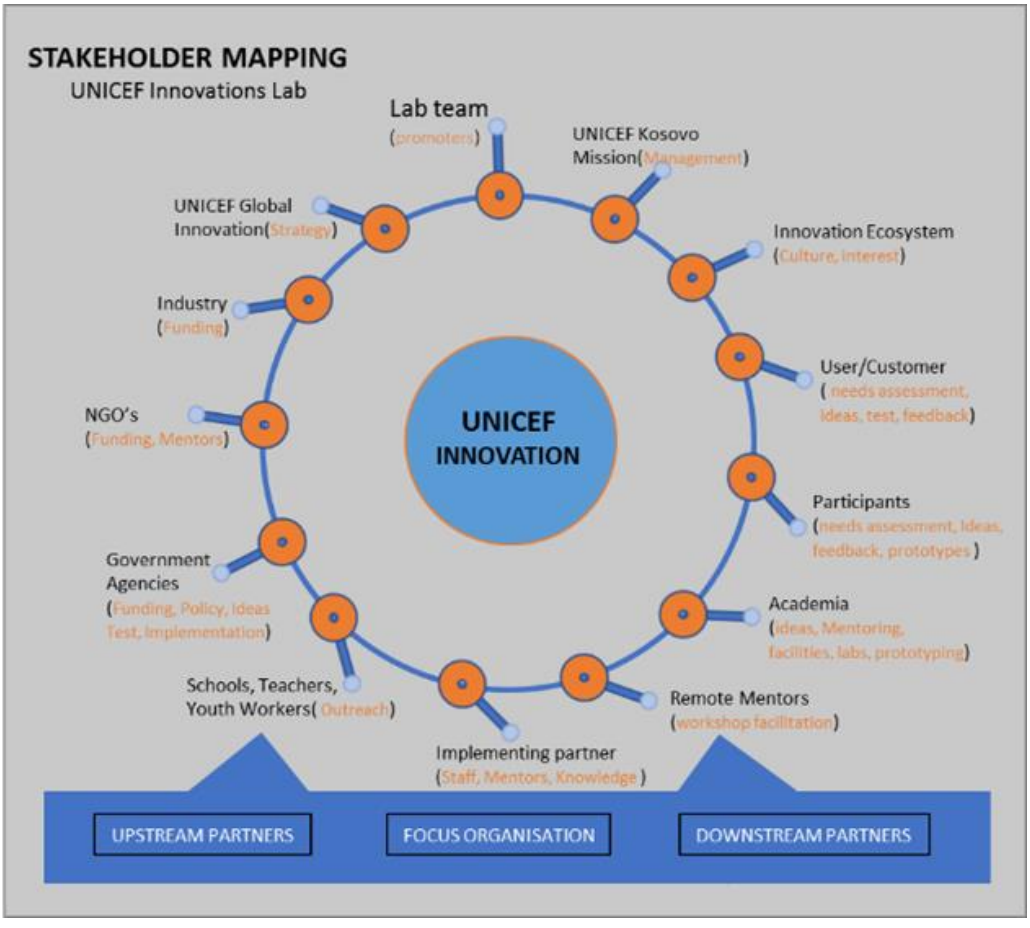
Firstly, the model of innovation is open because it generates innovative ideas from participating members of the local community (external sources) and also works with these participants to diffuse innovations (external pathways). (Chesbrough, 2003).
Secondly it is a network because it interacts with different stakeholders to achieve its objectives. Through this exchange it develops professional, as well as social relations with these stakeholders. Collaboration in this research refers to the coming together of a number of organisations (stakeholders) to form a group working together to achieve a common goal or common objectives. Collaborations in the case of this research were identified to be on defined projects, i.e. skills training for the youth and adolescent of Kosovo. Categorically, they were on the general project of providing the youth and adolescent of Kosovo with skills training programmes through an Innovations Lab model.
In addition, the Lab operates within an innovation ecosystem. In this ecosystem, the Lab maintains stronger relationships with some collaborators than with others. This was evident based on the level of contribution to Lab activities. Some collaborators were evidently more present and participated in innovation processes more than others. The level or intensity of collaboration was determined by the strength of linkage and interdependence, measured according to the frequency of use of their names in innovation processes, as well as through observation and attendance to workshops. Collaboration in this ecosystem was characterised by linkages and interdependencies between members of the network and the two are used as variables to measure the intensity of collaboration and to define and categorise actor roles.
In the study, collaborative processes were identified to be actions, activities and functions that result in a high or low intensity of linkage between a group of actors,[11] who share common goals based on their understanding of the project at hand. Intensity of linkage is considered in this research as the level of participation and involvement in the Labs' innovation activities.

Diagram 6.2 presents a map of key collaborators deduced from the data collected, developed on the basis of the level of participation and involvement of collaborators in the innovation processes organised and managed by the Kosovo Innovations Lab. This study found out that the Lab engages with ecosystem organisations for different reasons and at different levels. Levels in this research are scaled as Upstream, Mid-stream and Back-

[11] This was measured according to the level of direct or indirect participation in innovation processes.

stream. This is important to understand at what stages of the open innovation process these collaborators are involved, particularly within the context of interrogation. Upstream organisations are those typically involved with the Lab at the beginning of projects. They are typically not actively involved in workshop processes. Midstream organisations are groups involved with the Lab during innovation workshop processes and typically directly participate in these activities. Backstream members of this collaboration were found to usually only be present at the tail-end of the innovation cycle and focus on the diffusing of the developed innovative solution. In this research Actor roles at Upstream stages were found to include activities like providing resources, both human and financial, programme development and strategic planning. Mid-stream actors were found to engage in activities of implementing the strategic plan, planning, coordination and execution of programmes, whilst back-stream stage actors were involved in activities such as diffusing the developed solution (making it available for use) and the incorporated process of refining or improving the solution as a result of feedback from users.

Figure 6.2 - Stakeholder Map



Source: Author's own construct

In order to identify the actors (stakeholders) represented in Diagram 6.2 and their roles, data from documents, surveys, interviews and focus group discussions were initially analysed by identifying reoccurring names of organisations or persons mentioned as working with the Lab in the organising and managing of innovation activities for the youth and adolescent population in Kosovo. Similar meaning names/acronyms were categorised under a single organisational heading. The resulting list of headings are seen to represent stakeholders of the Labs innovation processes.

The study then identified the corresponding sectors of the economy, to which these listed stakeholders belong in order to determine sector representation, which it considers necessary especially because of the context. These sectors are considered the collaborating sectors with which the Lab engages in their quest to use innovation to address the objectives of the collaboration- meet the needs of affected population.
Using the criteria of 'frequency of mention', the Lab's dependency on the respective groups' participation in innovation activities, and the respective groups' contribution to activities, this study determined the strength of linkage and level of interdependency. This was represented on a scale of 1 to 5, with 5 indicating a strong dependency. Key stakeholders (based on their sector of operation) are seen in this research as those who scored two or more on the scale of up to 5. The diagram (Diagram 6.2) above shows a map of key stakeholders this research identified. The below table (Table 6.2a) presents the key collaborating partners and the identified strength of linkage and level of dependency.

Table 6.2a – Collaborators and Strength of Dependency, Participation, Role and Involvement

Collaborators and Sectors	Strength of linkage Level of dependency	Strength of linkage Participation	Role in processes	Phase of Innovation
UNICEF Mission	5	Indirect	Non-actors	Upstream
Private sector	5	Direct	Actors	Midstream
Government agencies	4	Indirect	Non-actors	Upstream
Academia/ Teachers	3	Direct	Actors	Midstream and Backstream
Local community	5	Direct	Actors	Midstream and Backstream

Foreign markets	1	Indirect	Non-actors	-
Civil society/NGOs	5	Direct	Actors	Upstream, Midstream and Backstream
UNICEF Global (innovation unit)	2	Indirect	Non-actors	Upstream
Other local innovation actors	2	Indirect	Non-actors	-
Users	5	Direct	Actors	All streams

Source: Author's own construct

A further level of analysis to determine the strength of linkage and also the level of interdependency used the role and function of stakeholders as a criterion. The data showed that some of the identified collaborators didn't participate directly in workshop activities. This provided a basis for categorising collaborators into direct and indirect participants of the Labs' innovation activities. Whilst this provided a means of determining strength of linkage and interdependency, it also provides a way of distinguishing stakeholders by virtue of their role and function in the process.

Direct participants are considered in this research as active contributors to innovation workshop processes and are thus defined in this research as actors, whilst indirect participants who do not participate directly in innovation workshop processes, are non-actors. Actors were identified to mainly belong to stream two and three, i.e. mid-stream and back-stream phases, of the innovation process.

Firstly, the majority of direct participating actors were most represented during the organising and running of the Labs innovation programmes. Secondly, their participation was visible during the implementing, refining and improving of the innovative solution.

Non -actors were identified as organisations who mainly provided funding and human resource capacity or were involved in the planning of strategies and Lab programmes for the youth and adolescent population of Kosovo. They were found at the upstream end of innovation processes (See Table 6.2a above).

6.2.1 Development Collaboration

By way of purpose, this collaboration of different actors and non-actors working together to address agreed objectives, form what can be described as a development collaboration. A development collaboration in this research is defined based on the focus of jointly set

strategies and implementation plans for achieving set development objectives. The data showed that the main objectives of this collaboration focused on economic and human development goals, designed to equip youth and adolescent with skills that help them achieve product, service, process and programme innovations to address the needs of a demographic recovering from a complex emergency.

Skills are to ensure employability -human development, and innovations enterprises and jobs, and thus economic development. As development collaborators the individual members perform different functions. The analysed data showed that they function in the following roles; *facilitator, provider, researcher, user, utilizer and enabler.* Some operate in two or more of these roles. Consequently, the identified sector key stakeholders above are discussed below with regard to these roles.

Table 6.2.1 – Development Collaboration Roles and their Descriptions

Development Role	***Description/Function***
Facilitator	is a member of the Lab and of partnering NGO's who facilitates workshops as mentor?
Provider	is an individual who provides expert knowledge/expertise to identified problems or challenges
Researcher	is an academic participant who carries out a study on a given area of inquiry and shares the gained knowledge either as an active participant, mentor or prototype developer. They promote knowledge-based solutions.
User	They distinguish themselves as either customers or end users of the developed innovations. The analysed data also showed that within this setting customers could either be utilizers or actual users
Utilizer	is a unique user who initializes the innovation process, engages with the development process as an advisor and finally administers the innovation, making it available and accessible to the wider community
Enabler	They are typically an organisation that provides what it takes for the Lab to exist and function.

Source: Author's own construct

The ensuing paragraphs presents in detail key stakeholders, and the roles they assume in their engagement with the Lab in this development collaboration. They identify a) function(s), b) role in innovation activities and c) role in the development collaboration.

Identifying these helps in defining the essence and potential roles that key stakeholders could assume in Innovation Labs employed in humanitarian settings, taking context into consideration.

6.3 Innovation Collaborators and their Roles

6.3.1 Private Sector Collaborators

As presented in Chart 6.2.1, the data showed that private sector collaborators are strongly linked with the Lab and the Lab is, in turn, significantly dependent on them. The data showed that the UNICEF Innovations Lab engages with them for two main reasons:

a) Private sector organisations are a source of financial resources – funding; [12]
b) The private sector partners are also mentors, invited periodically to provide youth and adolescent participants with entrepreneurial training.

This is evident in responses of key informants. Respondent MM50 noted that B1 (a private sector entity) are a funding partner. They are an international bank and provide funding resources for the work of the Lab. Further interrogation showed that B1 are not directly involved in innovation activities but provide the much-needed financial resources for the Lab to operate and to provide its programmes free of charge to the youth and adolescent in Kosovo. As of June 2017, they had been financially supporting the Lab for about 4 years. Such private sector partners enable the Lab (with their financial contributions) to offer its programmes and are therefore considered development *enablers.* They support development/empowerment activities organised and managed by the Lab for the youth of Kosovo. However, they are *indirect* collaborators (actors) because they are non-active actors in innovation workshop processes. Other examples of such private sector enablers come from the telecommunications sector.

Secondly, private sector collaborators also provide workshops and business advice to programme participants on how to be effective business founders and leaders. Respondent MM53 notes that:

> *"we invite business leaders to talk to our participants about their business experiences. The participants get to ask questions and gain knowledge about*

[12] This research was unable to access information regarding amount of funding contributed by B1(private sector partner) to the Labs work. Altogether, this research is limited in the provision of data on funding and costs involved in running the innovations Lab and its programs – a recommendation for future work.

running a business…they gain first-hand knowledge from experts who give them knowledge that would make them effective business owners in the future." (Respondent Interview MM53, 2017)

Invited private sector partners functioning in this role, directly participate in innovation processes and are thus *direct* collaborators - active actors. In this role, these partners function as *facilitators* or *mentors* of innovation activities. During fieldwork, it was observed that invited private sector partners who were used as facilitators were typically local business owners, who run well-known local businesses. There was the general perception that these were successful business owners and hence qualified enough to train programme participants in innovation and entrepreneurship. The effectiveness of their contribution could not be determined, but it was obvious from observations that participants were delighted to engage with these local 'successful' business owners. It would seem that they saw them as role models and meeting them, provided network opportunities. I would suggest that participating youth who engaged with such private sector partners of the Lab, were enthused by the opportunity and experience, and maybe even encouraged by their "stories". Respondent Interview P41 notes:

"I really enjoyed the session with Mr. B. I learnt a lot about running a business……one day I hope to be as successful as him…I want to own my own business…" (Respondent P41, 2017)

Thus, in this collaborative partnership with the UNICEF Innovation Lab, partners from different sections of the private sector support the work of the Lab as direct or indirect actors functioning as *enablers* and *facilitators/mentors* in innovation processes. Their dependency on funding to operate and provide their services makes the Lab significantly dependent on the contribution of these partners in this collaboration, potentially exposing themselves to power-over dynamics. Nonetheless, the value of contributions from such collaborators has led to the Lab developing strong linkages with them.

As facilitators/mentors during programme workshops, private sector partners instruct participants, employing diverse innovation mechanisms like interactive workshops, and consequently help influence programme outcomes. The Lab uses them to facilitate certain activities/components considered important for the innovation process. They are thus an intricate part of activities and the consequent successful delivery of programmes. This dependency strengthens the link to private sector partners making them key contributors

and active actors. In this collaborative network form of innovation, private sector partners are found upstream and mid-stream of the innovation process.
Within the humanitarian context, it is envisaged that their upstream role will similarly also involve enabling (providing funds), participating in midstream activities like innovation workshops, where they facilitate/mentor, but in addition, this research suggests that they will be needed backstream also as enablers of scaling up innovations to reach those who need the developed solutions. The collapse of economic systems and the general characteristics of humanitarian settings makes their involvement in these roles, at all stages of the innovation process, inevitable.

6.3.2 Academic Collaborators

Academia are a new addition to the Lab's group of collaborators. The Lab engaged only for the first time with academia during my data collection period in 2017. The engagement however rapidly developed, with regards to levels of interdependency and strength of linkage, reaching new heights within 6 months. The two collaborated in setting up a Social Innovation Hub in Kosovo, which was then situated at a campus site of an academic partner.

Altogether, during my field work, the Lab engaged with three higher education institutions; The University of Pristina, The University of Business and Technology and Riinvest University. Initially, the engagement was on two levels:

i. Organising and hosting a programme workshop together for university student participants
ii. Training of academic staff as mentors to facilitate programme workshops[13]

Respondent Interview MM5 noted that,

> *"this is the first time we are running a programme with students. Some of the staff have been trained as mentors…., we can tap into their expertise to help for example with prototyping…."* (Respondent MM5, 2017).

This collaboration was further developed and within 6 months of their first engagement, the Innovations Lab partnered with the academic institution to set up what was defined as a

[13] Each of these universities provided 10 members of staff to be trained and certified by the Innovations Lab as facilitators and mentors for the UPSHIFT Program.

social innovation hub. The hub was set up to foster social innovation in Kosovo through workshops offered by the Lab in tandem with academia, and secondly to provide research, prototyping and testing support to social innovators through use of university Laboratories and academic research expertise. In this constellation, academia was represented by students as programme participants, researchers and staff members as generators/providers of knowledge and facilitators of programme workshops and mentors of programme teams, directly involved in innovation activities.

Staff serving as mentors not only learn about and employ tools specially designed for the Lab's innovation processes of generating and developing ideas, but also contribute to innovation outcomes by providing specialised expertise particularly in research related issues, prototyping and testing.

As *direct* participants, staff engaged with innovation processes in the following functions:

a. *Facilitators* - facilitating workshop sessions as mentors;
b. *Providers* - bringing knowledge (expertise) and promoting knowledge-based solutions to identified problems or challenges;
c. *Researchers* - inquiring on a given area of study and using the gained knowledge either as an active participant or mentor or prototype developer;
d. *Users* - essentially as customers (purchasers) and end users.

With regards to staff as Mentors, it was also evidenced that as lecturers in a formal education body, they provided students with some education of innovation. For example, students studying business and computing reported having taken modules in innovation. They noted some overlaps with the model of the Lab. They observed however that the activities with the Lab were more practically oriented and geared towards prototyping, whilst those of the academic institution were theoretical and for exams (Interview Participants 41and42, 2017).

It was also evident in this study that student participants of Lab programmes, in this development context assume several roles in the innovation processes. Not only are they active participants, they also are:

a. *Users* –end users and/or customers of developed solutions;
b. *Providers*- by virtue of their academic background they also brought different levels of knowledge that supported the process of problem solving;
c. *Researchers* - carrying out a study on a given topic and applying the gained knowledge to develop a solution for the identified problem.

An interesting outcome of the above finding is that, firstly, for most innovations developed during the fieldwork, the function of *user* and *customer* fused into one for all participants in this context. In this research the customer is considered the one who purchases the product and the user is the ones who actively uses the product. In the researched context, most solutions affect members of the community directly making them potential purchasers and users at the same time. In humanitarian settings this fusion of customer (purchaser) and user might not be possible. In such settings aid organisations typically assume the customer, i.e. purchaser role. Users are then members of the affected community.

Secondly, within this context, the community not only faces the impacts of a weak socio-economic performance, in terms of income per capita, inequality, monetary poverty or human development, but also health, education, transportation etc. challenges, needing solutions that address multi sectors. Academia with its multi-disciplinary expertise, provide participants and staff members who are able to contribute to multi sector innovative ideas and solutions.

The interview data collected with student participants also showed that some of the solutions developed required knowledge that student participants had gained through their studies and academic work. For example, knowledge around robotics helped one student group research and apply the gained knowledge to developing an innovative solution for the blind. Knowledge of informatics through their studies helped another group develop the needed software application to address the challenge of identifying available car parking spaces in Pristina, the capital of Kosovo.

Academic stakeholders play different roles. As active actors involved in workshops, they are found midstream, but also downstream as implementers and users of developed solutions. Their ability to function and contribute in different relevant roles, make them important for innovation models in humanitarian settings. It is important that they were locally based academic actors, rather than external people without connections to the community of sharing in lived experiences. There was evidentially a high level of appreciation for the challenges worked on by the teams as well as better communication by speaking and discussing in the local language.

6.3.3 Government Agencies

This study found out that Government agencies constitute another key collaborator in this network. They are typically *indirect* collaborators and only seldom actively participate in innovation processes. They include government ministries, in this case like, the Ministry for Culture, Youth and Sports and the Ministry for Education, Science and Technology. As the responsible government agencies for youth and adolescent in Kosovo and for their education, UNICEF Innovations Lab and UNICEF Kosovo Mission are obliged to involve them in important decision making and implementation of any of its strategies programmes which affect the related sector of the country's economy. The study has already shown that these agencies were responsible for and carried out the drafting of government strategic development policy for the youth of Kosovo. Different iterations of these strategic documents and their influences on UNICEF programming have been discussed in chapter five.

Secondly, they are also responsible for approving UNICEF's strategic plans for any development initiative before they are implemented. This is evident in the engagements with them which led to the introduction of UNICEF Kosovo's strategic development initiative, which includes the introduction of a youth programme like the By Youth for Youth programme that later led to the establishing of the Innovations Lab. This initiative was developed on the basis of the Ministry of Culture, Youth and Sports' own strategic development plan for the youth. Government Agency collaborations with UNICEF's Mission in Kosovo have existed since the UN Administration was set up for Kosovo in 1999.

Other initiatives like the Social Innovation Hub with academia have also required both government ministries supporting and partnering with the Mission and its Lab to be implemented. Interview Respondent SM63 noted:

> *"The Ministry of Education, Science and Technology has been very supportive in helping us develop this relation (to academia)."* (Respondent SM63, 2017, brackets added)

Further, the Lab seeks government agency consent, especially at municipality level, to engage with schools and students of those localities. The Lab's outreach programmes are heavily dependent on the permissions issued by municipality heads. Without these permissions, outreach programmes to youth in these areas would fail. Thus, government agency authority in municipalities is respected and permission is sought for in order to

engage with potential participants of Lab programmes. Discussing what happens during the Outreach phase, Interview Respondent MM2 notes that:

> *"We engage with municipality heads and directors of schools to get the permission to engage with school children about our programmes."* (Respondent MM2, 2017)

Thirdly, the study also showed that the Lab worked with different Government agencies to develop innovative solutions that address specific challenges facing the youth in Kosovo. For example, the Lab worked with a government agency to develop the online platform KOVO that addresses the challenges of youth with regards to industry related and accepted work experience that could make them more employable. KOVO as mentioned in Chapter Five, is a volunteer-NGO matchmaking platform that advertises available volunteer positions and helps with the consequent accreditation of such volunteer internships as work experience. Interview Respondent MM 59 mentioned that:

> "*We worked with the Ministry for Youth Culture and Sports to develop this innovation. The Ministry issued an administrative action that was passed, leading to a change in the law. Our Design Centre developed this innovation that allows young people in Kosovo to be matched with organisations needing volunteers. This volunteering time is automatically registered with the government agency and credited to the volunteer as work experience, improving their possibilities of employment."* (Interview Respondent MM59, 2017)

Consequently, this study observes the existence of a high level of dependency and strong linkage to these government ministries. Using a similar analysis as with above mentioned collaborators, a score of 5 makes them a key member of this collaborative network. Responsible to a significant degree for the introduction of such initiatives like the Lab, this research argues that government ministries play the significant role of *enablers* – permitting the establishment of and supporting Lab programmes, as well as providing the needed support for the Lab to also reach out to youth and adolescent across the country. The reach of the Lab and its programmes are significantly dependant on establishing healthy relationships and a strong link with these agencies.

Categorically, data therefore showed that UNICEF Kosovo collaborates on three fronts with Government agencies:

a) As a collaborator on government strategy and development planning for youth;

b) As a collaborator with engagements with the educational sector; schools and academia, and;
c) As a collaborator on innovation solutions to address challenges facing the general public especially youth.

On the different levels of engagement with the Lab, government agencies function differently and are positioned at varying stages of the innovation process. As collaborators on strategic planning, they are *enablers* positioned at the forefront of initiative planning and consequently situated upstream of the innovation process. With regards to engagements with schools or with academia, they are facilitators, helping with the engagement with potential participants and future attendees of the Labs programmes. When they support the setting up of social innovation mechanisms at third level institutions, they are *facilitating* the introduction of innovation and entrepreneurial education at third level. In these supporting roles, they are at the upstream end of the process and *not actively* involved in the innovation process. They are mostly *non-actors* and only indirectly involved. Occasionally, the data showed that some government agencies directly participate in the innovation workshops and assist with the specialised knowledge required in the development of the solution. In the case of KOVO, the matchmaking platform, the Ministry of Youth, Culture and Sports is actually now the administrator of the online platform and consequently not only located in the mid-section of the process, but also at the backstream end of it. The use and administration of the innovation is managed by the ministry and they participate actively in the training and scaling up of use of this online platform.

Government agencies are, therefore, important collaborators. Their contributions ensure that projects like the Innovations Lab are designed and implemented. They are responsible and significantly contribute by developing and implementing the legal frameworks for the establishment of such interventions. They can also participate in innovation processes by providing the knowledge needed to ensure solutions are on track. They can also function at the tail end of processes by supporting the roll-out of solutions and even administer the use of the developed innovation.

The particularities of post conflict settings (and where government is not one of the drivers for the emergency in the first instance) make it invariably necessary for government to be involved. In such settings, governments and their agencies play a significant role in the lives of refugees and displaced persons. Their role as enablers, in ensuring that policies and

legal frameworks support innovation activities are key to the successful designing and implementation of such programmes /interventions like the Innovations Lab. Similarly, supporting in the diffusion of innovative solutions would ensure that positive impact is achievable. Their midstream participation could also ensure that more appropriate solutions are also developed, especially with regards to solutions they are directly involved in.

As discussed, in the case of Kosovo, governments role has been significantly supportive. In humanitarian settings, governments role would need to be equally supportive to have any level of measurable effectiveness. However, where government capacity is weak or willingness is absent, this effectiveness will not be possible, since others cannot fulfil their role. Beginning with simple requirements like access to these populations, government support would be imperative upstream for the introduction and implementation of such open innovation programmes like a humanitarian action suitable Innovation Lab model.

6.3.4 Civil Society

An analysis of the collected data also showed that Civil Society organisations are both *direct* and *indirect* collaborators to the Lab's innovation processes. As direct actors, they also play the role of both *implementer* and f*acilitator*. In the former, Civil Society organisations implement projects and programmes of the Lab for the youth and adolescents of Kosovo. In the *facilitator* role, they facilitate Lab workshops, providing knowledge and mentorship to participants during innovation processes. They are indirect collaborators when they assume the role of funding partner- where they assume the position of donor organisation and provide financial support to the Lab for its innovation programmes.
In order to successfully reach young people with their programmes, the UNICEF Innovations Lab is dependent on local NGO's as implementing partners. As discussed in chapter five, an analysis of internal documents, in form of reports, shows that the engagement and relationship with civil society in Kosovo, existed prior to the establishment of the Innovations Lab. Indeed, civil societies were heavily involved in the consultative process that produced the advocacy statement and led to the establishment of the By Youth for Youth programme and consequently the Innovations Lab.
Interview Respondent MM25 (2017) also explained that PEN (Peer Educators Network - a local NGO based in Pristina, Kosovo) are the implementing partner of Lab programmes. PEN has been this partner since the Lab's inception as the By Youth for Youth project in

2011. The Respondent noted also that UNICEF Innovations Lab has only a few directly employed members of staff. PEN provides the Lab with supporting staff who work as programme coordinators and youth programme officers of Lab programmes, as well as mentors during workshops. Outside of PEN, other civil society organisations allow their staff to function as Mentors during programme workshops of the Lab. As previously discussed, these external mentors first receive training from the Lab on the use of the tools for innovation processes. Thus, they co- facilitate workshops, together with normal staff of the Lab. Giving their direct participation in innovation processes, this study identifies them as *direct* actors. As *facilitators* they also function as providers of knowledge by teaching participants how to use the tools and materials of workshops to develop solutions to identified challenges.

In addition, the study also showed that civil society organisations function as monetary donors to the Innovations Lab, providing the Lab with the needed financial support to carry out its work. Like private sector partners, the financial contribution enables the Lab to function and to provide its programmes to the adolescent and youth of Kosovo. Respondent SM64, (2017) notes that organisation ADA are donors to our programme and provide us with financial support for our programmes. This was also confirmed by Respondent D (2017) who works for the organisation:

> *"We support the Innovations Lab financially[14] and in any way we can, like today, that's why we are attending this closing session…their programme is addressing the needs of the youth here (in Kosovo)."* (Respondent D, 2017)

Based on the above roles, this study considers civil society as important collaborators of the UNICEF Innovations Lab. Functioning as direct or active actors in innovation processes, the role of civil society is evident in the mentoring or co-mentoring of participants through that varying stages of innovation. Interview Respondents P40 and P42 (2017) noted that their mentors helped them to focus on the root causes of the "problem" and to work through the processes in the "manual" and to come to the "result" they had come up with.

[14] Again, the interviewee was asked for details of financial contributions to the Lab. Despite efforts made to gain access to this data, this remained unsuccessful.

The dependency on donor organisations is indisputable since the Lab needs the financial support to run its programmes free of charge to the youth participating in Lab programmes. Consequently, a score of 5 is reasonable evidence of a high level of dependency and strong linkage to civil society. The Lab's offering would adversely suffer without the support of these local NGO partners supporting up and mid-stream.

6.3.5 UNICEF

An analysis of the data also showed that the UNICEF Mission in Kosovo and the Global Innovations Unit are important partners of the Lab and an integral part of this collaborative partnership. The study showed that the relationship to the Mission is characterised by a flexibility and gives the Lab some level of autonomy to adjust and adapt its offerings relatively easily to challenges and possibilities. Nonetheless, the Lab reports to the Mission in Kosovo. The Mission is an *enabler* and *provider*. In these functions it is an indirect collaborator to the Lab's innovation processes.

Interview Respondent MM50 argues that in comparison to some of UNICEF's other programmes in Kosovo, the Innovations Lab enjoys some level of flexibility and autonomy. Although it is a representation of UNICEFs innovation strategy as introduced by its Global Innovation unit, the Lab is nonetheless an integral part of UNICEF, reporting to the UNICEF Mission in Kosovo. The Global unit, as initiator and designer of the guidelines for setting up Innovations Labs, provides the Lab with the needed support to develop its programmes. It however does this through the Mission in Kosovo.

The Mission introduced the project that led to the establishing of the Lab and has over the years since supported its further development. It is thus a significant collaborator without whom the Lab would not exist. Respondent SM64 confirms that the Mission in Kosovo has been responsible for creating, developing and sustaining the Innovations Lab over the last six to seven years. UNICEF Mission Kosovo has also been responsible in developing important partnerships with government, the private sector and academia. The Mission in Kosovo is however not actively involved in innovation processes and is considered by this research to be an *indirect* collaborator/actor. It functions as an Upstream 'Enabler' by allocating funds, developing and establishing key relationships with government, private and academic sectors.

Positioned Upstream, it secondly also functions as a *provider* of knowledge on UNICEF programming, goals and objectives, as well as, it's internal processes, governing rules and regulations. UNICEF, through the Country Mission controls the activities of the Lab without actively interfering with the work of the Lab. It provides the needed guidance but has allowed the Lab to adjust to context related requirements and adapted to the challenges and possibilities the context determines. Together with its role as *enabler* and *provider*, this flexible and yet guiding relationship to the Lab, makes UNICEF an important collaborator and strongly linked to it. The Lab's dependency is consequently significantly high, as evidenced in Table 6.2a.

6.3.6 Other Ecosystem Actors and Innovation Imaginaries

The analysis also identified what it considers as a silent collaborator in this OI model, whose activities are not readily recognisable as influencing the work of the Lab. This partner is collectively defined here as the silent ecosystem partner. In this research it refers to the whole diverse group of organisations and institutions, who participate in innovation activities locally (in Kosovo). This research argues that this silent partner positively affects the general notion and acceptance of innovation processes among the young people of Kosovo and hence *indirectly* contributes to the activities of the Lab.

In explaining this finding, the data showed that Kosovo is currently experiencing a surge in interest of innovation and innovation processes. There is evidence of an innovation ecosystem (list presented below) made up of diverse groups interested in innovation and technology and offering different programmes and projects related to innovation processes. This ecosystem indirectly supports the work of the UNICEF innovations Lab. The ecosystem has generally opened up and helped in creating interest and an openness to innovation processes, and the UNICEF Innovations Lab benefits from this interest and openness to innovation and its processes. This is evidenced by what this research terms innovation imaginaries. Innovation imaginaries are basically ideas held by the youth and adolescent population in Kosovo towards innovation as a way out of poverty. The general perception of participating youth and adolescent was that, through innovation, the next Google, Facebook and similar technology companies could be founded in Kosovo, resulting in economic growth. The data showed that such ideas have been developed in the minds of the young people of Kosovo as a result of this openness to and interest in innovation and also due to the influx of different technologies into this society and known success stories in the international innovation arena.

A central part of the innovation process concerns the way new ideas are generated and explored. This research found out that that there is evidence of a local Kosovan innovation culture that has supported and been part of the local innovation ecosystem, generating keen interest in innovation among the youth and adolescent population in Kosovo.
This research also discovered that there is evidence of what can be described as "innovation imaginaries" existing especially among the youth and young people of Kosovo These "innovation imaginaries" are collective perceptions of youth that innovation is a way to get or create a job for themselves. Such ideas can be alluded to and have been fuelled by the founding stories and experiences of technology giants like Google, Facebook and Apple, that disrupted markets and provided jobs for many. Interview Respondent P44 noted that:

> *"We are all hoping that through such programmes, some of us will come up with major ground-breaking solutions that would develop to become a 'big' solution like Google or Facebook, or something like that…."* (Respondent P44, 2017)

Similar views were expressed during both focus group discussions. A summary of comments related to this expressed that "it wouldn't be a bad idea to have a Google, Facebook or similar companies resulting from innovation activities." (FGD 1 and 2, 2017) Survey documents also noted that expectancy of participating in Lab programmes was to also:

> *"come up with ideas that could be like Facebook or Google."* (Survey Respondents 41, 42,45,46, 2017)

In addition to these stories, the majority of respondents noted that they were aware not only of the existence of UNICEFs Innovation Lab, but also of other innovation hubs and similar initiatives that support and help innovative ideas to be generated and developed. During fieldwork, I was able to collate a list of separate programmes that represent actors of the local innovation ecosystem – all providing some form of training or programme on innovation. These initiatives indirectly support the work of the Lab, since together they have generated interest and an openness to innovation and its processes in Kosovo. The effect has led to the development of a generation of youth and adolescent who are open to and highly enthusiastic about innovation, have ideas and are eager to attend and participate in programmes of the Innovations Lab. These other initiatives are also a source of ideas and thus function as *providers* of ideas indirectly supporting the programmes of the UNICEF Innovation Lab. The Lab has even in the past partnered with some of these other

initiates like Open Data Source, Girls Coding Kosova and IPKO Foundation, to foster the creation and development of innovative solutions by the youth and adolescent of Kosovo. The other identified actors in this local innovation ecosystem:

1. UNICEF Innovations Lab Kosovo;
2. Innovation Center Kosovo;
3. Jakova Innovation Center;
4. Open Data Kosovo;
5. Girls Coding Kosova;
6. IPKO Foundation;
7. STIKK (ICT Association);
8. Prishtina Hackerspace;
9. BoneVet;
10. Gjirafa Lab;
11. AUK TDI;
12. CBC Innovations Hub – Istog.

Ninety percent of interview Respondents noted that they knew about other similar programmes like those offered by the UNICEF Innovations Lab. As a result, the data showed that participants attended the Labs programme with some prior knowledge of innovation and its processes before attending UNICEF Labs programmes. They were consequently potentially already interested and open to innovation and its processes before engaging with the Lab. The data evidenced that this preunderstanding or interest can be alluded to the existence of other actors in the local innovation ecosystem and their offerings.

The relevance of this finding lies in the fact that motivating participation in Lab programmes wasn't too difficult. As Interview Respondent MM5 noted referring to outreach programmes, that:

> *"We talk to them about our programmes, a lot of them know about us already, they have already heard about our programmes and they are very receptive and don't need to be extra motivated to apply…."* (Interview Respondent MM5, 2017)

Since the presence of an innovation ecosystem influences interest and participation, Labs in humanitarian settings would need to do more by way of outreach programmes that would inform and possible explain Lab offerings in much more detail, and the associated

benefits of participating in programmes to motivate attendance and participation, in circumstances where such an ecosystem does not exist or has been destroyed.

6.3.7 Users and Utilisers

This study also found out the this specific network approach is unique and determined by the context – the context of humanitarian action and development aid where the essence of a collaborative innovation network is to serve as an essential enabler and provider, with utilisers and users as co-developers of innovative solutions to meet the needs of affected communities of which the co-developing *utilisers* and *users* form an integral and representative part.

Critically, the innovation network in this context is a collaboration of development collaborators,[15] aiming to facilitate the development of innovations through a continuous transfer of ideas and knowledge, and as identified in this research, also through the transfer of resources both financial and human, in multi contextual dimensions. Interactions are by heterogeneous actors from the affected communities and from the private, public, academic and local as well as international NGO sector. The outcome of such interactions leads to product, service, process, programme and organisational solutions to meet the needs of affected communities. The involvement of users or utilisers make them an important collaborator in the network approach.

The data evidenced firstly, that the youth and adolescent of Kosovo are primary users, who are also involved in innovation processes that led to solutions they profess to need and would use. For example, the idea of solving the gaps in the educational system (a need) through informal learning opportunities (solution) stemmed from them.

They also work during Lab workshops to identify and develop innovative solutions to these problems, prototype them and are also involved in the later scaling up and diffusion of these innovations. Interview Respondent P 42, (2017) notes:

> "*At this workshop we had a problem identified. We are trying to find a solution for this problem through this programme. We hope to find the solution, make a prototype that we will share with everyone."* (Interview Respondent P 42, 2017)

In addition, the youth and adolescent participants of innovation processes play other roles. In addition to being participants, they are potential customers, (purchasers of developed

[15] See: Weihe, 2008.

solutions), users of developed solutions and representatives of affected community members for whom solutions are being sought. Regarding this Interview Respondent PP 42 notes that:

> *"I think if we are successful with our product, I will also buy the product….it will solve a problem we all have. We can all benefit from it."* (Interview Respondent PP 42, 2017).

The data also evidenced that users can also be mentors or facilitators of workshop programmes since they are all members of the affected community. Interview Respondent UBT 6, an academic mentor note that:

> *"in fact, a lot of the solutions being developed here are solutions we all can benefit from. In fact, some of them are very interesting and I can imagine myself becoming a client of theirs. Some of them too, I know people in my family who could need them, so I can buy it for them."* (Interview Respondent UBT 6, 2017)

This identified multi- function of the user, provides a unique contribution to the extant literature on Innovations Labs. Active users who are also participants are encouraged to employ their new skills in developing solutions that would impact both their lives and those of other community members. Thus, they are also developers.

Further to above findings, this research also suggests that the user in this context is both *subject* and *object* of innovation processes. The user is the *Subject* because they are involved in the doing, - being part of the innovation process. As *Object* the user is the focus of innovation processes- the beneficiary of process outcomes.

Table 6.3.7a - User Categories Identified in this Research

Youth/Adolescent	Developer	Community member
Participant	Creator	Object of Innovation processes
Mentor/Facilitators	Customer	Subject of innovation processes

Source: Author's own construct

6.4 Innovation Collaborators

The above represents the key findings related to collaborators involved with the Lab and the roles they play in innovation processes. Aligning these findings to existing studies, this research established that, in keeping with innovation tradition, these entities can be recognised as key stakeholders. Participants at focus group discussions used the terms 'partners' and 'stakeholders' interchangeably. Respondents in management also used stakeholders when they made reference to partners and vice versa. As discussed above this

research sees them not as partners but as collaborators. The distinction lies in how the network of stakeholders was formed.

Firstly, in the case of this research, the Innovations Lab was set up before the collaborative network was formed. The data showed that the Lab was set up by UNICEF in response to calls for improvements in the education young people received in Kosovo by focusing on informal learning opportunities that equipped them with skills needed to gain employment. Collaborators were not part of the forming of the Lab. UNICEF sought collaboration on the Lab programmes after the Lab was formed. So, whilst some elements of collaboration were formed during the consultative process, the Lab as a tool to address the identified needs of young people was carried out solely by UNICEF. The Innovations Lab is a UNICEF initiative.

Secondly, the need for a funding collaborator was identified and sought for, before both private sector and donor collaborators were added to the network. Interview Respondent MM50 and SM 64 confirmed separately that funding is regularly sought for and such applications are tedious and entail a lot, since they must align with the demands of the future funding partner. Describing the type of funding collaborator, both note that they are entities with the financial capabilities to donate such amounts towards our work. The private sector funders are in a 'different business', who donate potential through their social corporate responsibility fund. Donors, who are typically government aid agencies, tend to first look out for projects or programmes designed and implemented by other organisations, and then provide financial support to these programmes or projects.

Thirdly collaboration is specific to a project/ programme that also has a begin and an end date. Interview Respondent 53 (2017) noted that the first cycle of funding from their private sector partner came to an end recently and they had to reapply. They were so delighted to have secured another round of funding with these partners. It was evident that securing these funds was highly important to the Lab since it ensured continuity of programmes, as well as confirming to some degree, the relevance of the Lab and securing its continued existence.

Given the above, these organisations are deemed collaborators. In such constellations, power dynamics could be at play and this will be discussed in the last chapter.

6.4.1 The Hub as a Collaborative Network

The research observed that the UNICEF Innovations Lab is a Hub, a central point for innovation activities. They organise, coordinate and manage innovation processes. The extant literature on Innovation Labs has observed that stakeholders, in this case collaborators are an integral part of innovation networks and processes. As discussed above, the Innovations Lab in Kosovo integrates its key stakeholders directly or indirectly in innovation processes that eventually, lead to varying types of innovations. Consequently, this research posits that, together with its collaborators, the innovations Lab displays a network approach to innovation. It operates in an innovation ecosystem comprising of key stakeholders and together they facilitate innovation in multi contextual dimensions. Multi contextual dimensions here refers to the wide variety of innovative solutions or outputs developed through innovation processes facilitated by the network - of which the Lab forms an integral part. Indeed, the data collected shows that innovation activities centre around the UNICEF Innovations Lab, making it the focal unit or hub of this ecosystem. They act in a central role of innovation activities, organising, coordinating and managing innovation processes. They are a facilitator of multilateral goals and objectives focused on benefitting the young people of Kosovo.

6.4.2 The Hub as a Multidimensional Actor

As part of its integrated role as the hub of innovations activities, the research identified the following roles that are specific to the Innovations Lab:

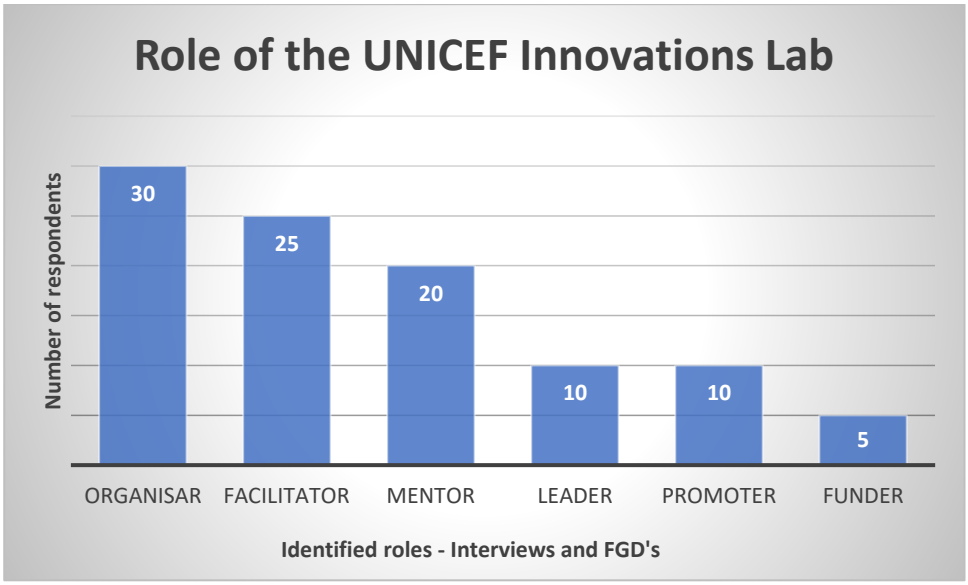
1) Organiser/convenor;
2) Facilitator /Mentor;
3) Champion;
4) Communicator;
5) Leader.

These roles are specific to the Lab and are discussed as additions to the already identified roles necessary and significant for innovation networks in humanitarian settings to be effective. Understanding the roles involved in achieving this is critical for evaluating what roles are needed to make innovations Lab effective. An effective model for the humanitarian system would thus imbed these identified roles into its structure. Through participatory observation this research observed the evidence of different roles in innovation processes.

The reviewed literature on innovation in chapter two has described it in light of roles and in order for this research to ascertain the Labs' roles in innovation processes, this study posed questions to gather respondent perceptions on the role of the UNICEF Innovations Lab in this network collaboration.

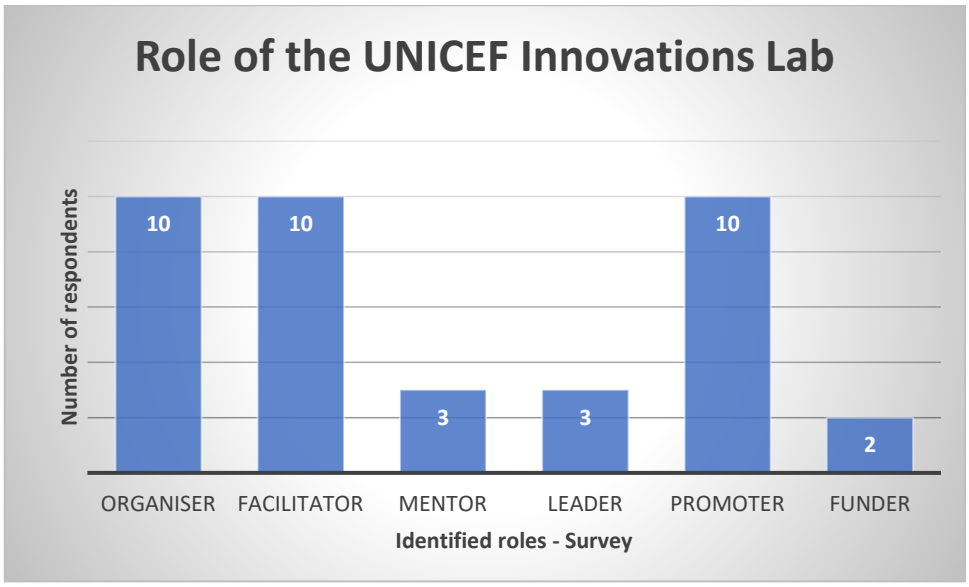
Respondents were asked during interviews, focus group discussions and surveys to describe the role and duties of the Lab pertaining to the innovation process. An analysis of respondent views showed that the Lab displayed a multi-actor role. The analysis of the data grouped similar meaning names into individual roles identifying the following above. Below, two diagrams represent the roles identified at interviews and focus group discussions, as well as through surveys. The roles are represented in this diagram based on the number of times respondents mentioned a particular role. Responses from FGD's were similar to those during interviews and hence were fused together and averaged out to give the numbers presented.

Figure 6.4a – The Role of the Innovations Lab – Interviews, FGDs



Source: Author's own construct from data collected.

Figure 6.4b – The Role of the Innovations Lab – Survey



Source: Author's own construct from data collected.

6.4.3 Organiser/Facilitator

Respondents initially described the roles and responsibilities of the Lab in relation to programme workshops. Firstly, the Lab has the role of organising programme events associated with innovation. As organisers, respondents noted that this role entailed gaining access to the youth and adolescents of Kosovo and as Interview Respondent MM2 noted to try and 'sell' the Labs programme to them.

> *"In order to talk to the youth about our programmes, we have to go and meet with the municipality heads who give us access to the schools through the school directors and teachers…."* (Respondent MM2, 2017)

The Lab also has the responsibility of advertising programme workshops and assessing applicant applications. The Lab as organiser is also responsible for arranging the location for the workshop and getting the location ready and equipped for the programme (Interview Respondent MM50, 2017). It is also the responsibility of the Lab to provide the human resources and to physically host/run the programme. Programme results are also shared with interested parties and publicized online. Based on these responsibilities, the role of the Lab with regards to innovation is that of a direct actor in the innovation processes, responsible for organising and coordinating processes that lead to ideating, developing and diffusing innovative solutions. Related and indeed a role integrated in that

of the organiser is the role of the convenor as mentioned by a number of respondents. Another description of this role was convenor.

6.4.4 Facilitator/Mentor

The facilitator role is primarily seen by respondents as related to facilitating programme workshops. Describing this role, Respondent JM6 (2017) argues that it entails providing the space, the human resources and material resources to allow workshops to successful take place. This role as facilitator is very important for the innovation process since only through this facilitation are innovations developed. This role is closely linked with the Mentor role.

6.4.5 Mentor

There are both internal and external mentors. Internal work with Lab and external are burrowed from external partners. In guiding participants through the innovation processes that occur during workshops, the Lab through its team members and other external ones, is considered the Mentor. A mentor is seen as the person who supports, guides and motivates participants to achieve the goal of developing an innovative solution to a problem (Respondent MM53, 2017). The Lab as mentor also provides the needed training of mentors to guide participants through the innovation processes conducted at programme workshops.

6.4.6 Leader

The leadership role as mentioned and described by respondents relates to the Labs' role of leading the consortium of collaborators in addressing the needs of youth and adolescents in Kosovo. As Respondent SM63 (2017) argues, the Lab is the representative of all those working together to help address the needs of the youth and adolescent in Kosovo. It leads the way to achieving key objectives defined with collaborators for the youth of Kosovo. Other respondents answered by noting that with regards to innovation education and training, the Lab was leading the way in Kosovo in providing new methodologies (some even calling it education) that help the youth address social challenges in innovative ways and prepare them for both work and life.

6.4.7 Communicator

The role of communicator was identified as a very significant complimentary role throughout innovation processes. The Communicator has the task of engaging with potential participants through social media and informing them of the Lab's programmes and workshop dates. In a country with 94% internet coverage, there is evidentially a high internet and social media usage and the Communicators role is to use this avenue to digitally advertise the work of the Lab. The successful use of this medium is dependent on specialised skillsets, making this role invaluable, especially within the context of Kosovo. The role also has the task of updating interested parties on progress and developments, as well as innovations ensuing out of the Labs' innovation processes. Respondent P41 who belongs to the category of users/ participants notes:

> *"I only heard of this innovation through social media and since then I have been using it. I intend to apply and participate in their (Labs) workshop…. I have an idea that they can help me to develop...."* (Respondent P41, 2017)

The role is similar to the role of a traditional digital marketing personnel - a social media marketing and public relations function.

6.4.8 Fundraiser/Funder

The data showed that the Lab performs the role of fundraiser in raising substantial financial resources to fund itself and its programmes but also fund selected teams through an implementation start-up phase.

In this role, it indirectly participates in innovation processes and is responsible for raising the necessary funds to not only secure the day to day running of the Lab itself and thus supporting its existence, but also for hosting and facilitating programmes (free of charge to participants). In this role it works with the UNICEF Office in Kosovo to attract potential funders through different activities, identify funding opportunities, engage as well as prepare the necessary documentation for funding applications.

As a provider of funds to winning teams however, the Lab acts in a direct actor role, actively participating in the innovation process, by providing the investment or financial resources to help the teams implement their ideas.

6.5 Conclusions

The chapter set out to provide an understanding of the model of innovation and the Lab employed by the UNICEF Innovations Lab in the context of interrogation. It sought to address the gap in the literature by answering two questions:

a. What model of innovation is employed by UN Innovations Labs?
b. If they are considered as Labs, then what model of Innovations Lab are they?

The extant literature on humanitarian innovation had queried the understanding of what innovation means within the sector (Betts and Bloom, 2014). What UN Innovations Lab are truly achieving and also what are their project level feature. The latter was discussed and answered in the previous chapter. This chapter sought to provide further evidence-based understanding of the employed model of innovation and model of Lab. It clarifies thereby the use of 'Lab' to describe UN Innovations Labs.

The data showed that UN Labs employ an open innovation model consisting of a network of collaborators. It is open because it generates innovative ideas from participating member of the local community and also diffuses solution through them.

It is also a network because it interacts with different stakeholders to achieve its objectives. They are defined as such, based on the focus on jointly set strategies and implementation plans for achieving set development objectives.

Furthermore, the chapter presents a list of collaborators determined and representing diverse sectors. The strength of linkage and/or interdependence is equally different. This strength of linkage however determined the different categorisation of actors into direct of non-direct actors depending on their position during innovation processes. Dividing the processes of innovation into three: upstream, midstream and backstream, this research determines roles played by stakeholders. Active actors are directly involved in workshop activities to develop solutions and thus are either midstream or down/back stream when they are involved in diffusing the solution as well. Collaboration is the coming together of a group with a common goal to achieve this goal. These collaborators are recognised as development collaborators.

The data evidenced that development collaborators form a Public-Private-NGO -People collaboration with distinctive features. Development collaborators were observed to play the following roles: facilitators, providers, researchers, users, utilisers and enablers. These roles have been discussed in this chapter.

Focusing on the key attributes of the Lab, the data further showed that the UN Lab functions as a hub for the collaborative network and operate in multi actor roles of convenor, mentor, champion, communicator, fundraiser and leader.

The second section addresses the question regarding what model of Innovation Lab is represented in this study. The data evidenced that it is a Living Lab model of innovation. Key attributes of a living Lab as proposed by ENOLL the umbrella organisation for Living Labs in Europe guided this analysis.
The data showed that the Living Lab in this context is characterised by a multi-stakeholder approach with active user involvement. In this context however the user assumes different roles from participant to mentor. Secondly innovation occurs within a real-life environment. Her again there is a uniqueness in that real life is not just a recreation of the natural habitat, but in this case, it is really the natural habitat, natural context of the user. It is the lived environment with its people, space and culture and influenced as well by the effects of the experienced complex emergency. Ideas are generated, developed tested, validated and diffused in this real-life environment.

Finally, the Lab is a 'Living Lab' because it employs a multi-method approach to innovation, which includes co-creating solutions with other stakeholders.

Therefore, this research concludes that the UNICEF Innovations Lab employs a Living Lab model/approach of open innovation. Based on the identified characteristics associated to it, the Innovations Lab in Kosovo can be defined as a physical, interactive learning space where collaborators from government, the private sector, civil society, academia, end users and other community members establish and facilitate an empowerment platform where youth, using human centred, user centric, open inclusive approaches and open source technologies create, prototype and develop scalable programmes, products, services and systems in real life situations thereby gaining skills for work and life.
This definition expands on an existing definition put forward by Westerlund and Leminen (2011) who describe Living Labs as physical regions or virtual realities, or interaction spaces, in which stakeholders form public–private–people partnerships (4Ps) of companies, public agencies, universities, users, and other stakeholders, all collaborating for creation, prototyping, validating, and testing of new technologies, services, products, and systems in real-life contexts.

Chapter 7 - Domains of Effectiveness

7.1 Introduction

The chapter present findings of how the effectiveness of the UNICEF Innovations Lab and its work in Kosovo is measured- defined and achieved.

Effectiveness is considered in this research as the evaluation of the results of performance. Organisational effectiveness is thus a measure of organisational performance (Mausolff and Spence, 2008; Lecy *et al*., 2012).

According to UNICEF, the Lab has been effective and it, as well as its programmes, have been replicated in other countries. This chapter presents results of the Labs effectiveness by analysing the data initially through the lens of the four main domains of effectiveness described in Chapter three:

The organisational management domain focuses on activities, processes and outcomes of the Labs governance and core management systems. In this research governance and core management systems refer to attributes relating to leadership, structure, tasks, team and size;

The programme design and implementation domain measures the effectiveness of Lab in relation to programmes. In this research it relates to the design and implementation of workshop programmes;

The responsiveness to the environment domain relates to the Labs' capacity and outcomes in relation to resource mobilisation and addressing external challenges to the Lab, thereby ensuring future survival and sustainability;

Partnerships and networks incorporate capacity and outcomes of collaborations with other stakeholders of varying forms within an innovation ecosystem. In this research it relates to the dimension of successfully setting up an ecosystem with distinct but complementary and supportive roles.

The data pointed to the need for seven domains and not four as examined and identified in chapter three. Adapted to context requirements, the results of this interrogation identify them as:

a) Programme Definition Domain;
b) Tasks and Responsiveness Domain;
c) Programme Design and Implementation Domain;
d) Partnership and Network Domain;

e) Interest and Participation Domain;
f) Structure and Context Domain;
g) Leadership.

7.2 Programme Definition Dimension

7.2.1 Mission, Goals and Objectives

The initial dimension of effectiveness was established by identifying the mission, goals and objectives of the Lab.

An analysis of the data showed that the UNICEF Innovations Lab was established to address three main challenges (goals) facing young people in Kosovo:

a. Not involved in education;
b. Not involved in training, and;
c. Not involved in employment.

Evidence of this need was initially provided by Interview Respondent MM2:

> *".. the demographic characteristics in Kosovo have made it necessary to create- to tailor make an initiative like UNICEF Innovations Lab. A minimum of 55% of people living in Kosovo are under the age of 25, about 35% of them are not involved in education, employment or training. About 65% of young people living in Kosovo are unemployed."*
>
> (Respondent MM2,2017, underlining added)

A 2017 independent evaluation document confirms this and places the emphasis of the Lab's existence on addressing youth unemployment. It notes that:

> *"The UNICEF Innovations Lab project is a programme trying through innovative yet pragmatic ways to address the youth unemployment issue in Kosovo."* (Internal Document 1,2017 p.4 underlining added)

This document also defines what the Lab does to address the identified issues. The Lab is an enabler:

> *"…is a vehicle enabling young people to transform their potential into strengthened capacity required for successful professional life, while concretely addressing existing social challenges within their communities and generating new employment opportunities through cultivation of innovative social entrepreneurship."* (Internal Document, 2017p.4 underlining added)

Interview Respondent MM2 also notes that the Lab is a programme with the following aims:

> *"The Innovations Lab is a programme …. in Kosovo that aims to empower youth and adolescence in the original ages of 15 to 24…to transform their ideas into projects…. basically, serving as a bridge for youth and adolescence to meet their unmet needs by providing to them and equipping them with 21st century transferable skills."*
> (Respondent MM2, 2017, underlining added)

The data further showed how the identified challenges are to be addressed:

a. Teaching youth selected skills that are in high demand in the Kosovo Labour market and elsewhere; providing them with some practical work experience; and helping them to start their own business;
b. Secondly, …. In the fulfilment of its duties, to employ innovative, relevant, effective and efficient programmes …(Internal Document 1, 2017, p. 4)

Discussing the second point with a representative of senior management, "innovative" was described as "*new ways of teaching"*. 'Relevant' was described as "*relevant to the context of Kosovo". "*Effective and efficient" were described together to mean approaches that will achieve *"our overall goals and objectives."* (Interview Respondent SM63, 2017)

The data suggests that the Lab is a programme, set up by UNICEF in Kosovo to achieve the following objectives through teaching and training programmes:

1. Equip young people with 21st-century skills;
2. Empower youth and adolescent;
3. Transform ideas into projects that address unmet needs;
4. Transform potential into strengthened capacity;
5. Address social challenges through innovative social entrepreneurship;
6. Generate new employment opportunities by starting own businesses.[16]

[16] Appendix 7 introduces seven innovations that were developed through the work of the Lab. A table is provided showing which of the above objectives have been achieved by each of the projects.

In investigating how the Lab's effectiveness is defined, achieved and measured, this research uses above variables as indicators. It considers them as tasks and attributes them to what it defines as the Task Domain of effectiveness. Ensuing paragraphs address these objectives individually by providing concrete understanding to what the data interprets as the meaning of each variable and secondly, presents an analysis of how the Lab performs in relation to these objectives. Consequent domains are then outlined and discussed.

7.3 Programme Tasks Dimension

Programme Tasks refer to all the individual actions to be taken by the Lab in fulfilling its purpose. Tasks are the units of work that have to be achieved in order to solve the identified needs of young people in Kosovo. Achieving programme tasks is the second dimension of effectiveness.

7.3.1 Twenty-first century Skills

The data evidenced that youth and adolescent participants of Lab programmes were equipped with skills in ICT, human centred design, innovation and entrepreneurship. These skillsets are offered and trained at Lab workshops. They are considered 21st-century skill sets by UNICEF, Lab staff, collaborators, as well as participants. The data suggests that this is due to the fact that government strategic documents have emphasised these as skills readily needed in Kosovo. Twenty-first-century skills thus refer to skills perceived to be in high demand in the Kosovo Labour market and elsewhere.

The data confirmed that, they are taught at training programmes and practical experience is gained through workplace internships and volunteering. Consequently, the effectiveness of the Lab and its offerings can be measured against its success in:

a. teaching these skills and providing/organising work experience (*this was measured by how many youth took part in the Labs training programmes and were able to gain work experience*);
b. participants learning and acquiring these skills, and (*measured by how many participants were able to turn their ideas into prototyped solutions*);
c. acquired skills determining their employability and/or employment (*measured by how many achieved employment as a result of gaining these skills*).

Teaching and Imparting 21st-century Skills

As noted, above the primary purpose of the Lab is three-fold; get young people into education, training and employment. Education and training are both instruments used for preparing the youth and adolescent of Kosovo for the Labour market- ultimately to increase employability and get them into employment.

The below verifies above and provides meaning to what 21st-century skills mean:

> *"To address a major concern in Kosovo (youth unemployment), the programme has in fact deployed an innovative approach that is effectively increasing youth employability by: teaching youth selected skills that are in high demand in the Kosovo Labour market and elsewhere; providing them with some practical work experience; and helping them to start their own business."* (Internal Document 1, 2017:4)

According to above, Lab programmes are innovative approaches that increase youth employability through practical learning opportunities and skills training. Employment is either gained in the Kosovo Labour market or by starting a business. Lab programmes are thus education and training opportunities. According to Interview Respondents PEN26 and MM24 (2017), who have both been involved with the Lab since its design and inception in 2010, skills taught are ICT-based, including: Word Processing skills, Spreadsheets skills, Database skills, World Wide Web Navigation skills, Website Design skills, E-Mail Management skills and Coding skills. They also claim that since 2013, the Lab has also been equipping youth and adolescent with skills for social innovation – to address "*existing social challenges within their communities.*"

21st-century skills can thus be defined as ICT and Social Innovation skills that are in high demand in the Kosovo Labour market. Social innovation skills are skills that young people of Kosovo can use to address existing social challenges within their communities whilst providing them with employment.

According to Interview Respondents 5 and 6 (2017) these skills are those that participants gain by going through our programmes:

a) Understanding the root causes of problems through ethnographic research;
b) Using human centred design approaches to generate ideas to address problems;
c) Knowing how to prototypes solution to test the its adequacy;
d) Developing the innovation to become sustainable and scalable.

The data also provided evidence of how these skills were achieved. For example, through a "Tech for Good Practicum" programme (TECHSTITUTION) hosted by the Design Centre of the Lab and in partnership with OPEN DATA Kosovo (a collaborator in the Kosovo Innovation Ecosystem). Participants worked on an IT problem faced by a government institution. The internal evaluation document (2017) notes that the ICT teaching programme focused initially on identifying a government institution as client collaborator and signing an MOU with them.

Secondly, there was an open call for youth to apply and 50 were selected (the call was made through youth centres and through social networks but also with local municipalities). The selected youth were then trained in ICT skills in two groups of 25 for a period of 8 days. During this period, they worked practically on possible solutions and interacted with the client. With the help of OPEN DATA, proposed solutions were refined and polished (Internal Document 1, 2017). The data also evidenced that the Lab selected the collaborator (government institution) based on their readiness to participate in the programme showing thereby their commitment to collaboration with the UNICEF Innovation Lab.

Thus, training was tailor- made, very hands on and involved two collaborators- a client collaborator and an expert collaborator for refining and polishing solutions.

Acquiring 21st-century Skills

The effectiveness of these skills training programmes on acquiring 21st-century skills was analysed from data collected mainly during focus group discussions and interviews. Respondents affirmed that:

a. the curriculum was based on known good practices (*affirmed by 90% of Interviewees and 100% FGD*);
b. It taught them about software development, which, in their view is in high demand in the Kosovo job market (*affirmed by 100% Interviewees and 100% FGD participants*);
c. 100% of Participants interviewed also commended the good structure of the programme (*starting with the system interface and then learning about coding*);
d. Participants felt it gave them practical experience on a practical problem (*affirmed by 90% of Interviewees and 100% by FGD participants*);
e. Participants also commended the opportunity of freely engaging with mentors (*affirmed by 100% of Interviewees and 100% of FGD participants*).

Asked whether they felt that they had learned new skills, all participants responded in the affirmative. All participants of this ICT training felt that the Lab programme had given them new and useful skills and had also prepared them for the Labour market.
Similarly, all participants of UPSHIFT, the social impact workshop, agreed that they had gained skills in human centred design, innovations and those who went on to do the STARTUP programmes, also confirmed gaining skills in entrepreneurship through that programme.

Employability and Employment Readiness

Although it was evident from the data analysed that participants were imparted with skills through Lab programmes, it was difficult to measure what the impact of gaining these skills directly had on employability and on gaining employment. Most of the participants interviewed were still students and not available to the Labour market. Even though it is possible that the gained skills may be in high demand in the Kosovo job market, there was little evidence that acquiring these skills guaranteed employment. According to the 2017 evaluation document, only 4 of the 50 participants of the ICT training had secured employment, two of them employed by the Implementing collaborator OPEN DATA (Internal Document 1, 2017 p. 21). Twenty percent of FGD1 Respondents noted that they had secured internship positions after participating in Lab programmes. (FGD1, 2017). Thus, the effectiveness of the Lab in achieving that youth were employable could not be verified.

7.3.2. Empowering the Youth and Adolescents

The data evidenced also that youth felt empowered by participating in the Labs programmes. They felt empowered by gaining 'hard' as well as 'soft' skills. Hard skills are related to ICT and social innovation and entrepreneurship skills, whilst soft skills relate to self-esteem and confidence. All interviewed respondents at the ICT training programme observed, when asked how and why they felt empowered, that they felt more confident about getting employment. The 2017 Internal Document noted also that: the large majority of youth reported learning effectively from Lab programmes. Even though this document doesn't directly provide an explanation to what "learning effectively' means, at a Focus Group discussion (FGD), participating youth reported learning about the 'subjects 'covered in their training programmes. They noted learning for example to:

a. Understand how to address complex problems, and;
b. Developing solutions to address them through prototyping.

In the START UP programme they observed that they had learned:

a. What is the value chain?
b. How to put the customer at the centre of business. (FGD1 and 2, 2017).

Both interviews, as well as FGD respondents consequently felt capacitated and empowered in what they viewed as transferable professional skills. They felt that they could employ these skills in new employments. Asked which acquired skills made them feel empowered Respondents at the FGD noted the following:

a. Negotiation skills;
b. Financial literacy skills;
c. Organisational management skills, and;
d. communication skills.

Self-reporting, the 2017 internal evaluation document also suggests that about 21% more than the target for this indicator (youth empowerment) had been achieved by the Lab in the first six months of 2017 (Internal Document 1, 2017, p. 19).[17]

It was also evident in some responses that, participants felt the Lab programmes had equipped them with other skills like improving their self-esteem and confidence. By learning the new skills, they felt they had gained the necessary knowledge and abilities to carry out potential tasks when they got a job and also engage professionally with others due to the gained skills. Interview respondent P44, for example noted that:

> *"The programme has made me more confident in myself. I used to be shy and never would answer a question in class. I feel much more confident now…"* (Interview Respondent P44, 2017)

The Internal Document 1 (2017) also verified this by noting that many interviewed, noted that the programme had helped them to increase their self-esteem. The document notes that one interviewee, highlighted how the programme had built her self-confidence and changed the way people perceive her:

[17] This research was unable to verify this claim.

> *"Now, people believe in me as they realized I entered into this competitive programme and even my father changed his mind towards me and strongly believe in me as a future entrepreneur while before the programme he did not."* (Internal Document 1, 2017, p.19)

With regards to this indicator influencing employability or employment, the data only indicated that participants felt they were better prepared for employment interviews and the Labour market.

7.3.3 Transforming Ideas into Projects that Address Unmet Needs

The collected data on ideas emerging out of the application processes indicated that all of the 30 ideas this research engaged with stemmed from unmet needs that the local community directly faced. Unmet needs relate to identified needs of community members (individuals and/or sections of the community) that had no solution or inadequate solutions addressing them. These unmet needs were the instigator and driver of solutions. An example was the need to provide toys for recovering children in the children's clinic in the local hospital. Another idea addressed the need for providing contactless bins to hospital wards.

Both ideas stemmed from youth participants who came up with their ideas as a result of being directly affected by the lack of toys for recovering family members in hospitals, as well as the risk of infection caused by contaminated hospital bins used by a member of the family working in the hospital:

> *"…we developed our idea because we know someone from our family who is in the hospital and doesn't have any toys to play with…our research shows that toys help children recover quickly...."* (Interview Respondent 40, 2017)

Both ideas were accepted to participate in the UPSHIFT programme and became projects of that programme. Solutions were developed and prototyped around these ideas. The developed solutions addressed these unmet needs in innovative ways with further support and recommendation provided to these ideas. On the whole, all projects this research engaged with, emanated from participant ideas that were accepted to a Lab programme as a team project. From these ideas, solutions were developed by participants to address these unmet needs by employing the skills gained from the training received.

This research observed however that outreach programmes conducted by the Lab, as well as ideas chosen by the Lab to participate in Lab programmes focused on identifying project ideas that addressed community needs/ challenges:

> *"In Kosovo there are so many problems …. there is no lack of problems ... so we encourage the youth to look around and find a problem ….and apply..."* (Interview Respondent 6, 2017)

Asked whether they thought their idea would get them a job or create a job for them, the group members noted that they hoped they would get the money to invest in their product. [18]

Similarly, participants were still in college and not yet ready to go into employment. However, after college they would consider developing the idea further, provided they got an investor to back them. All five team members noted that they could imagine themselves working in different capacities in an enterprise that supplied their solution. They all also observed that they had learnt a lot during the programme and gained valuable skills for the future, whatever the future might be. This research however observed that participants had learnt in addition to ICT skills problem solving skills and thus felt confident to address future problems and challenges in a similar manner, using the skills they had learnt. Interview Respondent P45 noted:

> *"I think that I have learnt skills that will help me solve problems in the future and I think I will use the same methodologies to address any new problem I face."* (Respondent 45, 2017)

This was also confirmed in a survey that wanted to know what Lab programmes had taught them. 80% of survey respondents noted 'problem solving' skills as one of the skills they had acquired.

7.3.4 Transform Potential into Strengthened Capacity

The data further evidenced that participants of programmes had been successful in transforming the perceived potential in them to strengthened capacity by acquiring skills for professional life. By achieving skills that had been determined by government in its youth development strategy documents as relevant for the Kosovo labour market,

[18] The product is a 3-D Printer that with specialised computer aided design tools can take pictures drawn by kids and prints out 3-D images of these for them to play with.

participants of Lab programmes were trained and made ready, i.e., equipped for professional life. In addition, the achieved skills had helped participants like Inclight from Gyakova (mentioned below) start their own business and thereby create new employment opportunities for themselves and others. Given that ideas emanated from them and with the acquisition of skills, participants could develop their ideas into tangible solutions, the potential in these young is considered transformed into strengthened capacity.

The data pointed to the fact that both participants and facilitators of Lab programme were of the opinion that:

a. Youth and adolescent participants had more potential than their traditional education could harness or appeared to harness, and;
b. Lab programmes had better chances of transforming these potentials into strengthened capacity.

Interview respondent SM63 noted that:

> *"The difficulties of the Kosovo situation haven't made it possible for the current education systems to harness youth and adolescent potential. The young people have more to offer than they were doing. Our programme enables them to do more, to transform their potential into useful capacities …to contribute directly to state development and to society."* (Respondent SM63, 2017)

In a concrete sense, the data showed that the perceived potential in the youth and adolescent of Kosovo relates to their ability to achieve a successful professional life and contribute to solving existing social challenges. Strengthened capacities is evidenced by young people who have acquired skills through Lab programmes, using these skills in their professional life, either in employment or to address existing social challenges within their communities by generating new employment opportunities through cultivation of innovative social entrepreneurship (c.f. Internal Document1, 2017:4)

Between January and June 2017, the data showed that 196 young people were trained in transferable skills, 70 young people received professional experience through establishment of social and ICT businesses and 3 start-up businesses and ICT solutions were established (Internal Document 2017, p. 17). Transferable skills are skills that can be used in varying sectors of the economy, e.g., creative thinking skills. Established

businesses refer to developed innovative solutions with business potential and not trading businesses. Start-up business refer to actually established trading entities.
Whilst there is evidence of transformed potential into strengthened capacity, the availability of participants interviewed and surveyed to the Labour market suggests again that they are not ready for the Labour market. All participants who attended programme workshops during my research period were either in secondary school or in college. It is possible that other workshops might have participants closer in age to achieving full time employment. This research however could not verify that. It was however obvious that participants had developed some skills that could help them, create new employment opportunities, and with the needed financial support, scale up their solutions.

7.3.5 Addressing Social Challenges through Innovative Social Entrepreneurship

The data bore evidence to the fact that established social enterprises first and foremost addressed unmet social challenges. Social enterprises are recognised in this research as innovative solutions that address specific problems affecting members of the community, i.e. the society. Solutions developed to address these societal challenges were innovative in the sense that they were new or better ways of addressing the issue at hand.

Inclight is one such example of a solution that addresses social challenges and aims to encourage inclusion of people with Down Syndrome in the society, Inclight is a creative business located in Gjakova. Kosovo. Youth leaders in cooperation with a local Down Syndrome Centre, were determined to create a social enterprise that manufactured candles made by people with Down Syndrome. It had to be decorative, colourful and easy to make by people with Down Syndrome. They have managed to open a store, which serves also as a working-space where staff manufacture the candles on a daily basis. The long-term goal of Inclight is to expand their capacities and involve more people with Down Syndrome. All benefits go to supporting people with Down Syndrome, and to expanding the business.

The above has sought to present findings based on an analysis of the collected data that relate to key goals and objectives against which the effectiveness of the Lab and its programmes can be measured. This research considers these are key dimensions of the Labs effectiveness. They relate directly to the purpose for establishing the Lab and the immediate needs it had to address.

This research is of the opinion that while it is too early to show effects at the impact level, especially due to the fact that the majority of participants of this study are not available to the Labour market, nor ready to start and run businesses, because they are in college, there is some evidence of possible long-term positive impacts.
Certainly, the acquired skills and certification of participation could potentially influence employability. Creative thinking skills and to some degree ICT skills are transferable to other sectors of the economy, and the ability to use human centred design techniques could be seen as an added value to potential employers. It thus could increase chances of gaining employment, at least aspirational at this point but not evidential.
Secondly, there is evidence of past participants establishing businesses and hiring additional people to help scale up the business. Examples like Inclight have successfully established a social enterprise that is employing others, scaling up and addressing significant social challenges.

Thus, with particular reference to the STARTUP programme, one important result of the programme has clearly been the training in entrepreneurship and eventual setting up of some businesses. Interviewees have noted that the programme was important to secure some additional financing, market their products through social networks, or network with other business to learn more about the business opportunities. This research engaged with five Social Enterprises operating in different industries. One such enterprise “tai sweets” noted that the programme had helped them scale up to two shops and also to develop a comprehensive long-term business strategy.

Other Important Variables

In addition to the above discussed measurable objectives, the data also points to other measurable variables of how effectiveness is measured in this unit of interrogation. The data collected showed that the Lab is also considered effective in:

a. Establishing a context induced organisational structure with related operations;
b. Building and sustaining relationships with key collaborators.

7.4 Design and Implementation Dimension

7.4.1 Pragmatic Teaching Techniques and Approaches

The data showed that Lab programmes have been innovatively designed employing pragmatic techniques and approaches to skills learning that would equip young people of Kosovo with required skills for the Kosovo Labour market, thus making them employable or helping them create employment by starting their own businesses.

Interview Respondent 81 (2017) also notes that Lab programmes have been so well designed that they are also suitable for students with specific physical challenges and the selection process as well as programme workshops make considerations for that. This couldn't be verified by the research since the criteria for selection was not presented. There was however evidence of compliance with requirements of local systems and structures like ensuring the equal access and participation of marginal groups (e.g. marginal ethnic groups)

Programmes have been designed in response to different strategic documents that have highlighted the unemployment problem faced by young people and called for measures to be taken to address the problem through innovative yet pragmatic techniques and approaches (Internal Document 1, 2017, p. 9). Pragmatic is understood in this research to mean practical and hands on methods and approaches to developing solutions.

7.4.2 Understanding and Meeting the Needs of the Target Group

The design of the Lab was also influenced by understanding the needs of the young people of Kosovo. As discussed in the earlier chapter, this was achieved through a UNICEF led consultative process. An internal evaluation document (2017) confirms that:

> *"The initiatives have been designed on the basis of the specific needs of beneficiaries."* (Internal Document 1, 2017, p. 9)

Key elements of their specific needs include:

a. Informal learning opportunities (as previously noted in Chapter Five);
b. Opportunities to learn and/or improve ICT, innovation and entrepreneurship skills;
c. Support and mentoring through training and learning processes;
d. Practical experience and volunteering.

Firstly, the data showed that young people advocated for informal learning opportunities. Informal learning opportunities referred to learning opportunities that were outside of the mainstream/ traditional school setting (Interview Respondent MM 3, 2017). In response, the research observed that Lab programmes were conducted at weekends and in informal settings – typically in Hotel conference rooms. This was to accommodate formal education during the week. The setting was relaxing and less rigid (Interview Respondent 43, 2017).[19]

Secondly, young people expected to learn and or improve their ICT skills and engage in innovation. UNICEF responded to these needs by initially introducing the By Youth for Youth programme, which, as previously noted, focused on ICT skills. Maintaining this programme, but in another form (the Design Centre), the Lab introduced UPSHIFT and STARTUP in 2013. UPSHIFT is an interactive workshop that teaches innovation skills and gets participants to address social problems in innovative ways, whilst providing them with skills in innovation -creative thinking, development and prototyping. STARTUP focuses on entrepreneurial skills which have also been discussed in the previous chapter. However, the effectiveness of these Lab programmes is measured by the appropriateness of these learning/ training offering in addressing the specific needs of young people, which as a midterm evaluation report also includes the deliverable of motivating and increasing youth confidence. It commends the Lab for these achievements:

> *"…it is very commendable that the programme has been able, until today, to effectively motivate young people by also increasing their self-confidence that is key for them to better plan and achieve their career goals."* (Internal Document 1, 2017 p. 4)

Participants of focus group discussions particularly noted that they were pleased with the support and mentoring they received from Lab staff and external mentors and collaborators during programme workshops. They reported that the design element of mentorship during programmes was key to them enjoying the learning experience, acquiring the skills and coming up with solutions they eventually developed (FGD 1, 2017). All participants agreed that the mentoring process was significant for the success of Lab programmes.

[19] As of the completion of my data collection period, Lab programs had not been incorporated into mainstream formal education. This research was however informed that there were advanced on-going discussions between UNICEF and government authorities about the incorporation of Lab programs into formal education and this was expected to happen in 2019. This would mean that Lab programs like UPSHIFT would be incorporated as subject/courses into secondary education.

Fourthly, the data showed that unemployment was also due to the lack of practical experience. Young people consequently advocated for possibilities of gaining practical experience in the trained fields. The Labs programmes have been structured in a way that participants get exposed to potential employees. This research observed that this strategy helped some participants to achieve employment of internships with programme collaborators. Other participants have secured work experience through the Labs Kosovo Volunteers Platform an initiative, that matches young people with NGOs offering work experience through volunteering. This volunteering is however accredited to volunteers as work experience by the Ministry of Culture, Youth and Sports.

Thus, by understanding the needs of young people in Kosovo, the Lab has responded by providing programmes and practical learning experiences that address these needs. It is therefore considered effective in designing and implementing relevant programmes.

7.4.3 Understanding the Merits of Innovation and Entrepreneurship for this Context

The data also confirmed that the Lab has been effective in understanding the merits and application of innovation and entrepreneurship approaches to address needs within the context of Kosovo. This is evidenced by adopting curricula that are based on cutting edge research on effective learning techniques (experiential learning and design thinking) and adapting to the context. The focus on entrepreneurship and start up suggests an understanding of their importance in dealing with the needs of Kosovo and its youth, i.e. dealing with the unemployment issue.

Foremostly, the data suggests that there is belief by UNICEF in existing research which advocates the use of innovation and entrepreneurship for solving unemployment issues. According to UNICEF documents, this body of research shows that:

> "*Despite the fact that the large majority of start-ups fail, the ones that actually succeed now accounts for nearly half of all net new job creation in the world. Moreover, in the context of Kosovo, even more than in other developed countries, while there are certainly several constraints, there are important opportunities for entrepreneurs to seize, as problems that have been already solved in other countries still need a proper solution in Kosovo."*(Internal Document 1, 2017, p. 10)

Consequently, the Lab has developed programmes that use innovation approaches like human centred design, and entrepreneurship approaches like business planning, to create programme workshops that help young people gain skills that can be used to address problems through innovation - scalable solutions that address local problems and can also create employment opportunities.
In addition to understanding the merits of innovation and entrepreneurship and developing and designing training programmes that can teach innovation and entrepreneurial skills, the Lab has also been successful in implementing these programmes.

7.5 Network Dimension

7.5.1 Building a Network

The data also showed that the effectiveness of the UNICEF Lab is also measured by its ability to build a network of collaborators and fulfil contractual agreements. This represents the fourth dimension of effectiveness. This network of collaborators, their roles and the sectors to which the Lab belongs, has been discussed in detail in the previous chapter.
As an international non-governmental organisation, in order to work in Kosovo, it was necessary for UNICEF to build relationships and partnerships with local government and non-governmental agencies, as well as with local and international donor organisations. The results presented in the earlier chapter have evidenced that the Lab has successfully developed collaborations with a host of organisation and entities. Some of these collaborations date back to 2010. (Event though Kosovo has not had a very strong and stable government since its independence, this has not had any visible impact on relationships and activities with UNICEF).
The list of the Lab's other stakeholders in this network have been presented in Chapter 6.

7.5.2 Meeting Requirement of Development Collaborators

An analysis of the data showed that beyond establishing a collaborative network, it was also very important to meet their expectations. Meeting their expectations i.e. contractual agreements assured continual support for the Innovations Lab and its work. The study found out that agreements were based on the delivery of certain outputs over a defined period of time-typically three to five years.

According to the Internal Document, (2017) the implementation of the funded project the report was prepared for, started from December 1, 2015 to November 30, 2018 (36 months).
Interview Respondent SM 64, (2017) also notes that the funding from a financial institution, collaborating on Lab programmes, was initially for five years, and only recently got renewed.

Key outputs of such contractual agreements focused on the design and implementation of programmes that are innovative, relevant, effective and efficient (Internal Document 1, 2017, p. 4). This document also emphasizes the importance of satisfying stakeholders' requirements. The document for example notes that with regards to an existing collaborative programme, the Lab:

> *"….is on track to achieve its planned short and long-term objectives and all the stakeholders interviewed confirm their satisfaction with the approach and the results of the programme."* (Internal Document 1, 2017, p. 4)

The data suggests therefore that key stakeholders collaborating with the Innovations Lab have specific expectations of the Lab. The significance of meeting stakeholder requirements was noted by Respondent SM 68 (2017) and reiterated by Respondent D87 (2017). Respondent SM 68 (2017) notes that:

> *"…other major stakeholders influence the work of the Lab. Stakeholders like funders, government agencies, municipality heads and even school directors all have some influence on whether we are able to run our programmes or not…. We have to ensure that we meet their priorities, their demands and work within constraints of agreed deliverables."* (Interview Respondent SM68, 2017)

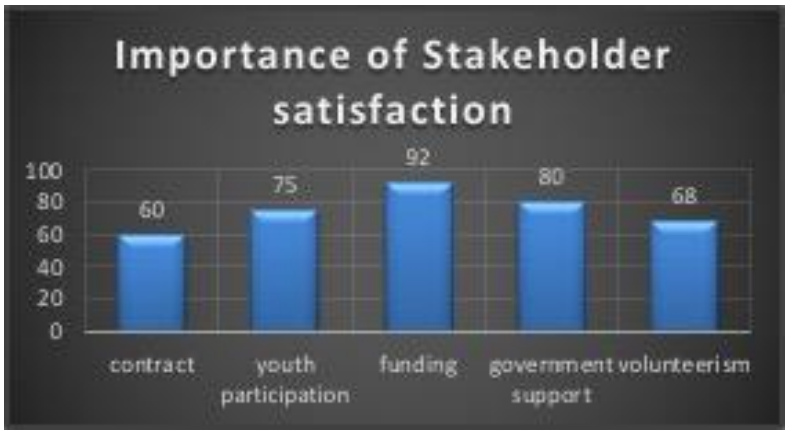
A key informant from a donor organisation, serving as a collaborator on this programme also noted that:

> *"…yes, this programme has been meeting our expectations…. Those ideas and presentations at the last programme were very good, and evidence they are providing the youth with new skills …so we continue to support them…"*
> (Respondent D87, 2017)

Thus, in addition to building a network of partners and satisfying requirements of contractual agreements, the data also suggested that by meeting stakeholder (contractual) requirements, the Lab secured the continual support of collaborators. An additional three to five years of funding was secured in some cases (Respondent MM 50, 2017).

A survey conducted purposely by this research to capture why it was important to meet the requirements of stakeholders, provided the following results. The Diagram shows in percentage how many respondents mentioned a variable that they saw as a reason why securing stakeholder satisfaction was important. As evidenced in earlier chapter and also now from below responses, satisfying stakeholder needs is important and achieving that is of immense benefit to the Lab. It secures funding to run programme, participation in programmes, government support and volunteerism that both benefits organisations, as well as volunteers. In Kosovo, through KOVO (a Lab programme), volunteer time is considered valuable practical work experience and accredited by the Ministry of Culture, Youth and Sports.

Figure 7.5.2 – Stakeholder Satisfaction



1. Satisfying contract
2. Securing participation
3. Securing funding
4. Government support
5. Volunteerism

Source: Author's own construct

The above survey, conducted primarily with UNICEF /Lab staff and mentors from PEN, shows:

- Ninety-two percent of respondents noted that it was important in order to secure funding;
- Eighty percent of respondents referred to its importance in securing government support on initiatives, (this was critical especially with regards to gaining access to

young people by dealing with ministries, government officials and other authorities);

- Seventy five percent saw the importance in ensuring that adolescent and youth kept participating in programmes;
- Seventy percent argued that it was important because they needed PEN (local implementing partner) as well as other NGO's on board to help(assist/volunteer) in programme delivery;
- Sixty percent felt that it was important in fulfilling contractual agreements which are both stipulated and pre-defined objectives.

It is important to observe hear that comments in the Internal Document 1 represent to some degree donor reporting and accountability upwards to donors. Consequently, this research suggests that there might be tensions in balancing the specific expectations of stakeholder requirements – in particular if some are contract based and others are not. A structure power imbalance could be built into the model. Although aware of these possibilities, this research was not able to examine and confirm these fears.

7.6 Interest and Participation Dimension

7.6.1 High Levels of Interest, Applications and Participation

The data further evidences that the Innovations Lab is effective in successfully implementing Lab programme. This is articulated in terms of planning, organizing, generating considerable interest for its programme workshops, making workshops accessible to young people across Kosovo, and improving young people's professional readiness and entrepreneurial capacities through numerous delivered training workshops. It is also evidenced by the number of young people trained and who have acquired skills and practical experience.[20]

The goal of addressing unemployment in Kosovo through its skills training programmes defined the basic requirement: of organizing and delivering as many training workshops as possible. Based on the numbers provided in Appendix 7.1, the Lab is considered effective for achieving the objective of training and participation. Essentially because this is the only metric it possibly can control. Other factors influence employment – including political-

[20] Appendix 7.2 provides a list of young people trained by year through the Lab's programs. The relevant programs are highlighted in grey.

economy factors; individual characteristics of the learners; spatial and environmental factors etc.

With regards to programme workshops, the data showed that output targets were set for the number of training programmes, as well as trainees per year. An evaluation report verified that the Labs work was benchmarked against predefined outputs and indicators measured and reported periodically. Table 7.4 below is an extract from a 2017 mid -term evaluation report. It presents results of the Labs performance against set outputs and indicators that focused on improved professional readiness and entrepreneurial capacities expressed in terms of soft and transferable professional skills, hard ICT skills and professional experience.

Main Project Outputs: The major outputs of this report are:

a. Skills training and experience;
b. Exposure to Labour market in the form of volunteering.

a. Skills training and experience

3-year target: 900 young people to be trained in ICT skills;
300 young people to be gain professional experience;
6 ICT based solutions to developed and deployed.

Targets (every 6 months):
150 young people trained in ICT skills;
50 young people gained professional experience;
1 ICT based solution developed and deployed.

Midterm (15 months) achievement

Achieved 1st 6-month period (Dec 2015 - June 2016):
100 young people trained in ICT skills;
50 young people gained professional experience;
3 ICT based solutions developed and deployed.

Achieved 2nd 6-month period (July 2016 - Dec 2016):
175 young people trained in ICT skills;
65 young people gained professional experience;
1 ICT based solutions developed and deployed.

Achieved 3rd 6-month period (Jan 2017 - June 2017):

200 young people trained in ICT skills;

50 young people gained professional experience;

2 ICT based solutions developed and deployed.

Total achieved up till June 2017:

475 young people trained in ICT skills;

165 young people gained professional experience;

6 ICT based solutions developed and deployed.

b. Advanced professional readiness and exposure to Labour market (volunteering).

3-year target:

3000 young people with advanced professional readiness;

60 CSO's and public institutions involved in providing volunteer positions.

Targets (every 6-months):

500 young people with advanced professional readiness;

10 CSO's involved in providing volunteer positions.

Midterm (15 months) achievement

Achieved 1st 6-month period (Dec 2015 - June 2016):

473 young people with advanced professional readiness;

0 CSO's involved in providing volunteer positions.

Achieved 2nd 6-month period (July 2016 - Dec 2016):

500 young people with advanced professional readiness;

0 CSO's involved in providing volunteer positions.

Achieved 3rd 6-month period (Jan 2017 - June 2017):

110 young people with advanced professional readiness;

8 CSO's involved in providing volunteer positions.

This research observed that with regards to achieving skills training and experience, the Lab was on track to achieving these set goals. With regards to the second segment which involved advanced professional readiness and exposure to the Labour market, the Lab was not faring well and lagged in achieving its goals.

This study also found out (by observation and personal attendance) that Lab programmes have been implemented across Kosovo and programme workshops take place also in other regions of Kosovo. This permits young people from these regions to participate in programmes without having to travel to Pristina, the capital and where the Lab is based.

This accessibility has assisted youth in these regions to also gain skills and start new businesses like, Inclight from Gyakova, who make decorative candles. Over the period of the study (6 months), Lab programmes took place almost every other weekend.

High Numbers of Applications

Related to the above is invariably the Labs' effectiveness in attracting high levels of interest/ demand in programme workshops, resulting in numerous applications from young people. As an example of the demand and high number of applications, the data evidenced that about: five times more applications were received than places available for participation in programme workshops. The Lab reports that:

> *"As a result of the implementation of a fruitful outreach, over 250 applications from youth all around Kosovo who expressed their interest to be part of Podium, were received. From this vast number of applications, 45 people assembled in 10 teams with ten distinct ideas were chosen to participate in the workshop."*
> (Innovations Lab Kosovo, 2019)

An internal report also notes that in 2017 alone, the Lab run 52 youth led programmes with 4897 direct beneficiaries (Internal Document 1, 2017).

Staff members noted that the Lab would receive anything between 100 - 300 applications depending on location and the programme being offered. Interview Respondent MM53 notes that the programme UPSHIFT would be the one that currently received the most applications-roughly 200 per programme call. Typically, 8-10 teams, with 3-5 team members will be chosen to participate in the programme. The interview respondent noted that these were the number of participants the Lab - its staff and volunteers could handle at a programme workshop. According to Interview Respondent MM52, 2017 registered the highest number of programme workshops and attendees since 2013. The respondent also noted that it was very rare that attendees wouldn't complete the weekend programme, hence a good number of young people are trained at every workshop.

High Levels of Participation

This research also found out that the Innovation Lab has not only been successful in attracting generous numbers of applicants, but also high levels of participation. High levels of participation in this research refers to attendance, participating and engaging in all workshop sessions and completing the workshop with a certificate. Achieving high levels of participation is considered desirable and evidence of significant success in performance

by UNICEF. High levels of participation invariably led to more youth and adolescent been trained in ICT, innovation and entrepreneurial skills around solving societal problems. Such high levels of participation are as a result of the following:

a. Structured outreach phase/Innovation ecosystem;
b. Unemployment/idleness;
c. Programme attractiveness – new methodologies, certification;
d. Problem solving opportunity;
e. Funding incentive.

To analyse the Labs' performance in achieving such high levels of participation, this study sought to elucidate why the attraction, interest, high response and willingness to participate in Lab programmes. Based on responses received, the above 5 reasons emerged from the coded data and are discussed below. The outreach phase not only provides the Lab with a great opportunity to address their target audience, but it also provides an opportunity to arouse interest and get them to successfully apply for programmes. Generally, by way of attraction, Respondent JM29 observes that the young and adolescents of Kosovo are typically very eager to participate in a UNICEF programme.

As already noted, even though participation isn't a guaranty for employment, it is expected that learning these new skills would make them employable and might help get them employment.

7.6.2 Structured Outreach Phase

The Outreach phase as one of the Lab's key processes of getting the youth and adolescent in Kosovo to participate in programmes. It emerged as the main approach to speak about their programme offerings, arouse interest in their audience to attend these programmes, and to encourage them to apply and consequently participate in programme workshops. It is essential for the Lab to be effective in generating interest and desire among the youth and adolescent in Kosovo to participate in Lab programmes.

A UNICEF mid-term evaluation report notes that the Labs' outreach team needs an:

> "*Introductory session of about 15-20 minutes to explain the process to students.…introductory training and mobilization activities are delivered to adolescents and youth capacities in ethnographic methods for problem identification and problem definition."* (Internal Document 1, 2017, p. 10)

This study found out that the effectiveness of this outreach phase was measured by:

a. the level of coverage achieved through outreaches (number of locations visited);
b. the number of youth and adolescent who applied and eventually participated - attended and completed workshop programmes.

The level of coverage is measured by the number of locations the outreach team manages to visit, the number of youth and adolescents the team engages with about their programmes and the number of youth and adolescent who participate in the open call application process. Thus, a resulting high number of applicants is considered evidence of an effective outreach phase and having such considerably high numbers of applications to choose from, is also synonymous for a successful outreach (Respondent MM50, 2017).

Related to this, the Labs' effectiveness is also gauged by the actual number of successful applicants who eventually attend, and complete programmes offered by the Innovations Lab. The choice of who attends is seemingly only based on having an idea, i.e., identifying a problem that the team has chosen to solve. The decision as to who attends is determined by a selection team at the Innovations Lab. Unfortunately, the criterion for selection was not shared. Whilst it is evidently important that the youth and adolescent of Kosovo are made aware of the UNICEF Innovations Lab's programmes and are offered the opportunity to gain some skills by attending the programmes, the data seems to however primarily emphasise how many youth and adolescent applied for and participated in Lab programmes.

This research thus argues that whilst there is relevance in a structured outreach phase that informs potential participants and encourages them to apply, evidence of a structured approach in generating jobs or causing employment is neither given, tracked nor monitored. Such a structured outreach may contribute to ensuring participation in programmes but does not directly influence innovation outcomes, in the sense that programme outcomes are implementable innovations. High levels of participation may ensure that numerous solutions are presented, but there was no evidence in the data collected that employability or employment increased correspondingly. The data however pointed to the fact that high levels of participation were also due to situational challenges face by youth in Kosovo.

7.6.3 Addressing Situational Challenges

An analysis of the data collected showed that the high levels of participation is due also to youth unemployment, idleness, a lack of training opportunities and perceived educational inadequacies. These situational challenges have prompted many young people to apply and participate in the Innovations Labs programmes.

The issue of youth unemployment in Kosovo has been discussed above. However, Interview Respondent JM5 explained the reason for the high level of positive responses to open calls by linking this desire to participate in programmes to the unemployment situation, idleness and a lack of training opportunities.

> *"I think one of the most important factors is that there is not much to do for the young people…. many youngsters are unemployed and there is not much activities that they can do in their free time, so with our programmes we try to keep them busy as we can, so this is one of the most important factors.. "*(Respondent JM5, 2017, underlining added)

It would appear that the Lab capitalises on the situational challenges to attain high levels of participation. Whilst the hope of gaining employment as a result of attending programme workshops might be a plausible reason to motivate attendance, it doesn't influence innovation outcomes. It would rather seem that the Labs offerings are considered opportunities to replace idleness and to be engaged with something. For others it is an opportunity to attend a UNICEF led programme and receive a certificate from this world acclaimed international organisation. The Labs programmes and certificates are thus attractive incentives for youth and adolescent. However, Lab programmes are obviously an effective mechanism to engage the young and adolescent population in Kosovo even during periods of idleness, teaching them useful ways of solving local problems and helping them acquire skills that can be useful for future employment. There are also agent-based benefits for participants; and collective social benefits for the wider community as new innovations emerge in the forms of products, services, programmes and processes innovations.

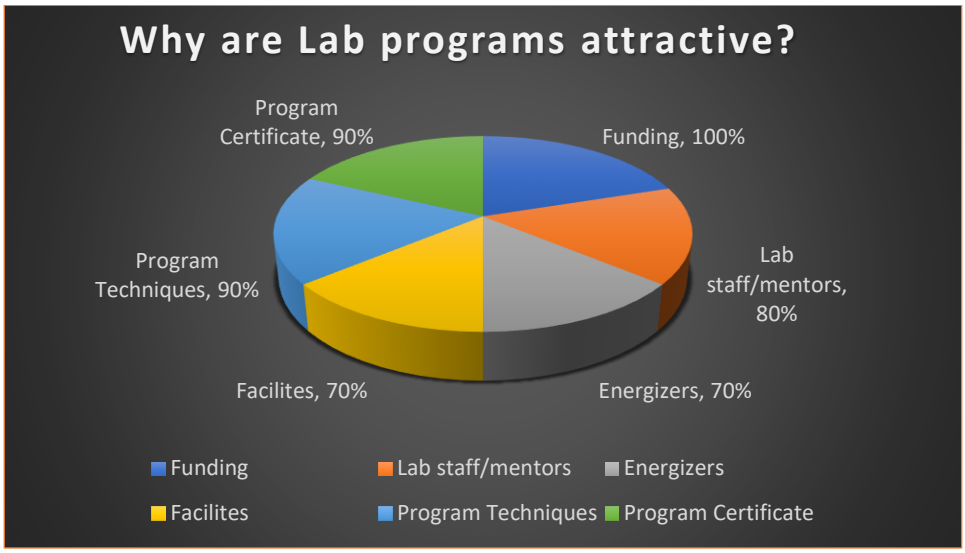
7.6.4 Programme Attractiveness – New Methodologies and Certification

Another reason for the high levels of participation focuses on the learning methods employed by the Lab and the certificate received for attendance. Interview Respondent JM5 suggested that programmes for participants were:

> "*Inspirational, fun and educational."* (Respondent JM5, 2017)

Asked what was most attractive about the Labs UPSHIFT programme, 90% of respondents of the survey, noted programme methodologies and techniques in their list. Funding, Lab staff and mentors, energizers, programme facilities and programme certification were also mentioned as other reasons that make attending Lab programmes desirable.

Figure 7.6.4– Survey Results of Why Lab Programmes are Attractive



Source: Author's own construct

An analysis of participant interviews also showed that 95% of participants at an UPSHIFT workshop, said they had never used any of the programmes methodologies or techniques before. Interview Respondent JM5 who is a facilitator noted that:

> *"In Kosovo, not much has been developed or has progressed in the last couple of years so it is a very classical way of teaching and all of a sudden we go to schools and then present a very attractive Project, a new methodology and modern approach and they are of course very excited and they see it as a really unique opportunity..."*
>
> (Respondent JM5, 2017)

In addition to methodologies and techniques employed in Lab programmes, 90% also voted for the certificate received at the end of the programme. Respondent P41 noted for example that:

> *"A certificate from UNICEF would help my chances of getting a job."*
>
> (Respondent P41, 2017)

Respondents P42 and P44 also noted that it was important to receive a certificate for the programme. They believed that the course was very good and had taught them a lot. They

had a certificate to show that they had learned the skill of innovation. During a focus group discussion, participants also noted that the methodologies helped them very much in developing their ideas and finding better solutions to the challenges they had identified. 90% were of the opinion that they would not have progressed to a solution without the use of the methods and techniques learnt.

7.6.5 Problem Solving Opportunities

The data also evidenced that high levels of participation were influenced significantly by the notion that Lab programmes would teach participants how to solve societal problems/ challenges. 90% of participants noted that Lab programmes were attractive to them because the methodologies and techniques taught were going to teach them how to solve societal problems. It gave them the opportunity to develop potential solutions for some of the inherent problems that affect them.

> *"I think that by attending this programme, we will be able to come up with a solution for our problem. The mentors told us that we can develop solutions for our problem at the programme."* (Interview Respondent P41, 2017)

Interview Respondent JM6 confirmed this:

> "*Our programme gives them an opportunity to address problems that affect them and their community."* (Interview Respondent JM6, 2017)

It would seem that most adolescent and youth are eager to attend the Labs' programmes because they believe that these programmes are designed to help them come up with ideas that can address inherent societal problems. Consequently, participating offers them an opportunity to develop solutions for these issues. It also provides them an opportunity to participate in a competition with the possibility of winning some money that can lead to the implementation of their ideas. This problem-solving opportunity appears to be an intriguing offer to the young people and suggests the reason for the consequent high-level response and desire to participate. However, as Respondent P46 notes:

> *"...we came up with a solution for our problem and were chosen to receive 2000 euros, but I am not sure we are able to implement this idea with 2000 euro. We will need more money, more resources to implement this idea…"* (Interview Respondent P46, 2017)

This study observed that applications were made with an expectation that Lab programmes would help them develop solutions that can be made available to those affected by the identified problem. However, these expectations were not met. The findings suggest:

a) There was a sense of frustration;
b) Expectations seem somewhat unrealistic in terms of what is possible through a three- day workshop and mentoring exercises;
c) Whereas a problem-solving opportunity motivated participation, it did not influence innovation outcomes.

Respondent P41 notes that:

> *"…it has been more than 5 months since we won the prize, we have had some mentoring sessions with the Lab to implement our ideas, but we don't have a finished product yet…We don't know if we will have a product, its complicated…"*(Interview Respondent P41, 2017)

Hence, whilst it was evident that providing a problem-solving opportunity influenced the generation of solutions, it also caused some level of frustration and disappointment when participants realised that the incentive of 2000 euro was not enough to turn their ideas into full blown innovations that create jobs and/or improve employability. Respondents however noted that it was good that they won 2000 euro because it helped them to buy some equipment that helped them to progress with their ideas.

7.7 Organisational Structure and Context (Team Culture, Technology and Size)

The sixth dimension relates to the influence of the fit between the structure and environment(context) factors of team culture, technology and size. Culture and climate are used synonymously in this research. Evidence in the data shows that the Lab is considered effective because it achieves its goals and objectives by employing the appropriate organisational structure, team climate and technologies. Size did not play a significant role in influencing effectiveness.

7.7.1 Organisational Structure

A key objective in setting up the innovation's Lab was to design and implement a structure that best fits the purpose, goals and objectives of the UNICEF strategy to introduce an Innovations Lab. Organisational structure refers to how activities of the Lab are directed to achieve organisational goals and objectives. It concerns itself with task allocation, roles

and responsibilities, and coordination mechanisms to achieve set objectives. The strategy aimed at providing youth and adolescents in Kosovo with informal learning opportunities that would equip them with 21st Century skills and make them employable.
The data collected evidenced that the Lab had achieved designing and developing a structure for the Lab that provided informal learning opportunities, training participants in problem solving skills and some innovation and entrepreneurial skills.

The data also showed that the structure chosen was a functional one, characterised by it being an integral part of the UNICEF Mission in Kosovo. It was a departmentalised structure based on functions identified as needed to achieve objectives. There are primarily two departments. The first is the By Youth 4 Youth department that offers training workshops centred around social problem-solving skills and youth empowerment skills. The second is the Design Centre which focuses on coding and scripting and developing software applications. The Lab is consequently managed by two Lab leaders who share the lead responsibilities for the two main departments of the Lab (Interview Respondents MM66, 2017). The leaders are a Youth/ Adolescent Programme Officer and a Software Designer, respectively. They report to the Mission's Head of Programmes and manage a team of two coordinators, four youth programme officers and four other supporting roles. Coordinators and youth programme officers are typically employed by the local implementing partner (PEN) but work in the UNICEF Missions office (Interview Respondent JM26, 2017). This arrangement seems to satisfy a requirement to use local partners to implement programmes.
Interview Respondents 41,42, 43(2017) noted that this clear structure ensured that youth participants knew exactly who to deal with. They noted that participants of By Youth for Youth programmes primarily dealt with the Coordinator and Youth Programme Officers of this department. They found this very helpful in building trust, since participants always dealt with the same persons and developed over time good relationships with their Mentors. They felt that this raised their confidence and motivated them to continue and helped them complete the programme and tasks.

The team appears to also be optimally set up for its work with young people in Kosovo. They are trained in youth and adolescent programming and all have a university degree in diverse courses. Staff members are practically also youth, not much older than their participants. This closeness in age, coupled with Mentors being 'like them' positively

impacts on the relationship between participant and organiser (Interview Respondents 41,42, 43, 2017). It was evident from the data that the structure of the Lab was well aligned with the tasks needed to be carried out by the Lab.

7.7.2 Team Culture

Team refers to the group of individuals who carry out different tasks to achieve organisational objectives. Team Climate thus refers to the manner or way of working together to achieve these tasks. It is defined in this research as the shared perceptions of behaviours, practices and procedures, both formal and informal, within the Lab's team. The data shows that the Lab is made up of enthusiastic, young people, not much older than participants, and who share in the dreams and aspirations of the young people of Kosovo. They are well trained in the delivery of tasks. There is a sense of collegiality birthed by this closeness in age, and also by the fact that Lab staff are, like participants, experiencing the same challenges participants attempted to address. Consequently, the team climate is defined by a distinct attribute of a collective determination to resolve issues and provide solutions to problems affecting also the team of staff.

Describing themselves, Respondent JM6 notes:

> "*We are enthusiastic people, young people, we are not only about the same age as our beneficiaries, but we are like them in the spirit and with their ideas. We are somewhat like them; we understand them and think almost like them. This is the reason for our success. They feel comfortable with us."* (Interview Respondent JM6, 2017)

The team climate is influenced also by the character of its staff. The data showed that they needed to be flexible and adaptive and reactional to young peoples need. They also had to be skilled in communication. Asked "What type of person is suitable to work in the Lab?" Interview Respondent MM2 (2017) explained that:

> *"They need to be flexible and adaptive. meaning that working with youth, it requires responsibility, it requires to be knowledgeable, it requires to be adaptive, meaning that sometimes, their attitude changes. young people are very critical to work for. so, people who work with them need to be adapted to the changes, they need to react when there is a need."* (Respondent MM2, 2017)

Confirming the evidence of a good team climate, Internal Document 1 (2017) argues:

> *"UNICEF has been highly effective in mobilizing and motivating youth (one partner used the expression, "activate youth") as the Lab has a very good "grassroots knowledge."* (Internal Document 1, 2017 p.20)

This research observed that the knowledgeable atmosphere pertinent in the Lab - knowledge of needs of their society, and their communities, fostered better engagement and facilitation, especially when developing the idea and identifying the challenge. Mentors and participants contributed ideas in the development of ideas and solutions. The climate was a passionate one and the Lab members appeared enthusiastic about supporting their peers to success. It appeared that there was a helpful supportive interaction between mentors and participants. The climate was cordial and familiar, peers dealing with peers on issues known to both. This knowledge of context promoted confidence and a good working atmosphere. There was a sense of loyalty, trustworthiness and transparency, a sense of security. The importance of this may be understood by relating this to the past history of conflict, insecurity and betrayal.

7.7.3 Technology

The data showed that the Lab had the needed technologies to deliver tasks and engage with their target audience. Technologies refers to applications and tools used by the team to achieve tasks. In this research it primarily focused on the technologies used to engage with youth and adolescent as well as technologies employed to assist youth to develop their innovative ideas. These are applications used by for example the Design Centre to help develop software applications or ICT based applications that are used to develop solutions to address the problems identified. Asked what type of technologies were used to achieve innovation, Respondents at both FGD's noted that they primarily used the Internet for communication, KOBO to carry out ethnographic research, diverse web applications, as well as software and coding tools. In an interview with the Head of the Design Centre, they confirmed that there was an availability of software tools to code and write programmes. They noted that the diverse technologies they used helped them successfully design and implemented innovative solutions like the KOVO Platform.

7.7.4 Size

There was no evidence in the data that size influenced effectiveness. Structure influenced the size of the team.

7.8 Leadership

The data evidenced that Leadership was significant in making the Lab effective particularly with regards to identifying and engaging with key stakeholders, relating internally with Lab staff, as well as dealing with requirements of UNICEF and its rules and regulations.

Regarding key stakeholders, the data showed that the leadership of the Lab was instrumental in guiding the process of identifying, engaging and building relationship with key stakeholders who have been significant in helping the Lab achieve its goals and objectives. As discussed previously the effectiveness of the Lab has also been influenced by a collaborative network of key actors. Managing and guiding the Labs engagement with the Ministry of Culture, Youth and Sports to develop KOVO, a volunteer matching platform, was purported by Interview Respondent …as a good example of the good leadership provided. The effectiveness of the leadership was in working with this ministry to change regulatory requirements that then permitted the Ministry to recognise volunteering time as work experience. Further to that, Interview Respondent 63 notes that:

> *"We have been able to identify and build partnerships with key stakeholders who are not only important for the Lab but also important for achieving the aims of government strategy for the youth of Kosovo. Our leadership in this partnership is to ensure that we work together with our partners to develop resilient young people, who receive skills for life and for work through the Lab's programmes."* (Respondent SM63, 2017)

The data also showed that the effectiveness of the Lab was also incumbent upon the effectiveness of the leadership in facilitating and championing programme design, development and implementation. As a facilitator, the Lab leader facilitated the introduction and sharing of ideas and supported activities to design, develop, prototype and test programme solutions. They facilitated such engagements within the confines of UNICEF rule and regulations, providing the necessary guidance that ensured that global UNICEF strategies as well as local context interpretations of these strategies, were complied with. They championed iterations of the initial By Youth for Youth project that led to the establishing of the Innovations Lab.

Interview Respondent 63 noted that:

"I have remained committed to this course since I arrived in Kosovo. It was an interesting challenge I took on and has sometimes been challenging, manoeuvring through requirements, regulations…a difficult context…. I have also had to learn, adjust…but I have had dedicated staff who have worked tirelessly to ensure this unusual vison has been achieved. Leadership has been provided on both levels- at senior management level and at Lab level…the leads have been very good at interpreting global strategies into a context relevant programme…."
(Interview Respondent 63, 2017)

A middle management staff confirmed this by noting:

"Without a champion like 'Champ A' (name coded), the work of the Innovations Lab in Kosovo will not be that successful. It is difficult to change structures in UNICEF; it is difficult to sometimes get things passed. Our ability to achieve what we are doing is primarily due to the support we are getting from……. They are our champions; they pave the way for us to do what we do…. They allow us the flexibility and support because they believe in the concept and give us the needed backing…"
(Interview Respondent MM50, 2017)

7.9 Conclusions

Based on assumptions made after reviewing the literature, this chapter focused on identifying the multidimensional factors that influence the effectiveness of the UNICEF Innovations Lab and its operations in Kosovo. It sought to understand how the Labs effectiveness can be measured. Previous research had identified different approaches for measuring effectiveness and presented these as domains of effectiveness (see Lecy *et al*., 2012, Wadongo, 2014). Based on the extant literature, this research had assumed that by determining the goals and objectives of the UN Innovations Lab, the effectiveness of the Lab could be measured. This research consequently considered the effectiveness of the Innovations Lab in relation to areas or aspects of the Labs work, where it has been effective in achieving purpose, goals and objectives, and discusses these as the dimensions or domains of the Lab's effectiveness.

The data helped identify seven dimensions/domains of effectiveness that this research considers also as a multidimensional approach to measuring the effectiveness of Innovation Labs within this context and which are applicable to humanitarian settings:

a. The Programme Definition Dimension;
b. The Tasks and Responsive Dimension;
c. The Design and Implementation Dimension;
d. The Network Dimension;
e. The Interest and Participation Dimension;
f. The Structure and Context Dimension;
g. Leadership Dimension.

Programme Definition:

The data showed that the Labs effectiveness can be measured against its success in identifying and defining its purpose, goals and objectives in relation to the needs of its target audience. Responding effectively is dependent on its ability to understand and articulate the needs of the target group and to precisely define its purpose and goals. In Kosovo's case, the challenges facing young people were three-fold – not in education, not in training and unemployed.

The data showed that the Lab was effective in addressing above challenges by becoming a training facility that provides training workshops that educate, train and prepare young people for practical experience, employment or self-employment. To achieve this, it was imperative for the Lab to understand and identify relevant skills needed to address unemployment.

Imperative in humanitarian settings would be to examine if training facilities that provide workshops are feasible to establish. Particularly in refugee settings, there might be challenges associated with space and resource equipment to run such programmes as was implemented in Kosovo.

Programme Tasks

The data showed that the effectiveness of the Lab could also be measured by its ability to define programme tasks in relation to the identified purpose. Programme tasks included:

a. Teaching and imparting 21st-century skills;

b. Achieving employability and employment readiness;
c. Empowering youth and adolescents;
d. Transforming ideas into projects that address unmet needs;
e. Transforming youth and adolescent potential into strengthened capacity;
f. Addressing social challenges through innovative social entrepreneurship.

In this study relevant skills were defined as 21st-century skills, needed by the Kosovo Labour market. The data evidenced that the Lab was able to use its programmes to successful educate and train participants in human centred design, ICT, innovation and entrepreneurship skills. The data also evidenced that participants were, as a result, made ready for the Labour market. They were able through programme workshops to transform their ideas into projects that addressed unmet societal needs. Equipped with new skills, the potential in young people was developed into strengthened capacity. They developed confidence in themselves to take on social challenges and address these through innovative social enterprises, like Inclight.

However, though there was some evidence of a few social enterprises starting-up as a result of programme workshops, there was no clear evidence of mass employment or increased employability as a result of participating in workshops. Only a few participants secured work experience/internship/volunteering positions. This is partly also due to the fact that most participants at Lab workshops were still students and not ready for the Labour market, and potentially also because the relatively scarce avaiLability of jobs in Kosovo.
Clearly defined tasks will equally be required to be defined when implementing Lab operations in humanitarian settings. Care would have to be taken to ensure that participants benefit directly from programmes. It would seem that employment might not be an element of need to be tackled in humanitarian settings due to the complexities of refugees accessing work in host nations.

Design and Implementation

The third dimension of effectiveness relates to the design and implementation of the Lab and its programmes that educate and train young people in skills relevant to context. The data showed that the Innovations Lab and its programmes were designed in response to requests from numerous strategic development documents to provide young people with

innovative and yet pragmatic (hands on) approaches to developing skills for employment. The Lab has been effective in designing programmes based on a clear understanding of the needs of the target audience. Lab offerings thus included:

a. Informal learning opportunities;
b. Opportunities to learn and/or improve ICT, innovation and entrepreneurship skills;
c. Support and mentoring through training and learning processes;
d. Practical experience and volunteering.

Secondly, the data evidenced that in the design and implementation of the Innovations Lab and its programmes that consideration was given to research on the merits of innovation and entrepreneurship in addressing the challenges of unemployment. Identifying and incorporating innovation and entrepreneurship into solutions that address unemployment shows a good understanding of the challenges and competence to seek appropriate methods to address context related challenges. Adopting curricula based on cutting edge research on effective learning techniques (experiential learning and design thinking) and adapting to the context, suggests an understanding of their importance in dealing with the needs of Kosovo and its youth, i.e. dealing with the unemployment issue.
The design and implementation of an Innovations Lab in humanitarian settings has to clearly identify the challenges its addressing. It also needs to determine appropriate interventive mechanisms based on the requirements of context.

Network Dimension

The network dimension is the fourth dimension of the effectiveness of the Lab in achieving its purpose and goals. The data showed that the effectiveness of the UNICEF Lab can also be measured based on its ability to build a network of collaborators and fulfil contractual agreements with same.
Developing these collaborations has been of significant benefit to the Lab. It has ensured support from government agencies and other relevant stakeholders responsible for the target audience-youth and adolescent of Kosovo. It has secured resources, both financial and human resources for the work of the Lab and in some cases has provided participants with volunteering or practical work experience.

An analysis of the data showed that beyond establishing a collaborative network, it was also very important to meet their expectations. Meeting their expectations i.e. contractual

agreements assured continual support for the Innovations Lab and its work. The study found out that agreements were based on the delivery of certain outputs over a defined period of time; typically, five years. Collaborators and their roles have also been extensively discussed in the earlier chapter.

Interest and Participation

The effectiveness of the Lab can be measured based on the generated interest and participation of young people in Lab programme workshops. This determined by the number of applications received, number of actual participants, who also completed the training programmes and those who acquired skills and practical experience from or through Lab programmes.

The goal of addressing unemployment in Kosovo through its skills training programmes defined the basic requirement: of organizing and delivering as many training workshops as possible. This study found that Lab programmes have been implemented across Kosovo and programme workshops take place also in other regions of Kosovo.

The data confirmed that the Lab has been successful in attracting high levels of interest/ demand in programme workshops, resulting in numerous applications from young people. It has also been successful in attracting high levels of participation. High levels of participation have led to more young people of Kosovo been trained in skills around solving societal problems and make them more employable. The data showed further that such high levels of participation are as a result of the following:

a. Structured outreach phase/Innovation ecosystem;
b. Addressing situational challenges i.e., unemployment/idleness;
c. Programme attractiveness – new methodologies, certification;
d. Problem solving opportunities.

It would be necessary that these are provided to the target group in humanitarian settings.

Organisational Structure and Context (Team Climate, Technology and Size)

Finally, the data collected also evidenced that the Lab had achieved designing and developing a structure for the Lab that provided informal learning opportunities, training participants in problem solving skills and some innovation and entrepreneurial skills. Secondly the team climate in the Lab was adequate to achieve effectiveness. The data showed that the Lab was made up of enthusiastic, young people, not much older than

participants, well trained in fulfilling their tasks and who shared in the dreams and aspirations of the young people of Kosovo.
Thirdly, the Lab had the needed technologies to deliver tasks and engage with their target audience. Internet and social media technologies were used to engage with youth and adolescent. Technologies like web applications and software applications were employed to assist youth to develop their innovative ideas, particularly in relation to software development. The size of the team did not play any significant role in determining the effectiveness of the Lab.

Leadership

Leadership also played a significant part in the effectiveness of the Lab. Effective leadership was provided in identifying and engaging with key stakeholders who supported the achievement of goals and objectives by forming a collaborative network with the Lab. Good leadership was also provided in the management and guidance of key projects partnerships that led to innovative solutions, e.g., KOVO. Finally, leadership was provided in dealing internally with Lab staff, supporting them in achieving goals and objectives.

Ensuing chapters discuss the findings of this research in light of contingency theories by connecting findings to the reviewed literature, research questions and assumptions made.

Chapter 8 - Contingencies of Effectiveness 1

8.1 Introduction

This chapter discusses key aspects to the effectiveness of the Lab by firstly considering it with regards to its purpose. It identifies key goals and objectives in the process, against which the Lab's effectiveness is measured.

Secondly, the following paragraphs discuss key characteristics related to the Lab's approach in achieving effectiveness. It further identifies and presents the progressive stages of a context-induced innovation process.

Thirdly, the chapter discusses the Lab's effectiveness in relation to achieved outputs in the form of programme, products, services and process innovations. Employing the developed conceptual framework introduced in Chapter Two, this chapter discusses the effectiveness of the Lab in light of an open collaborative innovation approach with significant user involvement and its position as a collaborative Hub and Living Lab with distinctive attributes. Borrowing from Benjamin and Misra (2006), this research considers effectiveness as the extent to which the Lab accomplished its mission and meet its goals and objectives. Effectiveness is also considered as controlled by more than the actions of an individual or in this case an organisation (Campbell *et al*., p. 41). It depends also on factors extraneous to the Lab's behaviour.

As noted in Chapter One, with the demanding challenges of new crises, protracted displaced populations and lack of funding, UN agencies have had to rethink things and act in new ways. Bloom and Faulkner (2015) observe that approaches of employing innovation theories in the humanitarian space are increasingly being favoured to help address the complex challenges the sector faces. Consequently, since 2009 there has been a growing interest in defining and operationalising innovation for use in the context. They note that the operationalization of innovation in the UN is occurring in many forms all with the specific intent to stimulate and support new ways of doing and being, to better address humanitarian needs. In the case of UNICEF, the Lab approach has been used to support innovation in humanitarian as well as development contexts. According to their own records, this model is considered effective and thus has been replicated numerous times around the globe

8.2 A Hybrid Solution – Bottom -up/Top-down Approaches

A critical aspect to understanding whether the unit of analysis is an effective model that allows innovation to occur in the humanitarian space is to first determine the nature of circumstances and processes taken to establish the purpose of the Lab.

An analysis of the data collected shows that there was an emphasis on wanting to meet the needs of the target population, i.e. the youth of Kosovo, by involving them in the process of identifying needs and designing solutions to meet these needs. In the previous chapter, this research has described the employed approach as a bottom up approach led by UNICEF and supported by development collaborators. This confirms definitions and descriptions provided also in the literature where UN Innovation Labs have been defined as: "…open, collaborative incubation accelerators that bring business, universities, governments and civil society together to create sustainable solutions to the most pressing challenges facing children and youth" (UNICEF 2013a).

However, within this context, an entirely bottom-up approach does not seem to either secure or establish an open collaborative solution. The very nature of humanitarian and development spaces requires a hybrid solution of both top-down and bottom-up approaches to achieve collaboration from key partners; nor does it meet the needs of the target populations. There is also a need for a power promoter role responsible for convening, involving and ensuring collaboration.

In this research, a top-down approach starts by defining a strategy and cascading this strategy out to the organisation at large. A bottom-up approach involves beneficiaries in the process of defining goals and objectives of implementing this strategy within the local context. In a sense, pursuing a localisation agenda of seeking first the interests of the target population in implementing the strategic vision.

In practical terms, the analysed data has showed that the Innovations Lab in Kosovo emerged following a comprehensive process of engagement with various stakeholders across Kosovo, including the youth. It was established through a consultative process and in adherence to calls from young people and the requirements of government strategic development plans for the youth sector.

The data has also evidenced that an overwhelming majority of 93% who engaged with UNICEF in this process wanted to achieve more education than they already had. Large majorities of youth (unfortunately undisclosed in the reviewed documents) expected that any interventions to provide them with better education should:

> "*... prepare them for work, improve their status in society, support good citizenship* and *the development of Kosovo, widen their perspectives* and generally *support all aspects of life"* (UNICEF, 2011, p. 2)

In order to actively promote the findings of the consultative process with the youth, UNICEF developed priority areas for its aid interventions in Kosovo. The resulting initiative therefore centred around youth; youth empowerment and securing economic and social development for the young people of Kosovo. UNICEF thus prioritized providing the young people of Kosovo with what it Labelled '21st-century skills' needed by the Kosovo Labour market. The Innovations Lab was thus established and introduced as a mechanism for achieving this goal.

In this approach, the data also evidenced that the Lab's offering were designed through an iterative process which initially involved engaging with the youth at informal learning opportunities delivered as after school training programmes. UNICEF as an international aid organisation with limited and controlled reach did not seek to replace or change the existing educational system, but rather sought to support it by providing opportunities for young people to gather in after school locations, learn additional skills and to shape such activities as they required. The Innovations Lab was later introduced as a new programme replacing the initial By Youth for Youth project, offering new practices like UPSHIFT and PODIUM, specifically developed with the youth and for the youth of Kosovo to teach them how to address local needs through innovation.

This research however argues that the involvement of UNICEF in seeking the support of other international non-governmental organisation, as well as engaging local government in the drafting of the strategic development plan for youth, suggests a top- down approach. It would appear that even though the consultative process by itself represented the inclusion and involvement of the target population in needs assessment and designing a solution, thus suggesting an inclusive bottom up approach, the involvement of UNICEF with government to develop strategic documents that affect sectors of the population, would suggest a top-down approach. In addition to that, advocating and organising the consultative process, presenting results of this process to government, supporting their objectives and eventual adoption, rallying support from other international non-governmental organisations to enact them, suggests that UNICEF played an influencing role - a power promoter role in processes which culminated in the setting up of the Innovations Lab. The suggested power promoter

role of UNICEF is considered by this research as evident in its ability to steer this project, provide resources and to ensure the success of undertakings preventing any potential obstacles in the process (see Gemünden *et al*., 2007, p. 409). This research observes that it was in exercising this role that the Lab was established.
Consequently, this research argues that for Innovation Labs in such context to be effective, the is a need for a hybrid solution - both a bottom up and a top down approach to both determine needs and to win support of governing institutions and other international non-governmental organisations operative in the context, respectively, to enact solutions like an Innovations Lab.

With regard to strategy, the Lab concept already existed before it was introduced in Kosovo. It was a key element of UNICEF's Global Innovation strategy that sought to operationalise innovation at its locations across the globe. Hence, this research argues that the global strategy of setting up Innovations Labs, conceptualised and already introduced by the UNICEF Global Innovation unit, influenced UNICEF's decision to respond to the needs of Kosovo youth, by introducing the Innovations Lab. The idea of the Lab was thus imposed on the situation. However, key objectives and offerings of the Lab were determined through the bottom up approach. Thus, the strategic vision of employing an innovations Lab was top-down, with the Lab facilitating programmes determined by a bottom-up approach.
Furthermore, the identified requirements of the youth in Kosovo gave UNICEF both a reason and an opportunity to roll out its global Innovation Lab strategy. This direction appears to be consistent with the neo-liberalisation of the aid and humanitarian space and potentially more acceptable to UNICEF donors than, for example, direct education service delivery.

The findings therefore provide evidence that the initial dimension of effectiveness was achieved with the successful definition of purpose, goals and objectives guided by a hybrid approach of combining a bottom-up and a top-down approach. The power promoter role in this combined approach should be restricted to facilitating the deployment of an initiative or solution that accommodates an inclusive bottom -up approach of identifying the needs of the target population.

8.3 Types of Innovations - Programme, Product, Service and Process Innovations

This study also provides us with an understanding of what UN Innovations Labs within this context are truly achieving and might have to achieve in other similar contexts in order to be deemed effective. It is imperative however that these innovations are context induced and meet local needs. Results of an analysis of the data has shown that there are four types of innovations that can be associated to the Innovations Lab:

a. Organisational innovations;
b. Product Innovations;
c. Service Innovations;
d. Process Innovations.

Product, services and process innovations embodied the majority of types of innovations emanating from activities organized and managed by the Innovation Labs. Some products, service and process innovations from the Lab have been presented and discussed in previous chapters.

A significant finding for this study in relation to innovations outputs however relates to the Lab and its offerings. As briefly mentioned in earlier chapters, this study identified the Lab as a new organisational innovation. In fact, it can be considered as a paradigm shift and a re-positioning (Tidd *et al*., 1997; Bessant, 2005) of UNICEF's primary focus and normal operations in form of projects for small children, to providing a facility that drives creative capacities by providing innovation and entrepreneurial skills training programmes to young people. This paradigm shift also has resulted in UNICEF using its target community, the youth of Kosovo to implement innovative solutions like the Lab as part of UNICEF's local programme initiatives. Thus, would-be beneficiaries are co-creators of programmes that address local challenges (see Tidd and Bessant, 2010).

With the Lab, UNICEF has repositioned its projects within this context; offering this programme primarily to adolescent and youth from the ages of 14 - 24. It can be argued that this is a practical response to the needs of a particular population. Particularly, given the demographic trends; high numbers of youth and youth un/under-employment, this can be seen as a logical, practical shift for UNICEF. However, this solution has been continuously replicated in other countries facing similar situations of high numbers of un/under employed youth caused by diverse crisis situations. Consequently, UPSHIFT, its flagship programme has only been offered to youth between the ages of 19 - 24, not only in Kosovo but in other locations like Jordan and Montenegro. Lately (2018), the

Innovations Lab hosted an international conference with representatives of 24 UNICEF Innovations Labs across the globe in Kosovo to showcase its work and train these representatives on how to deploy UPSHIFT in their countries to similar demographics as in Kosovo. The Lab is been considered as a Centre of Excellence.

Another significant point is that, for Innovation Labs to be effective in such contexts, they must be prepared to address multi-sectoral challenges. As evidenced by the data, solutions developed through Lab activities address challenges faced by the local community in varying sectors of the economy. Documented and observed outcomes of innovation activities conducted by the Innovations Lab addressed issues for example, in the primary education sector, the transport sector, the volunteering sector, the philanthropic sector, the healthcare sector, to name a few.

This expected broad delivery of solutions requires that the Lab provide the needed expertise to develop, validate and diffuse diverse innovations. This therefore calls for the willingness to engage and collaborate with expertise from different sectors. It requires that the Lab builds such relationships and secures partnership from organisations and institutions from those sectors. In the Kosovo context, working for example with academia and some private sector partners provided the needed knowledge and know-how required to realise innovative ideas.

Thus, innovation in the space has a broadened outlook that goes beyond organisational changes to embracing the understanding that problems can be identified everywhere and are not restricted and limited to UN organisational needs.

In addition to the paradigm shift and repositioning of offerings discussed above, the Labs' programmes have to be effective in meeting local needs. Within the context of this research, programmes were new innovative ways to addressing the challenges associated with facilitating informal learning opportunities that teach young people the skills needed to be innovative - develop and diffuse new products, services and processes.

In response to local challenges, the Lab developed a host of new workshop programmes that addressed different challenges in a multiple of sectors employing diverse approaches, like PONDER, PODIUM and UPSHIFT as discussed in previous chapters.

This research therefore argues that for Innovation Labs to be effective in humanitarian settings, they would also require appropriate innovative programmes or iterations of existing ones, specifically designed around context needs and developed to suit the context of operation. Since humanitarian spaces are situated contexts with diverse needs they will

require a model that will facilitate active engagement with communities to a) understand their needs through active listening and building spaces for direct participation in the design and planning process of a response; b) engage communities in the process of developing solutions to meet their needs such that c) they become key actors and drivers in their own humanitarian response pathways.

8.4 Project level stages of innovation within this context

For innovation activities to be effective, the process needs to follow a structured path with key routines at each stage of the process. In the case of Kosovo, the data showed that each of the programme offerings featured specific innovation activities and routines at various stages of the innovation process. Based on the analysed data, the diagram below (Diagram 8.5) summarises the project level stages of innovation within this context.

Tidd and Bessant (2010) note that developing an integrated set of routines is strongly associated with successful innovation management and can give rise to distinctive competitive ability. They further argue that one of the key ideas behind successful routines, is changing and adapting throughout the process by learning over time, evaluating and improving all the time to achieve greater success.

Bloom and Faulkner's 2015 study of the UN Innovations Lab had shown an emphasis on processes and mechanisms. The reviewed literature noted the existence of "Do It Yourself Guidelines" for establishing and running Innovations Labs. In line with Tidd and Bessant (2010), this research examined if successful outcomes are dependent on effective processes and hence better understanding of the innovation processes employed by the case study was necessary.

Other authors have also emphasised the importance of innovation processes in the innovation cycle- which they have defined as "clearly identified structured activities", synonymous for stages of the innovation process (Nightingale,1998).

Tidd and Bessant provide four core generating processes for innovation which they see as necessary for the effective management of innovation. They include *Search, Selection, Implementing* and *Capture.* Using these core processes as guidelines, this study contributes to the literature by identifying clearly structured activities that it presents as the key stages of an applicable innovation process and activities plan, organised and applied by a Lab in a humanitarian context.

Figure 8.4 - Project level stages of innovation

Source: Authors own construct

Activities and Routines

The *outreach and application phase* take into consideration local institutional ethics and requirements. It requires time and visits to the localities where the target group can be accessed. It involves seeking permission to engage with the target group and to in a way 'advertise' Lab offerings. It is an opportunity for the target population to get to know about the Lab and meet its staff and future facilitators of programmes. It is usually used by the staff to motivate and encourage members of the target group to participate with problem solving ideas that will address community problems and potentially bring about change in their communities. They are encouraged to engage with local real-life problems to identify a problem they could work on. The phase is in that sense a search stage. An outreach also marks the official opening of a call to apply and participate in Lab programmes with identified ideas of problems in the community that need addressing. At this stage also there is a selection process for teams applying to participate in Lab programmes. They have to select a problem they want to address.

The *training and development stage* ensue a successful application and acceptance to participate in a Lab programme. It involves attending the programme workshop, teaching and learning about human centre design and entrepreneurship skills. It also involves observing the problem within its context to better understand and define the problem at hand. During this phase solutions are developed to address the problem using the skills acquired. It is a highly iterative process of designing the solution. Hence this stage involves further selection.

The *prototyping and testing stage* involve building the solution so it can be used and tested and evaluated to see if it meets the need or solves the problem. It requires resources both knowledge resources as to how to build a prototype, as well as material resources that can

be used to build a prototype. This phase initiates the commercialisation stages of the solution.

The *training and scaling up stage* involve training participants with a proven idea to learn about how to scale up the solutions. It educates participants on how to develop the solution further so that it can be accessed and used by those for whom the solution was intended for.

The *start-up/partnership stage* is important in helping participants start their enterprise and to build the right relationships and partnerships to support the growth of the enterprise. By virtue of their status, particularly participants in humanitarian settings will be very much dependant of support and the right partnerships to scale up solutions to address the problem. It is imperative in this setting that suitable external partners are identified, who have the capacities to help scale up ideas.

Finally, the *roll out* or *diffusion stage* involves making the solution available to users and customers and observing the level of uptake. Wherever necessary, the solution has to be adjusted or adapted to ensure that users and or customers are satisfied with the solution. It concludes the commercialisation phase and ushers in the capturing phase, where the value created through the solution can be captured when customers are able to acquire the solution for use.

The stages presented above describe the different processes of innovation that the Innovation Lab in Kosovo takes its participants through to arrive at solutions that address identified problems. Given that this is a single case study, the stages can only be considered as true for this single case and within its context. To make these identified project level stages of any significance to humanitarian settings, it would have to be tested in such contexts. A different context might require different features or iterations of the above. However, just as this study was guided by the work of Tidd and Bessant (2010), the identified stages can also be used to guide such studies in entirely humanitarian settings. This research thus recommends further work to be done in identifying innovation processes in humanitarian settings and their characteristic routines and how they may be implemented. An elaboration of these features would provide an Innovations Lab within a humanitarian setting, processes of innovation that will be suitable to the context. Further,

such an exercise would also determine other characteristics of Labs within the humanitarian context.

8.5 A Collaborative Network

In further examining the nature and characteristics of this Lab, this research identified three key features of effectiveness that relate to the innovation approach:

a. The openness of innovation;
b. Employing a development collaborative approach;
c. Using a Hub and Living Lab model of innovation.

The results of the analysed data have shown that the UNICEF Innovations Lab employs a development collaborative network form of open innovation. It operates within an innovation ecosystem of diverse actors with distinctive roles. The Lab is also a 'Living Lab' and, in the ensuing paragraphs, this research discusses the effectiveness of the Lab and its activities through the lens of attributes presented in the developed conceptual framework (see Chapter Two). The conceptual framework postulates that the effectiveness of the Lab in allowing innovation to occur can be examined in light of space, context, actors, process, model and outcomes.

As discussed in Chapter Two, models of innovation explain innovation processes and describe the nature in which innovation occurs. They do this by outlining the actors, activities, routines and outcomes involved in such processes. In seeking to identify the model of innovation employed in the case study, this research reviewed the literature on the openness of innovation and its key component of user innovation. The openness of innovation activities by the Kosovo Innovations Lab, as well as the involvement of users in innovation processes have been presented in chapter six as characteristic results of this enquiry. Ensuing paragraphs demonstrate how these attributes contribute to effectiveness.

8.5.1 Openness of Innovation

This research argues that within the space of interrogation, the openness of innovation is represented in three aspects:

a. As a public good;
b. As co-creative actions;
c. As a development collaboration.

As a Public Good

Baldwin and Von Hippel (2011) have noted that innovation is "open" when all information related to the innovation is a "public good" – non-rivalrous and non-excludable. In this context, public goods are programmes, products, services, processes that are provided without profit to all members of the Kosovo society, by the UNICEF Innovations Lab. The openness dimension of innovation in this case relates to three types of public goods:

a. The Lab as a public good;
b. Lab programmes as public goods;
c. Innovation outputs of the Lab as public goods.

Within the context of this research, non-excludable means that the Lab and its programme offerings can be used by all youth in Kosovo. Practically, this means that no youth in Kosovo is excluded from applying to partake in programme workshops. The Lab's premises as well as the programmes offered by the Lab are for the benefit of all youth in Kosovo. Participants who apply with a credible problem are able to attend and can enjoy the benefits of the Labs offering without paying for it. The data evidenced that the Lab has the responsibility of also informing the youth of Kosovo about the existence of the Lab and its offering. Consequently, the Lab engages regularly in so-called outreach programmes, where they visit youth across the country and introduce the Lab and its offerings, providing future participants with all the necessary information to benefit from the Lab and its programmes. This approach helps to ensure that the Lab and its programmes are available to others.

There are sometimes constraints put on the Lab and its offering which make it only possible to host a given number of participants. However, this is usually as a result of spatial constraints, the availability of mentors for a programme workshop and the availability of funding to host youth teams.

To address the issue of spatial constraints, the Lab offers its programme workshops regularly. In 2017 for example, programme workshops were offered almost every weekend. In addition, it also regularly seeks opportunities to train trainers, who become mentors at programme workshops. During the period of fieldwork, it was observed that tertiary institutions that took part in programme workshops, were encouraged to lend their staff to be trained as mentors for the planned workshops. Consequently, about ten new mentors were trained for a particular programme.

Raising enough funds for the Lab has been a regular feature on the Lab's agenda. This was found to be a key priority area of the Lab and that soliciting for funds was a regular activity of the UNICEF Mission in Kosovo. The collected data showed that the Lab has been engaging with different donor organisations (e.g. Banks, government agencies) to raise the needed funds for its services to the young people of Kosovo.
Thus, non-excludable in this context means available to all, open for use by all, open to be attended and consumed by all.
Despite all reasonable efforts made by UNICEF, within this context the remains a possibility that Lab programmes may be curtailed when funding for the programme ends. This is however not expected to happen.
Another key element is that Lab programmes are available in sufficient quantities where there is a guaranteed flow of funds and facilitators. In such cases, future use of these "goods" is also guaranteed. The data showed that the Lab has been designed with a long-term vision. It has been providing its services since 2010 (Interview Respondent 63, 2017). UNICEF Global is replicating the model elsewhere and in Kosovo's case, the UNICEF mission is actively working with the Ministry of Education to introduce and imbed Lab programmes into local schools. Thus, this research therefore argues that, if this is successful, then these "goods" will still be available and accessible to youth in the future.

A related attribute to public goods according to Baldwin and Von Hippel (2011) is the characteristic of goods being non-rivalrous. Non-rivalrous within this context relates particularly to innovation outputs of activities organised and managed by the Innovations Lab. It means that outputs can be accessed for use by everyone. The argument here is that whilst non excludable positions programmes as made available by the Lab to all the youth of Kosovo, non-rivalrous means that youth in Kosovo are encouraged to develop innovative solutions that are accessible to all. Information and information material of developed solutions are also treated as public goods and are made available to and accessible by all for the common good.
Reiterating the public goods nature of innovation outputs, the data evidenced that some innovation outputs that had been diffused were already recognised as public goods. For example, the KOVO match-making platform is provided as a public good to the international NGO sector and the youth of Kosovo. The platform was designed, developed and implemented together with a government ministry. It is managed currently by that

ministry and all information is available and accessible to all users, without a fee. As a government institution, this offering is maintained through government expend.

SHNET is another innovation that provides online sex education and has also been made available and accessible to the youth in Kosovo. It is an application in Albanian language that can be downloaded for both android and OS devices at no charge to users. It is currently being funded by UN women, but there are talks of maintaining it through a subscription model.
Based on above, this research argues that the openness of innovation within this context is evidenced by the public goods nature of the Lab, its programmes and materials and innovation outputs.

Co-creative Processes

The openness of innovation within this context is also evidenced by the co-creative nature of public goods. Lab programmes are innovation processes that support co-creation activities.
In this research co-creation is the collaborative development of new programmes, products, services and processes, attained by stakeholders working together on an identified problem. Co-creation within this context allows innovation to occur through collaborative efforts where ideas are shared and improved together with the beneficiary for the benefit of the local community.

The analysed data confirmed that innovation emanating from Lab activities is achieved by participants working through processes and routines that help them develop solutions to pre identified problems. This research argues that co-creation in this space capitalises on freely shared and freely available information at all stages of the innovation process. Information is revealed and made available to all participants. This attribute is evidenced by the open nature of generating ideas, developing them, prototyping and the eventual diffusion of innovations. Facilitators who are themselves part of the local community reveal and share information voluntarily with participants during skills training programmes. Participants are allowed to openly ask questions and share their ideas and proposals through open discussions. This research observed that there was always an open exchange of ideas and thoughts around the proposed idea. All participants were encouraged to contribute in developing ideas, eliminating some and choosing the main idea

to be further pursued in the innovation process. All participants had access to information that helped in the process, and no one was excluded from sharing ideas and/or solutions. Problem ideas were encouraged to be done and presented as team efforts. The teams, often made up of four to five participants, worked together with their mentors in developing solutions. Prototyping was also a collaborative effort and the ensuing commercialisation of solutions were also done as a team effort.

Development Collaboration

The development collaborative nature has to specifically do with the network of stakeholder who together form an innovation ecosystem that facilitates the possibility for the youth of Kosovo to gain skills in innovation and entrepreneurship and to use these skills to engage in innovation activities that allow them to address some of the needs and problems of their community. This collaborative approach is characterised by key stakeholders who function as actors with distinctive roles in innovation processes – thus it is an ecosystem.

The research identified this as a development collaboration. The data helped identify a list of key stakeholders including private sector, academia, government agencies, civil society, UNICEF, the local innovation partners, and users. It was obvious that this development collaboration is built on jointly set strategies and implementation plans for achieving set development objectives within the context of interrogation. The data showed that the development objectives of this collaboration related to economic and human development goals associated with the young people of Kosovo. To enact the requirements of the Kosovo youth development strategy, UNICEF set up the Lab inviting the involvement of the above stakeholders with the aim of equipping the youth and adolescent population of Kosovo with innovation skills that can help them develop product, service, process and programme innovations to address their needs and those of the rest of the affected community.

As development collaborators this research has presented in the earlier chapter the different functions performed by the individual members in achieving these development goals. They functioned in roles of *promoter, facilitator, provider, researcher, user, utilizer and enabler.* These critical functions are performed within this innovation ecosystem to allow innovation to occur. Consequently, the joint effort of the collaborators working

together to identify needs, design and implement solutions, as well as to sustain and support the Lab and its offering characterises openness of innovation in this context. Collaborators are also involved in supporting the diffusion of innovations as can be seen with the KOVO platform and SHNET, two examples of innovation outcomes presented earlier. SHNET was financed by the gender arm of an international organisations to develop and diffuse its innovation.

It is thus evident from the data that openly collaborating in these roles has helped innovations to occur much more quickly than would be the case if there was no collaboration. This 'speed' in innovation can be alluded to the fact that in the design stages of the process, the teams are able to access more ideas than could be developed without collaborating. The availability of mentors and other resource materials positively impact the development and prototyping of solutions and thus overall performance is positive. Consequently, this research argues that the openness of the innovation process, which in this case is based upon a collaborative innovation approach, positively affects the Lab's performance and thus its effectiveness. Characteristic of this openness is also the linked and interdependent relationships existing among collaborators.

8.5.2 Linkages and Interdependencies

As observed in Chapter Six, actors in this collaboration operate at different levels of the innovation process. With regards to innovation processes, this research defined these levels as upstream, mid-stream and back/downstream, with actors either directly or indirectly involved in processes. The data has shown that depending on the level at which collaborations occur, the interaction is intense or less intense. Secondly the role executed by the stakeholder in the innovation process determined where they were situated – upstream, midstream or downstream. Finally, stakeholders are active or non-active actors in workshop activities, depending on at what level they operated with programme workshops for example typically located mid and downstream.

Outlining roles of actors in generating innovation has been discussed in the extant literature on open innovation as a key function in open innovation and innovation ecosystems literature. Integrating certain actors in processes are known to be important to achieve success and better results. (see Edvardson *et al*., 2010; Pascu and van Lieshout, 2009). Thus, outlining the roles of stakeholders in this study was imperative. The study

found out that the Lab engaged with different organisations for different reasons and at different levels. The unique contribution of this research lay in identifying roles as active or non-active collaborators and at what level of the innovation process actors were engaged with, within this context. The importance of identifying actors and their roles in innovation processes ensured that participants were provided the needed support throughout the innovation processes. This made Lab operations effective.

Upstream organisations were those typically involved with the Lab at the beginning of projects. They contributed to innovation but are not actively involved in workshop processes. They are therefore indirect collaborators. Midstream organisations are collaborators involved with the Lab during innovation workshop processes and are typically active or direct participants in such activities. Downstream members are usually only present at the tail-end of the innovation cycle and focused on the scaling up and diffusion of the developed solution.

Actor roles at Upstream stages were found to include activities like providing resources, both human and financial, programme development and strategic planning, engagement with policy makers. Mid-stream actors were found to engage in activities like implementing the strategic plan, planning, coordination and execution of programmes, whilst downstream stage actors were involved in activities such as diffusing the developed solution (making it available for use) and the incorporated process of refining or improving the solution as a result of feedback from users. Thus, the role played by a collaborator also determined their level and scale of engagement in the process.

Recognising the specificity of humanitarian contexts and the need to map out collaborators in such contexts, this research proposes the use of linkages and interdependencies – up, mid and downstream categorisations, to conduct the mapping exercise of key collaborators who can assist in the establishment of an appropriate Lab and to engage in the innovation processes.

Represented at all levels of the process are users, who this research considers most significant in the studies context because they occupy different significant roles in innovation processes. In this open collaborative innovation approach, users are programme participants, co-creators (as seen above) and also potential users of innovations. They are significant in innovation processes firstly because they more than any other participating role have a more accurate understanding of user needs (Respondent 26, 2017). Secondly,

Respondent 5, 2017) noted that users are better at establishing the right set of design and other specifications for innovative solutions.

In the literature users have long been presented as significant for innovative product and process developments and modifications in many fields. Von Hippel (2005) has defined them as firms or individual consumers who expect to benefit from using a design, a product, or a service. He attributes approximately 80% of innovations to this category of actor.

Within the context of this research, users can be either organisations, institutions or individuals. They are both producers and consumers of solutions, providing solutions for others to use or attending workshops to design and develop programmes, products, services or process innovations. In the latter role, innovation users are also innovation producers.

Practically explained, respondents have noted in the data collected that they are potential customers of the solutions emanating from innovation processes. Some have been motivated to develop such solution because of needs they are familiar with, and also see their solutions as innovations they will be interested in using.

KOVO, the match-making platform is a good example of innovations were the user has been involved in developing and providing a solution for others to use. Users in this case constitute youth but also the Ministry of Youth Culture and Sports as an organisation and other NGO's. The Lab, its collaborating partners, and its programmes were used to develop a platform all three are able to use. Consequently, this research considers them as both user innovators and producer innovators. Thus, within this open collaborative innovation model, Users play significant and diverse roles in the innovation process.

8.5.3 The Hub of the Collaborative Network

Another significant feature of innovation in this context is that in this collaborative network, the Innovations Lab functions as a Hub- a focal point and central to innovation activities. In the literature, Doz *et al*., (2001) have argued that Lab networks incorporate a position and network configuration. They argue that a network is characterised by its structure and its position. A focal network is one that has a central role in activities and is structured or acts as a hub or the engine for innovation activities. This research found that the UNICEF Innovations Lab is the hub in this open innovation collaboration. This discloses the function of the Lab in this network. The Lab acts in a central role of

innovation activities, organising, coordinating and managing innovation processes. It acts in multidimensional roles as *organiser* or *convenor* of Lab programmes. Its staff are *facilitators* of programmes and *mentor* teams through innovation processes. It *champions* the case for the Innovation Lab and its programmes and *communicates* relevant information about the Lab and its activities to the general public- a modern day public relations role. Its *leadership* role relates to leading the consortium of collaborators in addressing the needs of youth and adolescents in Kosovo. As *fundraiser*, its role constitutes raising substantial financial resources to fund itself and its programmes, but also fund selected teams through an implementation start-up phase.

The study thus adds to the existing literature on open innovation models by identifying that within this context open innovation networks are development collaborations. Innovation in this context occurs as a collaborative effort in a collaborative network. Collaborators come from different sectors of the economy – public sector, academia, government agencies, civil society, ecosystems, user population and utiliser institutions. Actors in such collaborations play distinctive roles in both the network and in the *hub* of the network. Their involvement in innovation activities are characterised by levels of operation, linkage and interdependency between themselves. They are active or non-active actors in workshop processes depending at which stage they engage in the cycle. As a hub, the Lab is critical to the effective functioning of the network.

8.6 A Living Lab Model of Innovation

In Chapter Two, the operational definition of a Living Lab for this study was presented. It was defined as an open innovation ecosystem where diverse actors representing different sectors and involving users, collaborate as a network in a physical or virtual space, employing a methodology to absorb ideas, co-create, prototype, test and validate new development programmes, products, services and processes.
This research decided to use the conceptual framework described in Table 2.7, as well as this operational definition to examine the unit of analysis to determine what the Lab is and what model of innovation it employs.

Hossain *et al*., (2019) note that there is the general need for understanding the key characteristics activities and outcomes of Living Labs. Whilst the developed conceptual framework seeks to do that and thus helps this research identify the model of innovation

employed by the Lab in Kosovo, this research also utilizes the framework to examine and identify factors that influence outcomes and the effectiveness of the Labs operation within the context. This therefore makes an analysis of the key elements of the model imperative. Rush *et al*., (2014) and Ramalingam *et al*., (2015) have also noted that it is important to identify what are the roles of key actors in such Labs during innovation processes. Consequently, this research identified the collaborative network approach above which operates as an innovation ecosystem with actors functioning in distinct, interconnected and complementary roles.

In the previous chapter, the analysed data revealed that the UNICEF Innovations Lab is a Living Lab. Unique and distinct characteristic of the Living Lab model in this case were identified and are discussed below. These findings contribute to the literature by providing an empirically grounded case study and example of the operations of a Living Lab in a post conflict setting. It adds to the understanding of the concept of Living Labs by explaining what the key attributes of a Living Lab are within this context. It discusses below the new understandings in relation to the following key attributes based on the developed conceptual framework.
Firstly, and with regards to *Space*, the data showed that Living Lab activities in such contexts occur primarily in physical location designed to support the co-creation process. Secondly, the *Context* was defined by a post-conflict country in the early stages of development. Thirdly, innovation processes involve diverse *actors.* This research considers this as a multi-stakeholder approach with active user involvement. Innovation consequently occurs in an innovation ecosystem. Fourthly, innovation *processes* are conducted employing a multi-method approach which facilitates co-creation. Lastly innovation *outcomes* are multi-facetted and constitute programmes, products, services and process innovations as discussed above.

UN Innovation initiatives have been labelled Labs with no clear indications why (Bloom and Faulkner, 2015). These authors have queried whether Innovation has become just a buzz word for UN agencies in order to attract private sector partners. By understanding what model of Lab is employed by UNICEF, this study intends to not only give meaning to the use of Lab in this context, but also add to the extant literature on Living Labs.

8.6.1 Labs – Designed for Co-creation?

In the extant Literature, aside open innovation networks, another innovation model that also emphasises the involvement of users is what have been termed Innovation Laboratories – Innovation Labs or ('i-Labs'). Bloom and Faulkner (2015) in their study of innovation spaces within the United Nations, note that the use of the term 'Lab', conjures a sense of a *safe haven* for experimentation, focused problem solving and solution creation. As previously noted, Kao (2002) have argued that innovation lives in *places*, i.e. needs a home. Kao compares Innovation Labs with the atelier of an artist. He suggests that organisations, just like artists' homes, need a place where the creative process is at the centre of activities. This 'place' is where the innovation process is a professional discipline and not a rare, singular event, and where people can meet, interact, experiment, ideate, and prototype new solutions. Bellefontaine (2012) has also argued that in tailoring space usage to the nature of the work, Innovation Labs incorporate *collaborative space* and *heads-down space* as well as flexible furniture configurations to accommodate creativity and changing future needs. Magadley and Birdi (2009) suggests that i-Labs are dedicated *physical environments* or facilities with collaborative workspaces in which groups and teams of employees can engage with each other in order to explore and extend their creative thinking beyond and above normal boundaries. In contrast to the usual workplace, Innovation Labs are designed to *create a certain ambience* that allows creativity to flourish in an environment that is stimulating and nonthreatening. Lewis and Moultrie (2005) conclude that Innovation Labs aim to encourage 'out-of-the-box' thinking by eliminating the traditional environment, such as rectangular rooms and tables. The existing literature on i-Labs has also shown that Innovation Labs have been used in a number of sectors, most notably in the business, public -academic and lately in the humanitarian and development sector.

It was obvious from the reviewed literature that definitions and descriptions of innovation spaces and Labs in the UN were broad and varied. Bloom and Faulkner (2015) had confirmed this by arguing that varying terms are actively being used to Label and brand innovation practice across several UN agencies. Consequently, there appeared to be no consensus as to what they are.

This research evidences that Living Labs offer a definition that best suits Labs in this space. Living Labs have also been identified as network forms of open innovation, as this research has also done for the unit of interrogation (see Leminen, 2015). Leminen notes

that a single living Lab network having multiple stakeholders is perhaps the earliest identified living Lab type. An analysis of the collected data also pointed to a single network with multiple collaborative actors. In addition to this characteristic of Living Labs, ensuing paragraphs present other key attributes of the UNICEF Innovations Lab that signifies it as a Living Lab.

8.6.2 Real Life Environments

Pertaining to the conceptualization of constellations or environments within which the Lab-led innovation activities take place, evidence in the data collected revealed that innovation processes of the Lab took place within the context of a real-life environment. The real-life environment was the context of Kosovo. The concept of real-life environment has been at the fore front of living Lab studies. Innovation activities in real life environments have been discussed around *focal point* (Kviselius *et al*., 2009), *intermediary* (cf. Lasher *et al*., 1991; Almirall and Wareham, 2008a; Almirall and Wareham, 2011), *innovation arena* (Almirall and Wareham, 2008a), and *platform* (cf. Ballon *et al*., 2005). In describing Living Labs, Westerlund and Leminen have argued that Living Labs are "experimentation environments; they are physical regions or virtual realities where stakeholders form public-private-people partnerships (4Ps) of firms, public agencies, universities, institutes, and users all collaborating for creation, prototyping, validating, and testing of new technologies, services, products and systems in real-life contexts" (2011 p. 20). Almirall *et al*., have also noted that Living Labs are grounded on real-life contexts, user involvement, and public-private-partnership (Almirall *et al*., 2012). ENoLL (2018) notes that key elements of a Living Lab are that users are studied or are involved in their everyday habitats instead of recreating a natural context in a Laboratory setting. (European Network of Living Labs, 2018).

The real- life environment within this context is not a re-creation of, but rather relates to the natural context, everyday habitat, the city, town, village and/or family context of the intended user. In Living Labs, the real-life environment is essentially the place where users engage in innovation activities. In this study it was the physical place and space of usage; where users reside, as well as the environment within which innovation activities occur. Within the context of this study, the real-life context/environment therefore expands beyond a physical space, virtual platform or arena, beyond the physical regions or virtual realities and the experimentation environment, into the living quarters and social environment where the user/customer/participant of the Lab's innovation activities, live.

Innovation and thus innovation activities took place in a much broader context than was typically considered in traditional Living Labs, where innovation is observed and studied in a re-creation of the natural context.

8.6.3 Multi-method approach

Results discussed earlier have also emphasised the multi-method approach and its distinct element of co-creation among Lab participants operating in teams and with mentors/facilitators guiding them through innovation processes. The Labs work is built on three main pillars:

- By Youth for Youth;
- The Youth Empowerment Platform;
- The Design Centre.

Each pillar is designed to offer different programmes which address community needs. Consequently, innovation occurs by employing a multi method approach of co creation. Employing the above aspects of a Living Lab to examine the UNICEF Innovations Lab, this research proved that the Lab is a Living Lab that operates in a collaborative network model of open innovation. Based on its findings, this research suggests a definition for Innovation Labs within this context. It considers this Innovation Lab in this space as a physical, interactive learning space where partners from government, the private sector, civil society, academia, end users and other community members establish and facilitate an empowerment platform where youth, using human centred, user centric, open inclusive approaches and open source technologies create, prototype and develop scalable programmes, products, services and systems in real life situations thereby gaining skills for work and life.

8.7 Conclusions

As part of the two discussion chapters, this chapter set out to interpret, describe and discuss the significance of research findings in light of what had been reviewed in the literature and known about the research problem. Focusing on new understandings and insights emerging from the inquiry, this chapter connects with the literature and research questions, to discuss contingency attributes for the effectiveness of the Lab.

A major finding of this research relates to the multi-dimensional nature of the Labs' effectiveness. These dimensions represent areas of the Labs' work, where it has performed well in achieving its purpose. This research concludes that these dimensions represent the key aspects of effectiveness and can be used to guide similar initiatives in humanitarian settings.

In the extant literature on performance and effectiveness, Performance is seen as not the consequence or result of action, it is the action itself... [and] consists of goal-relevant actions that are under the control of the individual" (Campbell *et al*., 1993, p. 40). The theory also makes a critical distinction between performance and three other concepts: effectiveness, productivity, and utility. Relevant for this study is the concept of effectiveness. Effectiveness was considered in this research as the evaluation of the results of performance. This research set out to examine whether the Kosovo Lab was an effective model that allowed innovation to occur in its context. The Lab has been considered by UNICEF as being effective and this research sought to understand why?

In reality, effectiveness is controlled by more than the actions of the individual or in this case an organisation – the Lab (Campbell *et al*., 1993, p. 41). Effectiveness depends also on factors extraneous to the person's or Lab's behaviour. Beamon and Balcik (2008) defined effectiveness as the extent to which clients' needs were being met. Benjamin and Misra, (2006) concluded that organisational effectiveness was the extent to which a not-for-profit organisation accomplished its mission and met its objectives and goals.

Consequently, this research hypothesised that the organisational effectiveness of the UN Innovations Lab was the extent to which the Lab accomplished its mission and meet its goals and objectives. It was thus imperative that the goals and objectives of the UN Innovations Lab be determined, and the effectiveness of the Lab then measured against these goals and objectives. In examining this, the study sought to identify the contingencies that made the innovations Lab in Kosovo effective in accomplishing its goals and objectives.

The findings provide evidence that the initial dimension of effectiveness was achieved with the successful design of the Lab - definition of purpose (and consequently defining its mission), goals and objectives of the Innovations Lab as the aid initiative. In this research, the purpose of the Lab was considered as the main reasons for its establishment. An analysis of the data showed that the UNICEF Innovations Lab was established to address a

host of challenges faced by the youth of Kosovo. Identifying these challenges, helped define its purpose/mission and the goals to be achieved. Defining its purpose and the goals and objective to be achieved was in itself a successful milestone. The identified goals have been elaborately discussed in chapter seven. Consequently, in designing the Lab, a dimension of effectiveness achieved relates to understanding the needs of the target group. The approach used to achieve this has been discussed above as a hybrid approach that combines a bottom-up and top-down approach, where UNICEF plays the role of a power promoter.

The next indicator related to articulating the measure or measures to be taken in addressing these challenges. In this study, it involved recognising the merits or role of innovation and entrepreneurship in addressing the needs of the target group -young people in Kosovo. This was evidenced in the adoption of curricula that was based on cutting edge research on effective innovation and entrepreneurship learning techniques (experiential learning and design thinking) and adapting these to the context. This influenced the development and adoption of new programmes and innovation processes. Stages of this innovation process have been discussed above.

Another dimension of achieved effectiveness relates to building a network of development collaborators and fulfilling contractual agreements signed with them. It was obvious during this research that periodical progress or evaluation reports of work to collaborators were made. In addition, establishing a collaborative network, meant creating an innovation ecosystem that supported and facilitated innovation.

A further indicator of the effectiveness of the Kosovo UNICEF Innovations Lab was its effectiveness in successfully implementing the Lab and its programmes. This was articulated in terms of planning, organizing, generating considerable interest for its programme workshops, making workshops accessible to young people across Kosovo, and improving young people's professional readiness and entrepreneurial capacities through numerous delivered training workshops. It was also evidenced by the number of young people trained and who acquired skills and practical experience. Related to this was the Labs' effectiveness in attracting high levels of interest/demand for workshop programmes, resulting in high numbers of applications and the consequent high levels of participation (attendance to and

completion of programme workshops. High levels of participation were found to have been achieved through the following:

a. The structured outreach phase/innovation ecosystem;
b. The problem at hand i.e. Unemployment/idleness;
c. The attractiveness of the programme – new methodologies, certification;
d. The problem-solving opportunity;
e. The funding incentives.

Thus, the Innovations Lab's effectiveness was also due to its ability to utilize situational challenges to determine appropriate interventions that will receive high levels of application and assure high levels of participation. Its three programme pillars and their corresponding tailor -made training programmes are evidence of this.

In the literature open innovation has been considered as being able to speed innovation. It can also provide access to more ideas than could be developed without. It has been observed that the more open the innovation process, the higher innovation performance would be.

This research is of the opinion that the openness of innovation is also a contributing factor to the effectiveness of the Lab in this collaborative innovation environment. As discussed above, it sees the effectiveness of the Lab and its offering dependent on:

a. The collaborative nature of this ecosystem;
b. The significant role of User Innovators;
c. The Lab as a collaborative Hub and Living Lab.

Hence, this research argues that the Lab's effectiveness in achieving its goals and objectives is crucially determined by the openness of innovation practices discussed above and how well the stakeholders including users in this innovation ecosystem interact with each other and respond to the demands of the broader societal and Labour systems.

In addition, the Lab operating as a Hub in a single network fosters effective innovation. The Living Lab model with its identified key characteristics not only provides a definition to what the UNICEF Innovations Lab is but it also explains why the Lab is effective in achieving its purpose.

Based upon the analyses of the data, this study concludes that, within this context, a multidimensional model comprising of programme definition, identification of tasks,

programme design and implementation, network collaboration, and a multi method approach through a single network, should be used to measure Lab effectiveness. Structure and leadership, two other contingencies will be discussed in-depth in the next discussion chapter.

However, in addition to these effectiveness dimensions, this research suggests that a hybrid approach, openness in approach towards innovation in the critical ways described above, are of very significant value in making Labs effective in achieving their goals and objective. Furthermore, defining interventions as a single development collaboration with the Lab as the hub in the network and employing a Living Lab model with its discussed characteristics ensures that Labs are effective in this context. This research suggests that examining these attributes within entirely humanitarian settings is needed and sees these attributes as possibly providing guidance to such work.

Chapter 9 - Contingencies of Effectiveness 2

9.1 Introduction

Further to the earlier chapter on the dimensions of effectiveness, this chapter interprets, describes and discusses the significance of the findings in relation to structural and leadership contingency theories, and their influence on the effectiveness of the Innovations Lab. It focuses on new understandings and insights that emerged as a result of the study and connects to the literature, research questions, and hypotheses posed in conducting this study.

This study considered two main contingency theories within the literature related to organisational performance and effectiveness: Structural Contingency Theory (SCT) and Contingency Theory of Leadership (CTL). The literature review on SCT concluded that the organisational context constitutes the following variables - environment, technology, task, size and culture. It postulated that the cumulative reaction of these individual variables with the structure- in other words, the fit of these variables to structure, determines positive performance. This is taken to be a key indicator of effectiveness.

Further to this, the review presented four leadership contingency theories that it proposed to employ in examining the contribution of leadership to the effectiveness of the Innovation Lab. However only the Situational Leadership Theory was relevant to this study and used to guide this examination of the role of leadership on the effectiveness of the Lab. the Situational Leadership Theory focuses on the style of leadership and its influence on effectiveness, which was seen as most relevant for this research, based on the analysed data.

To investigate the Lab's effectiveness, this research made a number of key assumptions that it consequently interrogated. Firstly, with regards to organisational structure, it assumed (in line with STC) that there is a relationship between context related contingencies and organisational structure. Contingencies were considered as being both external and internal factors that affect the Innovations Lab's structure and thereby influence its performance. Structure relates here to a grouping of people and tasks into different units to boost coordination of communication, decisions, and actions (Bloisi *et al*., 2007, p. 710). Environment, technology, tasks, size and culture were identified as the

key variables of context and were used to analyse the data collected with regards to their fit with the structure of the Lab and how this consequently influenced effectiveness.

Secondly, this research tested the assumption that leadership and particularly leadership style plays a significant role in making organisations (the Lab) effective. By employing the understanding of the contingency theory of leadership put forward by the Situational Leadership Theory this research examined the role of leadership as a separate variable influencing the effectiveness of the Lab in Kosovo. More recently (2007), the influencing role of leadership on effectiveness has again been investigated by Vroom (2008); Zaccaro, (2007); Sternberg, (2007) and Avolio, (2007).
The following propositions consequently guided this aspect of the research:

1. The unit of analysis is an open system, so it both affects and is affected by its external environment and internal factors like technology, tasks, size and culture– context;
2. The structure of the unit of analysis was designed to meet the requirements of these context contingencies;
3. There are possibly other context contingencies that fit structure but were yet to be discovered during the study;
4. This fit between the variables to structure has led to high organisational performance and effectiveness. The Lab's effectiveness is therefore a function of the fit between the structure and these contingencies;
5. Leadership and particular Leadership styles are a significant contribution to the Lab's effectiveness.

In addition to the above-mentioned variables that interact with structure, team and team climate were also identified as significant contingencies. As an element of environment, this research also identified "a place-based" view and the "I am You" cultural norm as significant contributing factors to effectiveness. Ensuing from that, the role of leadership and its attributes in this context, on the Lab's effectiveness are presented and discussed.

9.2 Structure

The data indicates that the structure of the Lab was designed to meet the requirements of the context and consequently the effectiveness it has achieved, as presented in the earlier results chapters, can be alluded also to this congruence.

In the literature, contingency theorists have explained organisational performance in more broader terms, as a consequence of fit between two or more factors - such as the fit between organization environment, strategy, structure, systems, style, culture, leadership etc. In earlier chapters, this research agreed that the relationship between fit and performance lies at the heart of Structural Contingency Theory (Donaldson, 2001) and assumed that the optimal relationship between organisational structure and context contingencies would have positive effects on organisational efficiency, performance and thereby effectiveness. It further argued that effectiveness is only achieved when performance achieves set goals and objectives. Structural contingency theorists have tended to focus more simply on the fit between organisational context and structure in order to explain effectiveness. Even though this research focused on analysing the effectiveness of the Lab in broader terms by elucidating other relevant contingencies, it began its investigation by employing the simpler structural contingency theory to measure the Lab's effectiveness in relation to the fit between structure and context variables. Organisational structure is defined here as the formal allocation of work roles and the administrative mechanisms to control and integrate work activities including those which cross formal organisational boundaries (Child, 1972).

Further to structure, and borrowing from the extant literature, this research considered context variables as consisting of the environment, tasks, technology, size and culture. The environment consisted of both the external and internal environmental factors surroundings the Lab. Environment included stakeholders and place – place-based norms and values. Tasks refers to work practices to achieve goals and objectives and carried out by the team. Technology focused on internet technology and technologies for web application and software. It also included technologies for conducting workshop activities. Size related to team size and its related attribute of team climate.

Based on the analysis of the data, this research observed that there was a fit between the Lab structure and context related variables in influencing performance - achieving effectiveness. Performance was considered as what the Innovation Lab did by way of the actions or processes of performing a task defined by its strategic goals and objectives, whilst effectiveness related to what it had achieved of its goals and objectives.
The data showed that a key objective in setting up the Innovation Lab was to design and implement a structure that provided youth and adolescents in Kosovo with informal

learning opportunities that would equip them with 21st-century skills and thereby make them better ready for employment. This research argues that UNICEF has been successful in designing and implementing a structure that was effective in achieving these goals.

The data evidenced that the Lab had designed a structure consisting of Lab leads and programme co-ordinators and officers who collectively served as facilitators of developed programme offered to the youth of Kosovo through workshops. This structure was responsible for organising and managing the Lab and its programme workshops. Based on its ability to do this, the UNICEF Mission in Kosovo had achieved designing and developing a structure for the Lab that was able to address its purpose by provided informal learning opportunities to the young people of Kosovo, training participants in problem solving skills and some innovation and entrepreneurial skills, as well as providing initial funding and mentoring for implementation of ideas. However, as previously noted, no evidence could be found to indicate that the presence of the Lab led to increased employment for the youth. The data however showed that the Lab was the mechanism UNICEF constructed to achieve this strategic purpose. The structure of the Lab was consequently used as the tool – consisting of allocated work roles and administrative mechanisms, employed to achieve this strategic purpose. The structure involved how activities of the Lab were directed to achieve organisational goals and objectives. It concerned itself with task allocation, roles and responsibilities, and programme coordination mechanisms to achieve objectives.

The data also showed that the structure chosen was a functional one, characterised by it being an integral part of the UNICEF Mission in Kosovo. It was a departmentalised structure based on functions identified as needed to achieve objectives. It was obvious from the data collected that the roles in this structure were determined to serve the purposes and offerings of the Lab. Elements of this flat structure, which has almost no middle management between leadership and Lab staff, have been discussed earlier. Significantly, the relevance of structure in achieving effectiveness is evidenced by UNICEF understanding the mission – the goals and objectives of the Lab and designing a structure suitable for delivering these objectives. It was important to identify the key segments of its offering and to identify key roles and their corresponding responsibilities for these ‘pillars’ (as they were referred to in this inquiry). It was also important that such a structure involves the contribution of local collaborators executing significant

responsibilities like facilitating workshops. Key positions that carry the responsibility of managing and carrying out administrative functions, as well as public relations functions are imperative for Labs to be effective.
The findings of this research show the importance and characteristics of structure in helping innovations Labs be effective in this context.

9.3 Environment

Like an organism, the Lab lives and thrives in and through its environment. This environment is anything which surrounds it and impacts it. The environment provides it with everything it needs to live, including important stakeholders, participants, facilitators, customers and users, to name a few. This research argues that there is evidential interaction of the Lab with its environment and that the Lab is consequently dependent on its diverse environments for its very existence and, most importantly for the continuation of that existence. Ultimately achieving the right fit between its structure and environment has been a dimension of effectiveness.

Tosi and Slocum (1984) have noted that improving congruency between the environment and the organization has been viewed as leading to improved effectiveness. The data evidenced that the environment of the Lab influenced the required structure of the Lab and that there was a fit of the structure with its environment. Like an organism, the Lab is an open system which continuously interacted with its environment.
Katz and Kahn (1966), in their account of contingency theory thinking, explained that basic to an understanding of CT is the concept of open systems theory. Open systems theory can be best understood as the continuous interaction of an organism with its environment. Considering an organization as a system with numerous environments, i.e., the environment of the town where the organization is located, the consumer market environment, the environment encompassing competitors, it becomes obvious that the organization is dependent on its many environments for its very existence and, most importantly for the continuation of that existence. Consequently, the assumption going into this research was that, there was a constant interaction between the Innovations Lab and its environment - a dynamic transfer and transformation of organisational and environmental energy.

Innovation Ecosystem

This research argues that the environment of the Innovations Lab constitutes the place (the country setting) and the identified group of stakeholders who support its work in what was identified earlier as an open development collaborative network. The findings have in the previous chapter identified different stakeholders who are in collaboration with the Lab and the different sectors to which they belong. This research argues that another dimension of its effectiveness has been the successful interaction of the Lab structure with this particular environment to deliver its goals and objectives. This collaborative network, with the Lab as a hub, and stakeholders assuming different roles, worked collaboratively to achieve shared goals and objectives. This has been evidenced in the collaborative efforts to initially identify the needs of young people in Kosovo, in adopting results of the youth consultative process into policy and action plans, collaborating to raise funds that support the Labs programmes, and even actively participating in Lab programmes. Roles of stakeholders in this collaborative network, like facilitator, enabler, knowledge provider, utilizer, etc., have been presented as key to the Lab's work.

The analysis has also identified interactions with what it considered as a salient collaborator in this open innovation model, collectively defined as the local innovation ecosystem. The local innovation ecosystem is a description of the whole diverse group of organisations/ institutions, who participate in innovation activities in Kosovo. Together this innovation ecosystem affects the general notion and acceptance of innovation processes among the young people of Kosovo and hence directly and indirectly contributes to the activities of the Lab and influences its effectiveness.

Equipped for the Task

The structure appears to also be optimally equipped for its work with young people in Kosovo. Staff members are not only trained and qualified in the methods they use but are selected from a younger age profile, not much older than their participants. This closeness in age, coupled with mentors being 'like them' positively impacted on the relationship between participant and organiser. Interview Respondents 41, 42, 43 (2017) noted, for example, that this clear structure ensured that youth participants knew exactly who to deal with. They argued that participants of By Youth for Youth programmes primarily dealt with the Coordinator and Youth Programme Officers of this department. Participants indicated that this was important in building connection and trust, since they always dealt

with the same people and developed strong relationships over time. They felt that this significantly motivated them to continue and helped them to complete the programme and associated tasks.

Place-based Mindset

The structure was also successful in operating with a situation-sensitive, place-based mindset which sought to understand and embed itself within the context in which it operates, thus contributing towards its effectiveness. In other words, the evident dynamic fit between organisational structure and context contingency can also be interpreted through the lens of how 'place' influenced structure and thereby the Lab's effectiveness. The data doesn't explicitly make reference to 'place' (since it is a term more common to geography and anthropology than to innovation management studies), however analysing terminology used by respondents, this research identified words equivalent in their meaning to 'place'. A place-based perspective offered important insights into the context that influenced structure and aided the structure to influence outcomes of innovation activity. This adds to our understanding of environmental factors that impact on structure and therefore achieving congruence in this regard would influence positive performance and effectiveness. In this context a place-based understanding contributed to effective innovations because participants, and facilitators both had a good understanding of needs and what solutions needed to address.

Local Mentors with Local Insight

A key role of the Lab structure was to facilitate the innovation process. To effectively achieve this, the Lab employed the services of mentors/ facilitators who were able to share in the insights of participants and guide them through designing innovative and also integrated and inclusive solutions that meet their needs. Integrated and inclusive solutions take the insights and perspectives of affected communities into account and integrate these ideas and insights into solutions. In this regard, the data showed that the Lab had addressed the requirements of the environmental context; by employing and using local mentors with the needed skill sets for mentoring and facilitating innovation processes. Where mentor/facilitators were lacking, training was readily provided.

Key to the effectiveness of the structure in this context was the fact that these mentors were from the local community and also young people (between 22-28) capable of sharing

in the insights that participants (also adolescents and youth) brought to the table and having the capabilities needed to mentor these participants through the process of innovation. Here not only did insight play a key role, but also knowledge of cultural nuances, language and governance structures also did. Interview Respondent 2 noted of people who work in the Lab:

> *"We want the person … has the will to work with young people,… a little bit of social science(understanding) not particularly having a degree but having communication skills in social (local) understanding, to know a little bit about the programmes and methodologies being used to teach young people, to transmit knowledge to them, and yeah being able to listen, being able to understand, being able to give feedback whether its positive or negative."* (Interview Respondent MM2, 2017, underlining and brackets added)

This statement reveals how awareness of and insights into place helped both participants and mentors better understand how to leverage resources to address challenges; to understand needs; and to utilize processes and resources wisely, by defining more clearly and accurately the mission and outcomes of innovative solutions. This is consistent with, for example, Mair and Noboa's (2006) emphasis on the importance of exposing students to social issues in order to help them recognize social opportunities. Thus, an exposure to context, i.e. knowledge and understanding of context, including knowledge of the norms and values that give the particular space meaning, provided participants with the possibility to recognise need and opportunities that need addressing.

In addition to this, localising strategic plans of rolling out Innovation Labs as discussed in the previous chapter by employing mentors from the local community, also increased effectiveness.

In taking this approach, UNICEF actively engaged in processes of localisation – key to the grand bargain and new ways of working in the humanitarian and development space. This is an important insight as it builds a bridge between the activities of the Lab and more recent changes in the humanitarian space to drive greater localisation. Some argue that localisation is not always an effective way to deliver support. In this case, this research argues that it is an essential ingredient for effectiveness.

Expounding on the data collected, this research observed that the importance of knowledge of social context was most visible in the ideating phase of innovation, particularly with respect to identifying an opportunity for creating value (opportunity recognition or

identification and ideation, assessing needs and competitive landscape, as well as mobilizing local stakeholders and developing solutions). It was also visible in the section on testing and evaluating solution, which includes communicating assessments to key stakeholders (including funders) and using assessments to define (and refine) strategy and prioritize operations of the start-up.

Empirically it was also evident that a place-based approach offered a more complex, holistic, and nuanced view of social context by grounding it in place, that is, in the complex patterns of relationships, political dynamics and histories, contested meanings, and ecosystems that constitute a place and bear upon the likely success of an Innovation Lab in this space. While traditionally markets, the competitive landscape, and other dimensions of the environment are important to teach participants of innovation activities, this research argues that they are not sufficient to capture the complex social, political, phenomenological, and ecological dimensions that a place-based perspective offers to participants who seek to initiate or participate in innovation activities that effectively address community needs especially in the humanitarian setting. Context thus also refers to the social organisation and the culture within which innovation processes take place. It involves an understanding of the communities need from the perspective of identity, selfhood and/or interest.

The data showed that there was a strong willingness of participants to identify with their community – their real-life environment, as Kosovars. It was also important for respondents to identify with the past lived experience of their community, expressed by way of identifying the conflict with Serbia as reason for a non- functional educational system that had left them comparatively behind other nations. This sense of loss strengthened their desire for better education and for 21st-century skills for life. There was a feeling of loss and a need to "catch up" with the rest of the world, that served as a motivating factor to participate in UNICEF Innovations Lab programming.

The data therefore showed how relevant the social embeddedness of solutions was critical to the innovation process, as well as the outcomes. The structure of the Lab facilitated the capturing of the value of both the social embeddedness of innovation activities, as well as use of human resources with such knowledge and understanding. This ultimately improved performance considerably and made the Lab effective.

9.3.1 UNE JAM TI: The 'I AM YOU' Cultural Norm

Another aspect of environment contingency relates to what this research terms the 'UNE JAM TI/ I am You' cultural norm. The data showed that the environment within which the Lab has been effective is characterised by a strong collectivist sense of unity– shared memories of the past and a unity of purpose to forge forward together towards a better future. Due to the history of violence, conflict and displacement, there is a general sense of togetherness. The situation of the past and the consequent losses and their impact on the Kosovar society, have uniquely united the people of Kosovo. There is evidence of participants and Lab workers sharing the general notion and attitude of being "together in this". *This* refers to the experiences of the past, the resulting consequences and challenges facing the entire Kosovar community and the task of resolving or providing solutions to these challenges. It depicts a generalisation of problems and a shared notion of experiencing the same - the problems associated with being victims of Serbian atrocities. As a result, there is a sense of standing on common ground and addressing the existing challenges together. This is expressed in what is considered in this research as the 'UNE JAM TI' cultural norm, translated from the local Albanian language - The 'I am You' cultural norm. Both participants and facilitators argued that they wanted to solve 'their' problems through innovation - coming up with solutions to challenges they all together and equally faced. Consequently, with the Lab ensuring that facilitator/mentors of workshop programmes were from and part of the community and sharing an understanding of the same posing challenges their community-their place, posed, and facilitated by a fitting Lab structure, made innovation activities more effective.

This study therefore argues that it is imperative that Lab interventions and innovation activities that aim to address local challenges in humanitarian settings should take a place, i.e. the real-life environment view. In order to capture the benefits of ideating, developing, prototyping, testing and validating, all these innovation processes need to firstly, take place together in the natural context of the affected community. Secondly, it is important that facilitators and mentors of such programmes are from the local community, since their appreciation of the challenges put forward by participants would help drive, as well as steer innovation. Thirdly, the structure of the Lab should correspond and fit with the needs of the environmental variable of key stakeholders, social embeddedness, place-based view and a common goal and willingness to support the work of the Lab in addressing shared challenges.

9.4 Tasks

The structure of the Lab was also in congruence with the tasks to be carried out. The data evidenced that the structure of the Lab aligned with the tasks to be carried out in order to achieve the strategic purpose and mission of the Lab. There was a close connection between the processes taking place inside the Lab which made it easier to understand the intricate tasks involved in directing an effective Lab. These intricate tasks were directed and fulfilled by the structure. Bloisi *et al*. (2007, p. 710) defined organisational structure as a grouping of people and tasks into different units to boost coordination of communication, decisions, and actions. Miles *et al*. (1978, p. 553) note that structure and the processes taking place inside the organization are closely aligned; it is hard to speak about one without mentioning the other. In their work, Miles *et al*., (1978) conclude and illustrate how structure is interconnected with such concepts as leadership and communication, and how this mutual connection influences the processes in an organization.

The reviewed literature has further shown that effective companies are those that have a structure that is aligned with the task to be carried out, in order to achieve the strategic purpose of the organisation. This understanding led to the assumption that for the Lab to be effective, the structure of the Lab needed to be aligned with its tasks.

In analysing the data, it was evident that the effectiveness of the Lab was also measured by its ability to define programme tasks in relation to the identified purpose. Programme tasks in this research included:

a. Teaching and imparting 21st-century skills;
b. Achieving employability and employment readiness;
c. Empowering youth and adolescents;
d. Transforming ideas into projects that address unmet needs;
e. Transforming youth and adolescent potential into strengthened capacity;
f. Addressing social challenges through innovative social entrepreneurship.

The study has revealed that relevant skills were defined as 21st-century skills, needed by the Kosovo Labour market. The data also evidenced that the Lab developed appropriate programmes and workshops to fulfil these tasks. It was able to use its programmes to educate and train participants in human centred design, ICT, innovation and entrepreneurship skills. This was evidenced by participants capability of employing these

design methods to develop and prototype solutions to problems they identified. As these skills had been identified as necessary for the Labour market, this research argues that participants were prepared for the Labour market. They were able through programme workshops to transform their ideas into projects that addressed unmet societal needs. Equipped with new skills, the potential in young people was developed into strengthened capacity. They developed confidence in themselves to take on social challenges and address these through innovative social enterprises. As previously mentioned though, the data did not provide evidence that the gained skills provided them with employment. Nonetheless, it was evident that the structure put in place serviced the requirements of the tasks needed to be carried out to achieve key objectives. As a consequence, the structure was in congruence with the tasks identified as needed to achieve the goals and objectives of the Lab.

In addition, organisational tasks have been operationalized through task uncertainty and task interdependence (Graubner 2006). Task uncertainty refers to the lack of information about how to perform a specific task (Stock and Tatikonda, 2008). Task interdependence is the degree to which individuals perceive that they interact with and depend on others in order to carry out their work (Lin and Huang, 2008, Schneiderjans, 2015).

As discussed in numerous places in this study, there exist relationships and interdependencies between actors in this open innovation ecosystems. The results evidenced that there was little or no uncertainty or lack of information for Lab staff, mentors and facilitators to perform their work. Everyone involved appeared to have been trained well and incorporated into the system, with clearly identified roles. The data also showed that there were different levels of linkages and interdependencies among key stakeholders and this has been discussed in previous chapters. The effectiveness of the Lab hence also depended on these attributes in helping the Lab to successfully achieve its objectives.

9.5 Team and Team Climate

As an addition to the already identified contingency variables above, the findings also confirm an alignment of structure with the team and team climate, and this also contributes to the effectiveness of the Lab.

The data showed that the Lab was made up of teams (sub-systems) representing the individual departments (pillars) of the Lab mentioned in chapter five, and that there was a

constant interaction of members of these teams with one another. This contributes to effectiveness in the following ways.

Firstly, Katz and Kahn (1996) and Mele (2010) argue that, in the same manner that the organization is in constant interaction with its environments, so are the members of that organization in constant interaction with one another; hence, organisational members (the sub-systems) are in a state of dynamic interaction. Therefore, organisational members are reliant on each other for the internal health and survival of the organization.
Secondly, the types of relationships that prevail in the organization will depend on the nature of the task being performed, formal relationships, rewards, controls and existing ideas within the organization about how a well-accepted member should behave (see Lawrence and Lorsch,1967, p. 6). According to these authors, if an organization is to survive, it must strive to fit the character of the individual and thereby the cumulative character of individuals that build a structure, with the environmental system surrounding it in fulfilling its tasks. Based on this, another key assumption was that the Labs team and team climate were of significance in achieving its strategic purpose and thus making it effective. Team climate in this research referred to the internal relationships among team members that influenced the team to achieve its tasks.

This research thus found out that healthy relationship in this case positively influenced the team's performance and effectiveness. In other cases, this may not be the situation and so, teams might be less effective. Regarding sub-systems as mentioned above, the findings suggest that there was continuous and regular interaction of staff members with one another indicating that the sub-systems were in a state of dynamic interaction. The Labs members were reliant on each other for the internal health of the Lab, and consequently a healthy team climate was created which was imperative for the successful execution of tasks, and the effectiveness and survival of the Lab. They met weekly to discuss programmes, conducted outreach programmes, organised and managed workshops, worked together to publicise their work to their audiences through the Communications Officer and Web Developer, etc. The data also evidenced a healthy relationship among the members of the Lab, with respondents noting that they were friends and got along very well with each other. This research observed a harmonious working environment between persons chosen to fill the positions within this structure. Although this research was not presented with the criteria used to employ staff, it was evident by observations made at

workshop programme and meetings, that there appeared to be a fit of characters to the individual positions and their tasks, that allowed the Lab to operate a friendly and supportive environment, fostering effectiveness in the organising, management and delivery of programme workshops, as well as the later mentoring processes of implemented projects.

This again emphasises the point that healthy relationships are imperative for positive performance and consequently effectiveness, at least within this context.

9.6 Technology

The findings also showed that technology was essential for the effectiveness of the Lab. Technology was primarily used by the Lab structure as a communication tool for outreach to target audiences. It was also used for ethnographic data collection and employed to instruct participants at workshops and to develop applications and software products that addressed identified needs. Ethnographic data collection was a routine in the innovation process, where participants went out to collect survey and interview data from key stakeholders of the problem, they had identified to solve at programme workshops. It had the primary goal of understanding the problem and defining the root causes of the problem and what specific solutions would address the problem. Technology was used to carry out this routine.

Child (1972) notes that the two most developed approaches to define technology are probably found in Woodward's (1965; 1970), studies of the 'operations technology' of manufacturing organizations and in Perrow's more generalizable analysis of 'materials technology' (1967; 1970). Operations technology refers to the equipping and sequencing of activities in an organization's workflow, while materials technology refers to characteristics of the physical and informational materials used. Child notes that both Woodward and Perrow consider that the nature of technological variables presents important implications for the design of effective organisational structure.
However, Child (1972) notes that there is considerable confusion in the literature as to what technology is and as to what aspects of organisational structure it may influence. He argues that a more fundamental problem is whether it is even a useful theoretical strategy to direct attention to this concept, in the first place. He suggests that rather than concentrating on the technological adjuncts of executing tasks, and on the technical logic

whereby such tasks are linked, there would seem to be a good case for focusing upon the work itself (Child, 1972).
This theoretical reorientation towards work and workplans makes the association between environmental conditions and organisational operations far more intelligible. The prevailing technology, be it an operations or material technology is now a product of decisions on workplans, resources, and equipment which were made in the light of certain evaluations of the organization's position in its environment.

Deliberating on the use of technology in the context of this case study suggests that the contribution of technology to effectiveness related more to its impact on workflows and workplans. This research had assumed that technology was a significant contingency to measuring the effectiveness of the Lab by virtue of it positively effecting workflows. This research found that there were both operational technologies which sequenced and supported the sequencing of the Lab's workflow. In addition to that, there were material technologies by way of information materials employed in its workflows. This research also observed that technology was primarily employed particularly in the Design Centre for the development of applications and software products.
The findings showed that in this case study, technology was employed as a mode of communication and outreach. Outreach in this research related to activities used to inform adolescent and youth of Kosovo about UNICEF Innovations Lab programmes and the value of participation. It was further used as material technologies for workshop activities. They came in the form of workshop materials that guided workshop activities. Technology was also used as a tool to support the development of web-based applications.

Local circumstances such as widespread coverage of internet, use of low cost internet access and internet enabled devices, were recognised as been responsible also for ensuring that Lab activities were effective, particularly with regards to creating awareness of Lab programmes, reaching and communicating with potential participants, advertising and marketing Lab workshop programmes, to particularly adolescent and youth living in remote i.e. rural areas.
Technology was also used in innovation activities, particularly for the initial phase of problem definition which involved conducting ethnographic research on the assumed problem/ challenge. This was conducted with handheld devices operating pre-installed data collection and assessment tools. Workshop activities were also conducted with

technologies that guided human centred design methodologies that taught participants how to develop and prototype solutions to the problems they had identified.

The Design Centre in particular was also on hand to help participants develop ICT based solutions. As discussed previously, the Design Centre is a specialist section of the Lab that comprises of web and software developers, with the capabilities of helping participants develop appropriate solutions to pre-defined challenges. Innovative solutions like KOVO, a web-based volunteer match making platform was, for example, developed with the help and considerable input of the Design Centre.

This research therefore argues that the effectiveness of the Lab in helping its participants achieve innovative solutions to tasks and challenges was significantly determined by the availability and use of technologies that in most cases were provided free of charge to participants by the Lab and its network of partners. Technology was thus a contingent factor for the Lab's effectiveness. It allowed the structure to communicate with its target audience in an efficient manner and to instruct participants in the use of technologies to develop applications and software products to address the needs that were identified.

Within the humanitarian context, it is important to acknowledge the possibilities of the lack of appropriate infrastructure to support technologies like internet, which this study views could be detrimental for Innovation Lab activities. Typical refugee scenarios in camp situations are sometimes void of the basic infrastructure like 24-hour electricity and other necessary infrastructure needed to provide services like the internet. In Kosovo handheld devices with associated technologies were used to carry out ethnographic data collection to understand the most pressing needs and to inform in the development of ideas and solutions. Such luxurious items might not be readily available in humanitarian settings. They might have to be generally provided by organisations.
Often the basic infrastructure, needed to host classroom activity and maintain educational opportunities throughout a crisis is absent and very rudimentary provisions are made for such activities like workshop events. However, technological provisions in the humanitarian space may not be readily available. Consequently, a dependence on them for effective innovation activities would be inappropriate. However, providing them and employing technologies in such settings could enhance innovation outcomes as well as

communication. It might be incumbent of aid organisations to provide such facilities in order to employ technology in innovation activities of a Lab in humanitarian settings.

9.7 Size

The data evidenced that size of the team played no direct or significant role in the effectiveness of the Lab in achieving its goals and objectives. Even though size has been considered as a variable that affects structure, the evidence in the data collected shows that it has no effect on structure and thus no influence on effectiveness. Child (1972) noted that the relationship of size to organisational structure cannot, any more than that of technology, be regarded as deterministic. The need to cope administratively with a large number of organisational members and their activities may well impose constraints upon certain structural choices, especially in respect of functions which service the membership as a whole.

In this research the examination of the influence of the size variable focused on how the number of persons employed at the innovation Lab influenced the effectiveness of the Lab. The data did not explicitly evidence a direct link between the size of the team and the effectiveness of the Lab, rather the team and its climate emerged as a more important factor. The size of the Lab appeared appropriate to manage required tasks and whenever additional resources were needed, for example at programme workshops, the Lab was able to fall back on already trained Mentors from other organisations and its implementing partner. Thus, agility and access to the collaboration network emerged as important factors in operations and management of activities to meet demand.

This research therefore argues that for the nature of work, the size of the structure of the Innovation Lab coupled with access to a source of trained and available mentors did not influence the effectiveness of the Lab. The development of this collaborative network takes time and thus may not be readily available in other humanitarian contexts. However, it is an important factor when designing an innovation Lab in any context.

9.8 Leadership

Leadership characteristics and style are important contingencies for effective Labs in humanitarian settings. In addition to adapting to levels of maturity and employing a supportive stance to goal attainment, leaders of the Lab in this context were also

experienced, system thinkers, facilitators and champions. This study observed that specific attributes of the leader in this context, coupled with specific leadership styles make leadership an effectiveness contingency, for the Lab in accomplishing its mission.

Miles *et al.* (1978) illustrate how structure is interconnected with such concepts as leadership and communication, and how this mutual connection influences the processes or life cycle of an organization. According to Madanchian *et al*., (2017) effective leadership is a key analyst of organisational success or failure. They argue that effective leaders show specific styles of leadership. This research focused on the latter claim that: leadership is a key analyst of organisational success, i.e. effectiveness.
The extant literature on leadership and contingency theory have presented the idea that the success of a leader in an organisation, and also how their leadership style affects the success, i.e. effectiveness of the organisation, hinges on the specific situation at hand. Certain factors come into play that define whether a particular leader or leadership style will be effective for a given situation. These factors include the task, the personality of the leader and the composition of the group that is meant to be led. The basic assumption is that leadership – success or failure of a leadership in influencing organisational effectiveness– is situational. This research sought therefore to identify the behaviours and style of leadership provided in the Lab that made it effective. This research thus looked at a number of different sub-theories that fall under the general contingency umbrella of leadership. They included: Fiedler's Contingency Theory, the Path-Goal Theory and the Decision-Making Theory. Although these sub- theories appear similar on the surface, they each offer their own distinctive perception on leadership. This research examined the leadership characteristics displayed in the Lab using the Situational Leadership Theory which focuses on style of leadership.

The Situational Leadership, formally called the Hersey-Blanchard Situational Leadership Theory, focuses on leadership style and the maturity of those being led. The theory suggests that leadership styles are controlled by four behaviours: telling, selling, participating and delegating. The maturity or potentially more accurate the capacity levels of staff in this theory range from an incompetence or unwillingness to perform the task, to a willingness and ability to perform the task. The idea is that a successful leader will adapt leadership techniques to fit the capacity levels of the group in question depending on the situation. This study observed that this was akin to the leadership style of the Lab's

leadership as evidenced by the data collected. Depending on the maturity /experience of the staff member, the leadership was either telling, selling, participating or delegating.

While contingency models diverge on some points, they all share a common thread. The overlying viewpoint of leadership contingency theories is that effective leadership is contingent on the situation, task and people involved. This research had assumed with particular regard to the Situational leadership theory, that maturity in the context of this research related to competencies in organising, managing and delivering Lab programmes. Consequently, the Leader responsible for the Lab adapted their leadership techniques to fit the maturity level of the individual members of the Lab's team. Secondly, this research assumed that for the Lab to be effective, the leadership of the Lab had to be clear in articulating the goals and objectives of the Lab and its activities but also be supportive of Lab staff and their efforts in attaining goals and objectives. The iterative nature of the Lab's activities calls for much more flexibility and patience than otherwise necessary. Innovation is a highly dynamic and iterative process and often requires acting, reflection, changing directions and starting all over again. Ideas are often fluid and flexible.
As discussed in Chapter Seven, the data showed that the leadership of the Lab was instrumental in guiding the process of identifying, engaging and building relationships with key stakeholders who have been significant in helping the Lab achieve its goals and objectives. In addition, leadership was effective in facilitating and championing programme design, development and implementation.

Thus, the data collected in this research has confirmed the significant contributions of persons in leadership towards making the Innovations Lab effective in achieving its goals and objectives.

9.8.1 Experienced Leadership:

The data showed that the Leadership in the unit of analysis had:

a. A strong UNICEF programming background with substantial understanding of UNICEF rules, regulations and strategic programming;
b. An understanding of context, the appropriate interpretation of globally defined strategic programming, within this context and implementation of transferable programmatic tools, if previously existent. E.g. Kenya i-Lab (similar context);

c. The ability to navigate through context specific complexities and align programmes to UNICEF's rules, regulations and programme strategies.

These leaders were needed in navigating the Lab through a stringent rules and regulations riddled UNICEF Global apparatus, often 'inflexible' and resistant to change. The leadership style of the experienced leader constituted selecting, directing, coaching and supporting inexperienced staff in carrying out tasks. Later on, the data also evidenced that with mature staff (mature in the sense of knowing UNICEF's procedures) the Leadership style changed to one of delegating (see Fiedler's Contingency Theory).

Table 9.8.1 – The Experienced Leader, Characteristics and Style

Knowledge Requirements	Knowledge of programmes, Knowledge of context, Experience working with similar programmes, Ability to navigate context specific complexities.				
How/ Style	Selecting (new staff)	Directing (new staff)	Coaching (staff with limited skills)	Supporting (staff with better skills)	Delegating (staff with experience)

Source: Authors own construct

9.8.2 Systems/Network Knowledge and Thinker (Systems/Network Thinking):

Another characteristic of effective leadership within this context was the Leaders' capability of employing a system thinking approach to implementing goals and objectives. Systems or potentially more appropriate - collaborative network thinking in this research and context is displayed by a leaders' understanding that the Innovations Lab is a part of a wider complex environment (system) made up of several 'components' of which the Lab is an intricate part of. It is important that the Lab fits into this system, and in order to do so appropriately, it needs to identify the gap it needs to fill. The systems thinking Leader also recognises that the Lab as part of the whole, is only as successful or effective as the whole system or network it forms part off. Thus, the systems/network thinker knows how and when to adapt to changing circumstances in order to remain relevant and effective.

This characteristic of the Leader was evident in the decision and choices of collaboration and partnerships that the UNICEF Mission in Kosovo and the Lab developed to achieve strategic objectives. The data showed that positive decision-making in this regard led to the effectiveness of the Lab, because the constellation of collaborators and partners of the Lab

significantly helped it in achieving set goals and objectives. For example, to help young people in Kosovo gain accredited work experience, the Head of Programmes/Office at the time engaged with the right collaborator – Ministry of Culture, Youth and Sports to develop KOVO, a volunteer matching platform. The effectiveness of the Lab was in working with this ministry to change regulatory requirements that then permitted the Ministry to recognise volunteering time as work experience. Further to that, Interview Respondent 63 notes that:

> *"We have been able to identify and build partnerships with key stakeholders who are not only important for the Lab but also important for achieving the aims of government strategy for the youth of Kosovo. Our leadership in this partnership is to ensure that we work together with our partners to develop resilient young people, who receive skills for life and for work through the Lab's programmes."* (Respondent SM63, 2017)

Today the KOVO project has been implemented and is being administered by the Ministry with significant contribution from the NGO sector. It is considered as having been 'plugged' into the system, the system that allows it to be a sustainable solution.

9.8.3 Facilitator and Champion

The importance of the leader was also evidenced in their role as Facilitator and Champion. In an earlier chapter, the concept of facilitator and champions are discussed with regards to actor roles in innovation networks. The Innovations Lab was presented there in its role as facilitator, a key role and feature in the Labs project level innovation processes. In the same chapter the external complementary role of the champion is mentioned. This role together with the leaders' role as Facilitator, are discussed below as contingent factors of leadership effectiveness. As a facilitator, the Lab leader facilitates the introduction and sharing of ideas and supports activities to design, develop, prototype and test programme solutions. They facilitate such engagements within the confines of UNICEF rule and regulations, providing the necessary guidance that ensures that global UNICEF strategies as well as local context interpretations of these strategies, are complied with.

The leader in this inquiry also displayed a 'Champions' behaviour contributing to the effectiveness of the Lab in achieving its objectives. A champion has been defined as "an individual who is intensely interested and involved with the overall objectives and goals of

a project and who plays a dominant role in many of the interaction events through some of the stages, overcoming technical and organisational obstacles and pulling the effort through its final achievement by the sheer force of their will and energy." (Materials Advisory Board, 1966). In the case of this research, the leader displayed a strong interest in youth programming and was involved in the designing, implementation, testing, evaluation and necessary readjustments of the innovation's Lab as a UNICEF programme. (Notable for this particular case is that the leadership has been around for an unusually long spell of service in the region and has been part of this iterative process for 5 of the 7 years of the Labs existence).

The facilitator role of the leadership has also supported an immensely iterative process of ideas, development, testing, evaluating, redesigning and implementation, which has improved the offering of the Lab. Programmes are almost tailor-made for the youth of Kosovo who, as seen enthusiastically participate in these fine-tuned processes led by a team, who under said leadership, is schooled in the iterative nature of innovation processes. The leadership role as Champion, has benefitted the Lab in that, the Champion leader remained a salient motivator of Lab staff and has played a dominant role in many of the interactions with a stringent rules and regulations riddled UNICEF Global apparatus, that has often been deemed 'inflexible' and resistant to change. The Champion Leader also engaged as well with other collaborators and partners, who have understandably been often challenging to manage. The data showed that the leader had been instrumental in overcoming technical and organisational obstacles that could have been detrimental to achieving goals and objectives. Speaking of themselves, Interview Respondent 63 noted that:

> *"I have remained committed to this course since I arrived in Kosovo. It was an interesting challenge I took on and has sometimes been challenging, manoeuvring through requirements, regulations…a difficult context…. I have also had to learn, adjust…but I have had dedicated staff who have worked tirelessly to ensure this unusual vison has been achieved. Leadership has been provided on both levels- at senior management level and at Lab level…the leads have been very good at interpreting global strategies into a context relevant programme…."*
>
> (Interview Respondent 63, 2017)

Lab middle management staff confirmed this by noting:

"Without a champion like 'Champ A' (name coded), the work of the Innovations Lab in Kosovo will not be that successful. It is difficult to change structures in UNICEF; it is difficult to sometimes get things passed. Our ability to achieve what we are doing is primarily due to the support we are getting from……. They are our champions; they pave the way for us to do what we do…. They allow us the flexibility and support because they believe in the concept and give us the needed backing…" (Interview Respondent MM50, 2017)

9.9 Conclusion

This chapter set out to interpret, describe and discuss the significance of findings in light of structural and leadership contingency theories and their influence on the effectiveness of the Lab. It has discussed the relationship of structure to context related variables; environment, tasks, technology and size, arguing that a fit or congruence of these variables determined the Lab's effectiveness.

A key objective was to set up the Innovations Lab and to design and implement a structure that provided youth and adolescents in Kosovo with informal learning opportunities. The goal was to equip them with 21st-century skills and make them employable. The data evidenced that the Lab had indeed achieved designing and developing a structure for the Lab that provided informal learning opportunities, training participants in problem solving skills and some innovation and entrepreneurial skills. The chosen structure was a functional one, characterised by it being an integral part of the UNICEF Mission in Kosovo. It was a departmentalised structure based on functions identified as needed to achieve objectives.

The internal and external environment were significant in determining this structure. As argued, in CT thinking, the Lab is an open system and interacts with its environment. The data showed that, the environment of the Innovations Lab constitutes both location - the place, the country setting, and the identified group of stakeholders who support its work in what was identified earlier as a collaborative network. The structure appeared to be optimally equipped for its work with young people in Kosovo. Staff members were not only trained and qualified in the methods they use but were practically also youth, not much older than their participants.

The structure also operated with a place-based mindset which corresponds to a good understanding of the space/country setting in which it operates, thus making it effective.

A place-based perspective offered important insights into the context that influenced structure and aided the structure to influence outcomes of innovation activity.
A key role of the Lab structure was to facilitate the innovation process. To effectively achieve this, the Lab needed mentors/facilitators who were able to share insights of participants and help them design innovative and also integrated and inclusive solutions that meet their needs.

Their awareness of and insights into place (the social understanding) helped both participants and mentors better understand how to effectively support the processes of innovation. The place-based approach ensured that the structure adhered to the requirements of the environment by offering a more complex, holistic, and nuanced view of social context by grounding it in place, that is, in the complex patterns of relationships, political dynamics and histories, contested meanings, and ecosystems that constitute a place and bear upon the likely success of an innovation within a place.

Furthermore, the data showed that the environment within which the Lab has been effective was characterised by a strong sense of unity – a unity against its past and a unity to forge forward into a better future. Due, particularly to the history of violence, conflict and displacement, there was a general sense of togetherness. The situation of the past and the consequent losses, and their impact on the Kosovar society, had uniquely united the people of Kosovo.
The data also showed that the structure of the Lab was aligned with the tasks to be carried out in order to achieve the strategic purpose and mission of the Lab. There was a close connection between the processes taking place inside the Lab which made it easier to understand the intricate tasks involved in directing an effective Lab. These intricate tasks were directed and fulfilled by the structure. All the key tasks as identified above were carried out by the Lab. Thus, in order to achieve these tasks, the structure was designed to be able to carry them out and this ensured that the Lab was effective in addressing these tasks.

Further to structure being aligned to environment and tasks, the data showed that the Lab was made up of teams (subsystems) of the individual departments mentioned afore, and that there was a constant interaction of member of these teams/subsystems with one another and hence the subsystems were in a state of dynamic interaction. The Labs

members were reliant on each other for the internal health of the Lab, and consequently a healthy team climate was imperative for the successful execution of tasks and consequently the effectiveness and survival of the Lab. The subsystems have been discussed above. It was evident that the team structure was represented by people who got along well with their colleagues and enjoyed a healthy work climate. This teams structure and climate fostered effectiveness of the Lab in achieving its tasks.

Technology was primarily used by the Lab structure as a communication tool to communicate with the Lab's target audience. It was also used for ethnographic data collecting research and employed to instruct participants and to develop applications and software products that addressed identified needs. In contrast to humanitarian settings, this research argues that technological provisions within such contexts are not readily available and the use of them scarce. Consequently, a dependence on them for effective innovation activities would be inappropriate. It might be incumbent of aid organisations to provide such facilities in order to employ technology in innovation activities of a Lab in humanitarian settings.

With regards to size, this research argues that size impacted on effectiveness when it was coupled with the availability of trained mentors. Tasks to be carried out by the Lab, particularly with regards to programme workshops were only achievable with these trained mentors. Thus, size in this context would include these externally available resources, who work as volunteers and support the structure of the Lab to achieve its goals and objectives. They are typically burrowed from other stakeholders in this ecosystem and assume temporarily the role of facilitators or mentors at programme workshops.

The data showed that the leadership of the Lab was instrumental in guiding the process of identifying, engaging and building relationships with key stakeholders who have been significant in helping the Lab achieve its goals and objectives. In addition, the data also showed that the effectiveness of the Lab was also incumbent upon the effectiveness of the leadership in facilitating and championing programme design, development and implementation.

As part of broadening the scope for other potential contingency factors, this research looked at the Leadership theories that affect firm effectiveness. Based on the data it looked at style of leadership, concluding that the Leadership in this unit of analysis was also

responsible for the effectiveness of the Lab. The Leadership was very supportive and adjusted its tactics to suit the people it was leading. Sometimes it directed, supported or delegated based on the level of maturity.

The leadership was also a systems thinker and understood the role key stakeholders and play and was quick to respond and work effectively with them. The Leader was both facilitator and champion, traits discussed above. Finally, the leadership was capable of absorbing and redirecting pressure from the Lab to ensure that they focused on the relevant and were able to achieve their goals and objectives. In humanitarian settings, this research argues that similar traits and style of leadership would be necessary to ensure that Innovation Labs are effective.

Chapter 10 - Conclusion

10.1 Summary and Reflection

This chapter summarises and reflects on this study and clearly states the answer to the main research question. It discusses the new knowledge this research contributes, identifies limitations and makes recommendations for future work on the topic.

This research examined whether UN Innovation Labs are effective innovation models to meet the needs of communities in the humanitarian sector. It did this by examining a single case study - the UNICEF Innovations Lab in Kosovo. In the late 1990's Kosovo experienced a conflict induced humanitarian crisis. It finds itself currently and also during the study in a state of transition. Kosovo's population is predominantly young, and this young population faces very high levels of unemployment. The educational system had suffered under the repressions of Serbian rule with Kosovo having over a lengthy period of time no educational system for its youth. It is within this context that UNICEF, together with other international NGO's identifies through a consultative process the needs of young people in Kosovo and advocates with them for change. These needs translate into youth development strategies and action plans, with UNICEF responding initially with a project by and for youth, which is replaced by a Innovations Lab concept that offers diverse bespoke programme to provide young people with skillsets in innovation and entrepreneurship, expected to prepare them for the Labour market and equip them with skills to help them create jobs through self-employment.
In less than ten years, this model has been deemed effective and is being replicated across the globe. Research on this model has however questioned what this model is achieving. Generally, research on humanitarian innovation seeks to also understand what the project level features of such innovation processes are, whilst others have argued that there is still the need to identify actors and their roles in humanitarian innovation processes.

As the humanitarian sector continues to face challenges in meeting the needs of communities this research examined whether UN Innovation Labs are effective models to allow innovation to occur in humanitarian settings. Effectiveness was considered in this research as the evaluation of the results of the Labs performance in accomplishing its purpose and meeting its goals and objectives.

This research concludes that the Lab model employed in Kosovo has been effective in allowing programme, product, service and process innovations to occur. It has been successful in meeting its purpose of providing the youth of Kosovo with informal training programme that provide youth with innovation and entrepreneurial skills to help them identify opportunities and develop solutions to unmet social needs within their context. In relation to these skillsets, the Lab model has also been effective in preparing participants to develop and roll out their innovations. Some have been able to create employment for themselves through these solutions. However, this research observes that there is no clear indication of participants achieving other employment as a result of Lab programme. This has possibly been as a result of the fact that most participants during this research were still studying and not ready for the Labour market.

This research therefore concludes that the chosen model can be an effective innovation model for humanitarian and development settings, provided they are designed and operate as Inclusive Living Lab models. Inclusive Living Lab models in this research have three main characteristics:

1. They employ a hybrid approach of both a bottom - up and top – down approach to identify needs and to define purpose, goals and objectives of the Lab;
2. The Lab is designed as a collaborative open innovation ecosystem with distinctive attributes as discussed in chapters;
3. The Lab structure is designed to fit the following key variables:
    a. Environment -The local environment and discussed requirements;
    b. Culture – The local cultural norms and values;
    c. Tasks - The tasks to be carried out by the Lab;
    d. Team - The team and team climate requirements for the context;
    e. Technology - The requirements of technologies to be utilised;
    f. Leadership – The leadership needed with its context distinctive characteristics.

This research consequently advocates for a multidimensional Living Lab model and has discussed the specific characteristics of this multidimensional model, applicable in the humanitarian context, in the previous chapters.

The process of arriving at this conclusion has involved reviewing the literature on humanitarianism, humanitarian action, the UN system and the humanitarian innovation

imperative. It also reviewed the literature on innovation management, types of innovation and innovation models, as well as the innovation ecosystems literature before finally reviewing the literature on structural and leadership contingency theory and organisational performance and effectiveness to identify the gaps which consequently led to the refining of the main research question.

Employing a constructionist epistemology and a qualitative case study methodology which privileged participant's voices, this study sought to answer four sub - questions:

a. Why an Innovations Lab? Historical Background and context;
b. What is the Lab achieving and how? The project level features of innovation;
c. Who are the actors and what model of innovation is employed?
d. How is effectiveness measured and what are the domains of effectiveness?

Over a total of four months, this research collected data in Kosovo through interviews, surveys, focus group discussions and analysing documents. In answering these questions and ultimately the main research question, this process helped elucidate the key dimensions of effectiveness and the main aspects of this inclusive Living Lab model. The limitations of this study have been observed and will be discussed below.

A review of the literature had shown that the current humanitarian sector is characterised by protracted displacements. A recent United Nations High Commissioner for Refugees (UNHCR) annual trends report (2019) confirms that about 70.8 million individuals have been forcibly displaced worldwide as a result of persecution, conflict, generalized violence, or human rights violations.

The literature revealed that in response to such displacements, humanitarian action involved the provision of goods and services such as food, water, sanitation, disasters medical care, shelter and protection, during and soon after natural and human-made disasters (Sphere, 2004, p.6). Researchers have however argued that responses could be inefficient, lead to dependency and are unsustainable. With increasing numbers of displacements and related challenges facing aid organisations, researchers have suggested innovation as an imperative. Humanitarian innovation is a means of invention, adaptation and improvement through finding and scaling solutions to problems, in the form of products, processes or services. Consequently, UN agencies have been introducing mechanisms that seek to address needs of populations affected by complex emergencies. A

preferred mechanism has been a Lab model. This model has been implemented in countries like Kosovo that is currently in a state of transition.

Academic discourse however suggests that progress of measuring impact, as well as factors that contribute to successful innovation processes in the sector are unclear and limited. There remains also a need to understand actors and their roles in innovation processes within the humanitarian settings. As a result, understanding of best practices for humanitarian innovation remains limited. Other authors have also questioned the general understanding of innovation and what Lab mechanisms are truly achieving and argued that systematic impact measuring has not formed part of the debate to date. This research identified gaps in the literature on not only the above but also in measuring the effectiveness of this Lab. It sought to therefore examine the Lab with the view of identifying contingency factors of effectiveness within this context. Employing a conceptual framework developed around an operational definition of innovation and the Living Lab model, as well as a theoretical framework based on contingency theories, this research analysed the UNICEF Innovations Lab in Kosovo and its activities to identify whether this model is an effective innovation model to allow innovation to occur in humanitarian settings. Key findings of this study and their contribution to the literature are discussed below.

10.2 Contributions to knowledge

Reflecting on the study, the data collected, and the findings of this research provide some rich evidence of how to design and manage innovation activities in a context affected by conflicts and wars. The results of this study add to knowledge in four areas.

Firstly, by developing an understanding around innovation within this sector; the types of innovation outputs, the open nature of innovation, the employed model of innovation with its key context induced characteristics, as well as the some identified practices and routines during innovation processes, this work contributes to the literature on innovation and innovation management, open innovation and Living Lab innovation models. It provides not only an operational definition for innovation, but also a definition for a Living Lab in such contexts. Key characteristics of this model are provided as an addition to our understanding of Living Labs. Related to the openness of innovation it also discusses the

key characteristic of user involvement and hence adds to what we already know about user innovation, particularly in relation to user roles in innovation processes in such contexts. Secondly by critically looking at key stakeholders and their roles as actors in what this research also identifies as an inclusive open innovation collaboration, the research contributes to the literature on innovation networks and ecosystems. In critically looking at innovation ecosystem aspects, this research expounds on our understanding of actors, their roles, interlinkages and interdependencies between actors and their positions up, mid and down-stream of innovation processes. It also provides key stages of innovation processes that can serve as a guide and framework to innovation initiatives in humanitarian settings.

Thirdly, the data adds to the literature on contingency theory, particularly structural and leadership contingency theory. It expounds on the key variables of environment, technology, tasks, size and culture in structural contingency theory, describing them in light of unique context related characteristics. The style of leadership employed in this context contributes to the literature on leadership contingency theory, particularly in relation to the Situational Leadership Contingency theory and its emphasis on the style of leadership. It also adds to our knowledge on favourable leadership characteristics in such contexts that induce Lab effectiveness. Related to these, it adds to the literature on organisational performance, demonstrating what effectiveness means within this context and how it may be measured. It introduces key dimensions of effectiveness in this context.

Lastly it contributes to the growing academic discussion on humanitarian innovation and directly answers questions in that space related to what UN Labs are achieving (Bloom and Faulkner, 2015) project level features of innovation in this space (Obrecht and Wagner, 2016), as well as Rush *et al*., (2014) and Ramalingam, Rush *et al*., (2015) call to identify what are the roles of key actors in humanitarian innovation ecosystems. These authors have also called for skills and capacity building in this space. The findings of this research evidences improvements in this area as the UNICEF Innovation Lab' primary focus has been to develop skills of actors in innovation and entrepreneurship.

In relation to innovation management, this research has also attempted to describe the possible practices and routines that a Lab might implement to manage the innovation process and, in so doing, maximise the probability of success in humanitarian innovation. It has provided key stages of the process in its findings.

With the growing challenges that the sector faces, and the potential that humanitarian innovation offers in helping address these challenges, Humanitarian Innovation Lab efforts led by international aid organisations could benefit from this work by utilising the gained knowledge to help them define objectives, design activities, and generate new ideas and solutions to existing challenges.

Critically, the sustainability of Innovation Labs in this sector will depend on their ability to continue to innovate and to address existing challenges. This research has observed that Labs will have to go through a process of engaging with target populations, local partners, and bring together different knowledge, skills and ideas to introduce and manage innovation processes in order to be effective. Innovation processes will need to introduce practices and routines that are also guided by context requirements to ensure success in innovation processes.

In this space innovation also means making something new (Tidd and Bessant, 2010) and includes new programme, products, services and processes. It also involves introducing new ways of doing things (Porter, 1990). In such contexts, innovation is a process of meeting local needs. It might involve introducing new programme that initially provide the target population the skills needed to be innovative and entrepreneurial. In addition to product, service and process innovations, innovation in this space might need paradigm shifts and the repositioning of aid initiatives as described in earlier chapters. As evidenced in this case which developed bespoke training programme out of an initial "By Youth for Youth project", it has been important that the Lab has recognised and understood that effective practices and routines are required to ensure successful management of innovation.

Furthermore, it has also been evident that to ensure effectiveness, innovation has had to be part of the organisations strategy and requires a buy-in from organisation leadership. It is also necessary to cooperate with external, as well as internal sources, be prepared to be open and share knowledge freely and unrestrained and encourage others involved to do the same. Knowledge and innovation outputs are a public good in such contexts and not a necessity to gain competitive advantage, in the traditional sense. The openness of knowledge generation and developing solutions together are key to the effectiveness of innovation processes within such contexts. Thus, effective innovation management in this

context should allow for four core open innovation generating processes: *open searching, open selection, open implementation* and *open diffusion*.

Open search in this case involves reaching out to target population for ideas. It involves involving them in identifying their needs and developing solutions together, like the BYFY project and then the Innovations Lab that were introduced as aid programme to meet the identified need for informal learning opportunities that provide skills for work and potentially for life.

It is also a team effort that comes up with new problem-solving ideas and then applies as a team to participate in a programme that allows (through a skills training workshop with activities like ethnographic research and human-centred design approaches) for *open selection* of the main idea that the team will together work on.

Together the team slowly progresses to an *open implementation* of their solution, firstly by prototyping and presenting the solution, testing it and then developing a social enterprise that organises and manages the *open diffusion* of the solution.

In many cases coming up with an innovative idea does not guarantee that it can be adopted. Great ideas are not enough for success. It is important to develop understanding of the requirements and to discover approaches to meet the need.
Innovation thus needs to have knowledge from "outside the box" There has to be the skill and alertness to identify threats and opportunities and ways to mitigate but also utilise the opportunities to co-create solutions.

Thus, in such contexts the data has evidenced the significance of active users, who actively play other roles like participating in Lab workshops as mentors, facilitators or students. As a searching strategy, the Lab sends out its staff in an outreach process to find ideas: to showcase itself and its offering but critically to 'dig' for ideas that will drive the innovation process. Future participants are encouraged to explore multiple futures within their communities and develop future scenarios as challenges to work on during programme workshops. In this context, this approach ensures working with potential active users of developed solutions– starting off by communicating with them to pick up ideas that will drive innovation processes and new solutions.

Processes involve identifying the real cause of the problem and what can be solved. It involves considering the processes and strategies to be used and assessing the target user and their needs. The process requires knowledge about the intended solution that the team and its mentors seek to develop. The aim of decision making is to provide a clear understanding of the process for all participants and ensure that, the team has the necessary capability and recourse to complete the process (see Tidd and Bessant, 2010).

In this context, the reason for innovating is to provide skills for work and possibly for life. It is about using these skills to respond in an effective and positive manner to unmet social needs. It is an attempt to change their "world". Thus, the 'profit' captured in this context is to have skills that enable employment, either self-employment through a social enterprise or made fit for the local Labour market. Consequently, "profit" is acquiring those skillsets necessary to identify problems and develop solutions fit for the local context. These skillsets are gained through practices and routines of the innovation process. Hence identifying the right practices and routines helps to achieve success in innovation. This doesn't only make processes effective but also Lab initiatives effective. Thus, this research argues that for Labs in this sector to be effective, it is important that the right practices and routines for innovation processes are developed. Effective routines should be flexible, change and adapt over time (also to context), evaluating and improving to achieve greater success and confirming Tidd's and Bessant's (2010) assertion that developing an integrated set of routines is strongly associated with successful innovation management.

In concluding, this study has revealed that the critical elements of innovation activities are collaboration, design and innovation processes used by the Lab to achieve its goals and objectives. The research has evidenced that collaboration was inclusive and achieved through a hybrid approach. It also required a promoter role that was assumed by UNICEF. The design of the Lab was inclusive in that it critically involved users, the youth of Kosovo, and other collaborative partners. Processes were also inclusive not only of key stakeholders but also of users, local community members in roles of mentors, working together through effective practices and routines that allow innovation to occur. This approach employs not only the ideas of user participants but also acquired skills and talents of other key stakeholders to develop and diffuse innovative solutions. Consequently, developed innovations (solutions) are appropriate to context and to needs, making them more acceptable and resulting in high levels of diffusion. Diffusion is defined in this

research as the rate of uptake of innovative solutions. Lab participants are in this context both developers and customers. This research argues that the innovation processes employed in humanitarian settings must thus be similarly inclusive, in order to be effective.

10.3 Limitations and Recommendations

To determine whether UN Innovation Lab models are an effective model to meet the needs of communities in humanitarian settings, this research acknowledges the need for a multi case study approach, involving other cases, particularly those in entirely humanitarian settings. Methodologically, examining a single case study has been a limitation of this research in arriving at findings which allows it to determine whether UN Innovation models are effective models or not in allowing innovation to occur within such settings. This research thus recommends a multi case study approach to investigate this. It acknowledges further that investigating other possible models employed by other UN agencies is necessary to come to any such conclusion.

Another limitation of this work has been that it did not rigorously identify all the practices and routines involved at various stages of the innovation process. Even though it identifies the various stages of the process, it lacks in detailing how exactly ideas develop into diffusible innovations and the exact routines and practices employed. It therefore recommends that further study be conducted to identify and disclose process routines and practices at various stages of the innovation process, and particularly for such contexts as the humanitarian setting.

The study has contributed to understanding that the open and co-creative process is essential, but doesn't detail how this approach should precisely function, particularly in a humanitarian setting. Context might be a determining factor but that needs to be investigated within such settings. Hence, this study recommends further research to be conducted, particularly in entirely humanitarian settings to determine how innovation will precisely occur in these contexts.

The process of innovation has also a number of other elements that have to be considered by an Innovations Lab to achieve success. Choosing the right collaborators, who compliment the Lab and possess the right skills and resources to help allow innovation to

occur is significant. In this research, this was made evident by the network of collaborators who formed an innovation ecosystem that influenced performance and effectiveness of the Lab in the given context.
Regarding this, this work has been limited in identifying the key stakeholders of an innovation ecosystem in an entirely humanitarian setting. Whilst they might be similar to those of the examined context, this study recommends that further research needs to be done in entirely humanitarian settings to identify key actors and their specific roles within such contexts.

Although this research was able to identify the importance of funding as a resource to enable innovation in this context to occur, it has been limited in its ability to provide an oversight of the available resources at different stages of the innovation process. This research therefore recommends (as did Rush *et al.*, 2014) further work to be done to address this.

This study thus acknowledges the limitations of this work in generalising its findings to typical humanitarian settings given that firstly the examined Lab is no longer in an entirely humanitarian setting and, secondly the examination was carried out on only one case – the UNICEF Innovations Lab in Kosovo. However, this research expects that by elucidating contingency factors that have influenced the effectiveness of the chosen Lab, the study provides a framework and some guidelines to help humanitarian aid actors design and implement Lab models that can allow innovation to effectively occur within humanitarian settings.

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Appendix 1 - Research Questions

WHAT	Methods/Tools	WHO	WHY
What form? Project Level Features Innovation model/ Contingencies & Effectiveness	**Interviews/Document analysis** **Interviews** **Interviews /Survey/ FDG's** **Interviews/Document analysis**	**Senior Management** – Head of Mission, UNICEF Innovation headquarters, N.Y **Middle Management –** UNICEF Kosovo/ Lab Managers Staff Partners, Key stakeholders. Participants	Policy & Strategy Structure Environment Context Operations Managers/Implementers

Interview questions: Senior Management

1. Please tell us a little bit about yourself and your position in the organization?
   a. How long have you been working here?
   b. What are you responsible for?
2. What are UNICEF Innovation Labs?
3. What is the purpose of Innovation Labs? (What are the reasons behind the setting up of these labs)?
4. What words would you use to describe these labs? Give examples of each word.
5. Describe the ideals that drove the founding of UNICEF Innovation Labs
6. What skills and knowledge are critical for Innovation Labs?
7. What are the job roles needed in Innovation Labs?
8. What departments are needed in Innovation Labs?
9. How are Innovation Labs managed?
10. To effectively achieve UNICEF strategy, what principles should guide the work of a lab? Explain.
    a. What is central to 'who we are as a lab' that should never change?

b. What should the Lab focus on and pay attention to?

c. What key values, if followed, would help this organization compete and thrive?

11. Finally, what does innovation mean to UNICEF?

Interview questions: Middle Management

1. Please tell us a little bit about yourself and your position in the organization?
   a. How long have you been working here?
   b. What are you responsible for?
2. What are UNICEF Innovation Labs?
3. What is the purpose of Innovation Labs? (What are the reasons behind the setting up of these labs)?
4. What words would you use to describe these labs? Give examples of each word.
5. Describe the ideals that drove the founding of the innovation lab in Kosovo
6. What skills and knowledge are critical for Innovation Labs?
7. What are the job roles in this innovation lab?
8. What departments do you have in this innovation lab?
9. What is the management style in this organization?
10. To effectively achieve UNICEF's strategy,
    a. What is needed for your work? Explain.
    b. What is central to 'who we are as a lab' that should never change?
    b. What should the Lab focus on and pay attention to?
    c. What key values/things, if followed, would help this lab compete and thrive?
11. Why is the work done by this lab so important?
    a. What is the exact contribution to society?
12. What, in your view, has influenced the character of the Kosovo innovation lab? Explain.
13. What value is fundamental and distinctive to this lab since its founding? Give examples.
14. What makes this lab feel different or unique from other labs?
15. Describe the personality or character of this lab.
16. Finally, what does innovation mean to you?

Interview questions: Employees

1. Please tell us a little bit about yourself and your position in the organization?
   a. How long have you been working here?
   b. What are you responsible for?
2. What are UNICEF Innovation Labs?
3. What is the purpose of Innovation Labs? (What are the reasons behind the setting up of these labs)?
4. What words would you use to describe your lab? Give examples of each word.
5. In your view, what are the ideals that drove the founding of the innovation lab in Kosovo?
6. What skills and knowledge are critical for Innovation Labs?
7. What are the job roles in this innovation lab?
8. What departments do you have in this innovation lab?
9. What is the management style in this organization?
10. To effectively achieve UNICEF's strategy,
    a. What is needed for your work to be s? Explain.
    b. What is central to 'who we are as a lab' that should never change?
    b. What should the Lab focus on and pay attention to?
    c. What key values/things, if followed, would help this lab compete and thrive?
11. Why is the work done by this lab so important?
    a. What is the exact contribution to society?
12. What, in your view, has influenced the character of the Kosovo innovation lab? Explain.
13. What value is fundamental and distinctive to this lab since its founding? Give examples.
14. What makes this lab feel different or unique from other labs?
15. Describe the personality or character of this lab.
16. Finally, what does innovation mean to you?

Interview questions: FGD, Key Stakeholders -Youth, Partners, Academics

1. In your opinion, what is the purpose/ objective of the Kosovo innovation lab?
2. How would you describe the work of the Lab?
3. Why are you (your organisation) involved with the Lab?

4. What are your requirements for supporting the Lab?
5. Why is the work done by this lab so important?
6. What is the exact contribution to society?
7. What, in your view, has influenced the character of the Kosovo innovation lab? Explain.
8. What value is fundamental and distinctive to this lab since you started supporting them? Give examples.
9. What makes this lab feel different or unique from other labs?
10. What is needed to ensure your continual support
11. Finally, what does innovation mean to you/ your organisation?

Surveys

Questionnaire 1

Employs general questions targeted at gaining insight into the Labs innovation strategy and innovation management process. It focuses on the process of innovation and seeks to identify the understanding of innovation and factors necessary to achieve success within the Lab

Questionnaire 2

It will be used to measure the organisational *structure*, tasks, environment, team and *climate relationship* that allows innovation within the Lab to occur - i.e. Work Group Innovation. It focuses on shared objectives or vision; group participation and safety; team support for innovation; and the group's task orientation. It is expected that this questionnaire would give insight into the contingent factors like environment, process coordination, etc.

Appendix 2 - Data Collection - Respondent Legend

SM -	Senior Management (UNICEF Kosovo)
MM -	Middle Management (UNICEF Kosovo)
JM -	Junior Management (UNICEF Kososvo)
MEST-	Ministry of Education, Science & Technology, Kosovo
D -	Donor Organisation
Consultant –	UNICEF employed Programme Consultant
P –	Workshop participant
PEN -	Peer Educators Network (implementing partners)
B -	Private sector entity
ID	Internal; Evaluation Document

Appendix 3 – Consent Form

Title of research study: Are UN Innovation Labs effective innovation models to meet the needs of communities in the humanitarian sector– Case Study Kosovo?

This study and this consent form have been explained to me. I believe I understand what will happen if I agree to be part of this study.
I have read, or had read to me, this consent form. I have had the opportunity to ask questions and all my questions have been answered to my satisfaction. I freely and voluntarily agree to be part of this research study, though without prejudice to my legal and ethical rights. I have received a copy of this agreement and I understand that, if there is a sponsoring company, a signed copy will be sent to that sponsor.

Name of Sponsor: Trinity College, Dublin
Participant's name: …….
Participant's signature: Date: ……..
Date on which the participant was first furnished with this form: ……

Participants with literacy difficulties: I have witnessed the accurate reading of the consent form to the potential participant, and the individual has had the opportunity to ask questions. I confirm that the individual has given consent freely and understands that they have the right to refuse or withdraw from the study at any time.

Print name of witness: …….
Signature of witness: ……
Date (Day/month/year) ……
Thumbprint of participant:

Statement of investigator's responsibility: I have explained the nature, purpose, procedures, benefits, risks of, or alternatives to, this research study. I have offered to answer any questions and fully answered such questions. I believe that the participant understands my explanation and has freely given informed consent.

Researcher's signature: *Immanuel Darkwa* Date: 12th May 2020

Appendix 4 – Domains of Effectiveness by Lecy et.al., 2012

Interpretation of effectiveness					
	Goals Attainment Approach	**Systems resource Approach**	**Reputational Approach**	**Multidimensional Approach**	**4-dimensional Approach**
Definition	A measure of progress towards achieving goals	Ability to utilise the environment to gain scarce and valuable resources. *(Ritchie and Kolodinsky, 2003)*	Subjective measures of perception of multiple key stakeholders. Legitimacy = multi stakeholder acceptance. *(Herman and Renz, 2004)*	Incorporates goal attainment, system resources and reputational dimensions (Kendall & Knapp, 2000; Kaplan, 2001; Sowa et al., 2004)	a. Organisational Mgt b. Programmedesign & implementation, c. Responsiveness to environment d. Partnerships and networks *(Lecy et al., 2012)*
Problem	Lack of single and specific goals.	Focus on financial variables e.g. expenditure and revenue.	Stakeholders' lack of consensus on effectiveness.	Difficult to implement: a. complexity, b. information overload and c. lack of resources and experience in such systems *(LeRoux and Wright, 2010; Moxham, 2009; Carman, 2007)*	
Analysis criteria	Defined strategic goals.	Resource requirements?	Stakeholder goals/requirements.		The variables of each approach?

Source: Authors own construct

Appendix 5 – WORKSHEETS /Drafts of Innovation Projects - July 2017

1. **3DX - (Education) A social enterprise, Mitrovica**

Outreach/Application

In 2017, the 3DX team of students applied to participate in an UPSHIFT Social innovation workshop. The team had identified that most young people with Down Syndrome in Kosovo, had little to no opportunities to gain further skills that could provide them with a job. They had observed that Young people above 18 with Down Syndrome, become passive members of society with their future prospects looking often grim. The team observed that there was a need for institutional mobilization for their integration in society, especially through providing them with professional skills and preparing them for employment and independent life.

The 3DX team thus applied to participate in the workshop with this problem. They did so with the hope of developing a solution around 3D printing that could address the lack of skills training opportunities for young people with Down syndrome.

Training & Development

The ensuing three day UPSHIFT training helped the 3DX team understand the identified problem in a much better way. They realised that if they could provide a skills training programmetargeted at young people with down syndrome, they could help them gain the skills necessary that would provide them with a job and make them more independent. One of the team members, who is a psychology student and had experience working with people with down syndrome, introduced the idea of developing a skills based training programmearound 3D printing. She had been working with 3D printers in her spare time and her experience with her down syndrome group had taught her that they would be in a position to learn skills around the use of 3D printers. The team therefore set out and developed a skills training programmecentred around the making of smart phone holders with 3D machines.

Their solution was to create a social business where young people older than 18 years with Down Syndrome would learn skills in operating a 3D printer, designing, collaborating and communicating ideas, and get paid for the work they do, helping them become independent.

Prototyping & Testing

During the workshop the process was prototyped in that the team was able to make and present a sample product that had gone through the designing and 3D manufacturing process.

Training, Start-up & Diffusion

The Innovations Lab provided mentoring to the 3DX team that has allowed them to set up a social enterprise that is associated with the Down Syndrome Kosova's Mitrovica branch. They currently provide their services at this centre and have provided a number of workshops engaging young people with Down Syndrome in designing, 3D printing, labelling and packaging smart-phone cases. The initiative currently employees 4 young people, as well as 2 younger interns.

The project has received significant traction, with orders for personalized cases coming in from all Kosovo. Some companies have placed orders for up to 100 cases for their employees.

2. Shnet (Health) - Mobile Education App

Outreach/Application

The labs' outreach involving this project was to the University of Pristina. Here a team of psychology students presented a project that wanted to address the problem of adolescents and youth in kosovo receiving effective sexual education. The challenge that was recognised related to the cultural context identified that there were inherent misconceptions, incorrect information, stigma, and other issues also related to sexual literacy of adolescents in Kosovo's. The teams' application was successful and they were invited to participate in a Social Impact UPSHIFT worksop in 2017.

Training & Development

The ethnographic research training and ensuing workshop training helped the team observe more clearly that the absence of sexual education could be the source of social hazards including unintended pregnancies. Sexual literacy was also still considered a taboo topic in Kosovo, and consequently sexual education in schools was rarely taught as teachers chose rather to skip entire chapters of the curriculum to avoid this subject.

The team also identified that a significant number of young people were forcibly married off as a result of unwanted pregnancies which only resulted in the first place due to a lack of knowledge about contraception.

Addressing two major challenges to a local problem, Shnet developed and provides a mobile device application that is in the local Albanian mother tongue and offers young people unhindered access to information on their personal devices. The idea for the app was identified and developed at the three day Upshift workshop.

Prototyping & Testing

A mockup of the app was developed during the three day workshop. Upon receipt of some funding a functional prototype was developed and tested.

Training, Start-up & Diffusion

With the assistance of follow on mentoring sessions and the support of the technology team of the lab, Shnet finally organized a Kosovo-wide event on February 22nd, 2017 to disseminate an app that is available in the Google Play Store. The app offers information in five sections: Let's Talk Sex, Sex Anatomy, Sex Facts, Safe is Sexy and Know Yourself. Basic facts and relevant information that students identified as most critical issues affecting young people are provided. It's the first of its kind available in Albanian and Serbian—the two official languages in Kosovo—making relevant information available to a hitherto marginalized groups of young people needing basic sexual education.

With the support of the UNICEF Gender Innovation fund, Shnet released a new app with empirical, evidence-based content, developed in close cooperation with doctors, psychologists and university professors in November 2018. It now also hosts an innovative Artificial Intelligence in the form of a 'Chat bot', which uses advanced algorithms to automatically answer questions users pose.

3. E-Bin - (Health & Hygiene) Electronic Bin

Outreach/Application

The E-Bin team became aware of the Social Impact Workshop organised and provided by the UNICEF Innovation Lab when the team had an outreach event at their university in Pristina.

Consequent to an application call in early 2017, the E-Bin team applied to attend a workshop held in May 2017 to address a problem of rampant contamination and consequent spread of disease in local hospitals.

The team had observed that patient cases caused by infection in local hospitals had been on the rise and considered that this might relate to local hygienic circumstances in hospitals.

Training & Development

The workshop helped them to identify a possible cause for infections- the handling of bins in the hospital wards. They found out through their research that nurses and other health practitioners in hospitals had to physically touch bins to open them in order to dispose of used items. Often however these bins would already contain disposed items which might have been contaminated with all kinds of bacterial and viral infectious diseases. By touching these bins, staff could transfer diseases further to other patients.

Their solution is the E-bin - a modern bin developed for hospitals to avoid physical contact with the contaminated bins. The team came up with the innovative idea of creating a “smart bin” which works with sensors and opens/closes without physical touch.

Prototyping & Testing

With the help of university labs and technicians, the students demonstrated how a bin like the E-Bin would work, at the end of the three-day workshop. The solution was well received and received funding from UNICEF for implementation.

Training, Start-up & Diffusion

As of the end of my data collection period, the E-Bin team were receiving start up training and hoped to raise significant funding to go into manufacturing.

4. Simple Life

Outreach/Application

This group of students from the University of Business & Technology in Pristina, also heard of the Innovation labs’ three-day workshop during an outreach programme at their university. They applied with a problem that related to people with disabilities, particularly, blind people who couldn't participate in daily activities of moving around without assistance. Aware firsthand such problems since they either personally knew of someone with such challenges or had someone like that in their family. They envisaged coming up with a solution that would simplify the challenges of life for people with disabilities.

"This team is a group of students from UBT, who were concerned about disabled people, they wanted to involve them in everyday activities.

Even though they aren't experts or engineers, they "invented" a smart solution for people with disabilities. A multifunctional stick which can be used in indoor and outdoor activities. The "Simply life" stick is built from several sensors which notifies people with disabilities about terrain, distance of items, and obstacles."

Training & Development

During the workshop training the team identified that people with disabilities, particularly those with bad eyesight could be considerably helped if they were forewarned of hindrances and could navigate their way around these hindrances. Altogether it would be good if these people could navigate their way around their place of living, both indoors and outdoors.

The team came up with an intelligent solution of designing a multifunctional walking stick which can be used for indoor and outdoor navigation. The "Simply life" stick is built with several sensors which notifies people with disabilities about terrain, distance of items, and obstacles.

Prototyping & Testing

The team were able to present a mockup at the end of the workshop and convincingly demonstrated in their presentation that the solution could work. They received funding from UNICEF to implement their solution by developing a functional prototype.

Training, Start-up & Diffusion

They were in start-up training when I completed my data collection phase. Enquiring from them before I left, it was doubtful though if they were going to be able to produce a functional prototype with the money they had received. The team was also made up of university students who wanted to complete their education before venturing into starting a business. Thus, the future of this novel idea for disabled people in Kosovo was bleak.

5. KOVO - (Online Platform for Volunteers)

Outreach/Application

This volunteer platform was designed as a match-making platform by participants and the labs' tech team to bridge the gap between volunteers and civil society organizations.

The identified challenge was two-fold:

In the first instance, there was a way of notifying volunteers of internship/work opportunities with civil society organisations. Secondly there was a serious lack of work experience opportunities for young people in Kosovo.

The solution provided started with the initiators lobbying with the government to come on board as a partner to manage this matchmaking platform and recognise internship positions as employed roles with work experience. This led to the government agency for youth culture and sports issuing a legislative action that now allows internship work to be recognised officially as work experience. The platform provides the possibility for volunteer seeking organisations with tools and resources to help enhance their community engagement programmes and volunteers with resources to seek and secure great volunteering experiences. The KoVo: Volunteers Management Workshop, a two-day intensive workshop, aims towards capacity building and knowledge dissemination for Civil Society Organizations and/or Public Institutions on volunteer management.

Currently the platform is being used and offers a Volunteers Management Workshop. This is a workshop organized by UNICEF Innovations Lab Kosovo, which aims at the capacity building of Civil Society Organizations and/or Public Institutions on volunteer management.

6. Wooden Eyes (Arts & Craft)

Outreach/Application

The young team of four who make up “Wooden eyes" attended the Social Impact Workshop with a concern about the large number of blind people in their community who couldn’t read braille.

In Fact, only one of the 149 blind people in their community could braille read. The team’s application was successful, and they attended the workshop to learn skills in innovation and entrepreneurship that they hoped would help them identify a way of helping address this problem. They hope also that their solution would help them establish a social enterprise that would also generate income for themselves as well as the blind who they intended to help.

Training & Development

At the social impact workshop, the team observed that learning to braille was not the only challenge the blind had but also getting a job was also a big challenge for their blind community members. To help find a solution to these challenges, they made use of a team

members' skills in an art form that is rarely seen these days. Member F. had a rather peculiar interest: string art. This is an art form popularized in the 20th century which involves winding thread, wire or string around nails attached to a wooden board. The idea was to develop a social enterprise around the making and selling of art work using this art crafting technique. The social enterprise would employ the blind and use the income to sustain itself, whilst affording the blind community members the possibility of learning to braille.

The workshop helped the team design how this social venture would operate and taught the team the needed/necessary soft skills and entrepreneurial competencies to establish this youth-led social venture which they named "Wooden Eyes". The Start UP programme helped them get started and scale up their offering.

Wooden Eyes' was established and trading within six months of the workshop. The venture began making art pieces which went on sale. Orders for their crafts were received from all over Kosovo. Each of the art pieces is unique; handcrafted in different motifs that tell a little story.

As planned a large percentage of their sales is used to finance and organize workshops together with the Association of the Blind and Visually Impaired, where the 'Wooden Eyes' team also teach the braille alphabet to the visually impaired persons.

As of November 2017, the venture has not only grown in the number of workers (employing the services of the blind who have learned to make some of the art crafts for sale), but also sales have exponentially increased and consequently more braille workshops are being offered. The Wooden Eyes' enterprise model is deemed a success and has received accolades from government and the wider international non-governmental sector. The entire of four continue to be fully involved in the venture and see a future in it.

(Unfortunately, the team, like most others previously interviewed, were not comfortable to share details like sales figures and total number of people employed in the enterprise. Such information was often considered 'private' information)

Some others

7. BO Mire

"Bo'mirë is a crowdfunding platform encouraging individuals, non-profit organizations, businesses, and enterprises to collaborate and take action for social causes.

There are many people interested in donation and contribution for philanthropic purposes, but there isn't a local site for that.

The group of UBT students have developed a well-groomed platform which operates as a "bridge" for people who need help and for those who want to donate.

The team is convinced that through data transparency, they will encourage people to make more donations in the future.

8. V Save

V-Save is a youth-led project of the 19th edition of UPSHIFT that offers an outlet that is very economical. The team have identified the problem of excessive electricity consumption which is often unnecessary. This team have developed a device that encourages energy savings by showing people when we spend electricity more than it is necessary. V-Save have also a connection with the wireless app and allow the user to notify if they forget to turn off the lights. In addition, the app offers the ability to disconnect the device from power.

Appendix 6 – UNICEF Innovations Lab Midterm Evaluation Report

Due to both confidentiality restraints and the size of the document, it is provided for review at this link:

https://drive.google.com/file/d/1MTPfZMb0JQcnCtBlB-KpgkGgeJk9KwzD/view?usp=sharing

Appendix 7.1 List of Lab Programmes, Beneficiaries and Costs

Date	Program Name/Title	No of Beneficiaries	Age group	No of Teams	Program Location	City/Town group came from	Cost
2010	Innovations Caffee	3,200	13-30	N/A	Prishtine	Kosovo wide	12,000.00€
2010	Birth Registration Platform	1,200	0-15	N/A	Prishtine	Kosovo wide	20,000.00€
2012	iInnovate Camp	4,800	15-24	40	Prishtine	Prizren, Dragash, Peje,	80,000.00€
2013	Social Innovation Camp	2,400	15-30	24	Prishtine	Kosovo wide	40,000.00€
2013	Bootcamp	700	15-24	10	Prishtine	Kosovo wide	45,000.00€
2013	Inside Out Campaign	2,500	14-30	N/A	Prishtine	Kosovo wide	15,000.00€
2013	Al Jazeera Citizen Journalism Workshop	600	15-30	N/A	Prishtine	Kosovo wide	20,000.00€
2013	Immunization Management Platform	1,000	0-18	N/A	Prishtine	Gjilan, Fushe Kosove	15,000.00€
2013	Post 2015 Campaign	10,000	15-29	N/A	Prishtine	Kosovo wide	20,000.00€
2014	YCAPP	1,500	12-18	15	Prishtine	Kosovo wide	15,000.00€
2014	Red Cross Health Education Courses Management System	500	14-18	N/A	Prishtine	Prishtine	5,000.00€
2014	Annual Youth Event	1,300	N/A	N/A	Prishtine	Kosovo wide	15,000.00€
2014	OMADA learning classes	500	15-24	N/A	Prishtine	Kosovo wide	9,000.00€
2014	UPSHIFT: Social Impact Workshop	42,000	15-24	220	Prishtine	Kosovo wide	400,000.00€
2014	Skills Assessment Tool	20,000	10-18	N/A	Prishtine	MENA Region	25,000.00€
2014	Activate Talk	900	N/A	N/A	Prishtine	Kosovo wide	20,000.00€
2014	Human Performance Monitoring Application	4,000	0-18	N/A	Presheve, Serbia	Middle East	7,000.00€
2015	STARTUP: Social Venture Workshop	2,100	15-25	18	Prishtine	Kosovo wide	120,000.00€
2015	PODIUM Advocacy for change	6,200	14 - 21	21	Prishtine	Kosovo wide	60,000.00€
2015	Home Visiting	1,450	0-3	N/A	Prishtine	Kosovo wide	10,000.00€
2015	Know Your rights	22,000	16-29	N/A	Prishtine	Kosovo wide	30,000.00€
2016	Pro Bono Legal Aid platform	9,000	14-24	N/A	Prishtine	Kosovo wide	2,500.00€
2016	Kosovo Volunteers	2,500	14 - 25	16	Prishtine	Kosovo wide	60,000.00€
2016	Techstitution	3,000	15-24	N/A	Prishtine	Kosovo wide	80,000€
2016	PONDER: Critical media literacy	246	14 - 21	54	Prishtine	Kosovo wide	70,000.00€
Total:		**143,596**	**Total:**				**1,195,500.00€**

Source: Authors own construct

Appendix 7.6 Improved Professional Readiness and Entrepreneurial Capacities. In terms of Soft and Transferable Professional Skills, Hard ICT Skills, and Professional Experience for Adolescents and the Youth. (Source: UNICEF Innovations Lab Mid Term Evaluation Report, 2017).

MAIN PROJECT OUTCOMES/ OUTPUTS (1 Dec, 2015 - 31 Dec, 2018)	INDICATOR	MID-TERM TARGETS (6 months)	December 2015 – June 2016	July 2016 – December 2016	January 2017 – June 2017
Output 2 **By 2018, 900** adolescents and youth (ages 14-24; with an emphasis on most vulnerable groups) will be trained in relevant ICT skills, **300** of which will gain professional experience through a practicum pursued in cooperation with and under the mentorship of ICT professionals to design, develop, product manage, and deploy six ICT-based solutions for public benefit.	**Indicator 1**	**150 young people** trained in ICT skills	**100** young people trained in ICT skills	**175 young people** trained in ICT skills	**200 young people** trained in ICT skills
	Indicator 2	**50 young people** gaining professional experience through participation in practicum	**50 young people** gained professional experience through participation in practicum	**65 young people** gained professional experience	**50 young people** gained professional experience
	Indicator 3	**1 ICT**-based solutions for public benefit design, developed, and deployed	**3 ICT**-based solutions designed, developed, and deployed	**1 ICT**-based solutions designed, developed, and deployed	**2 ICT**-based solutions designed, developed, and deployed
Output 3 **By 2018, 3,000** adolescents and youth (ages 14-24) will have advanced their professional readiness and exposure to the labour market through volunteer positions with **60** local CSOs and public institutions trained in best practices in volunteer management.	**Indicator 1**	**500 young people** (ages 14-24) engaged in volunteer positions via Kosovo Volunteers Platform	**473 young people** (ages – 24) engaged in volunteer positions via Kosovo Volunteers Platform	**500 young people** (ages 14-24) engaged in volunteer positions via Kosovo Volunteers Platform	**110 young people** engaged in volunteer positions via Kosovo Volunteers Platform
	Indicator 2	**10 CSO** and public institutions trained in best practices in volunteer management	NA	**0**	**21 CSO and public institutions** trained in best practices in volunteer management
	Indicator 3	**4 CSO** employing best practices in volunteer management as part of mentorship and incentive scheme	NA	**0**	**8 CSO** employed best practices in volunteer management as part of mentorship and incentive scheme