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Innovation spaces

Transforming humanitarian practice in the United Nations

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List of abbreviations

d.school	Hasso Plattner Institute of Design
ENOLL	European Network of Living Labs
NGO	Non-governmental organisation
OCHA	Office for the Coordination of Humanitarian Affairs
PSI	Public Service Innovation
UN	United Nations
UNDP	United Nations Development Programme
UNHCR	Office of the United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
WFP	United Nations World Food Programme

1 Introduction

In its seventieth year, the United Nations (UN) is now a complex web of agencies, programmes, funds and bodies. Its global operations have demanded tight organisational frameworks in order to function effectively; however, it is often claimed that the UN's bureaucratic structure is a barrier to efficiency and innovation. With a global population that holds the UN to account for radically stimulating global change, the organisation is faced with the challenge of addressing this barrier. A recent movement towards employing approaches from innovation theory in humanitarian and development practice has led several UN agencies to rethink how they operate. The UN is a vital source of security and social progress, and this important mandate means that the organisation cannot afford to lag behind its contemporary counterparts such as non-governmental organisations (NGOs) and increasingly relevant private sector actors. Whilst innovation may seem like an unlikely turn for the UN, the organisation is creating bespoke spaces for innovation practice as it forges ahead towards its aim of a "Strong UN. Better World" (UN 2015).

Since 2009 there has been a growing interest in defining and operationalising innovation for use in the humanitarian context. The increase in scale of new crises, the urbanisation of many displaced populations, and stretched financing for humanitarian assistance are forcing international aid agencies to think and act in new ways. Humanitarianism demands creative action across a diverse set of needs ranging from health care, the provision of water, food security, livelihoods and many more. Innovation offers a process to guide new ideas into implementable and scalable solutions, as well as methods for managing and strengthening the effectiveness of change. Many tools for funding, executing and leading innovation have started to emerge in the humanitarian landscape. Along with other international humanitarian actors, several United Nations (UN) bodies are engaging with new tools and practices to bring innovation to the forefront of their work. The high demand for effective services from the UN presents a particularly strong case for the integration of innovation into the organisation's work.

The operationalisation of innovation in the UN is occurring in many forms. Examples include UNICEF's innovation unit, comprising innovation experts from around the world, and UNHCR's innovation team, which was created to stimulate and support innovation in refugee assistance operations. The World Food Programme (WFP), the UN Office for the Coordination of Humanitarian Affairs (OCHA), the UN Development Programme (UNDP) and others are also engaging in the discussions and activities focused on innovation and each have staff or teams dedicated to exploring innovative approaches. Within these agencies, there has been a growing movement to establish 'innovation spaces' or 'innovation labs'. UNICEF has 14 innovation labs worldwide, which are considered to be "open, collaborative incubation accelerators" (UNICEF 2013a) that bring together a range of diverse actors to create sustainable solutions to developmental challenges. UN Global pulse, UNDP and UNHCR have also created a range of 'labs' to house innovative projects and ideas. The labs are taking different forms – some virtual, others physical – and each is created with its own motivations unique to the context in which it operates. Despite the variation, there is a growing trend in the UN system, and more broadly in the international humanitarian community, to create labs as a way to engage in and facilitate innovation practice. [1]

[1] The authors would like to thank the following people for their contributions in knowledge, resources and time in order to make this research possible. Thank you to interviewees including staff from UNICEF's innovation labs in Uganda, Kosovo and Burundi; staff at UNHCR Innovation team and UNDP Global Centre for Public Service Excellence. A specific mention is given to Oxford Pro Bono Publico for their funding which enabled an extended visit to UNICEF Innovations Lab Kosovo, and to the Innovations Lab

The use of the term 'lab', more commonly seen in the physical and natural sciences, conjures a sense of a safe haven for experimentation, focused problem solving and solution creation. As laboratories for innovation have become part and parcel of innovation in the UN system, there is a pressing need to understand more about what these labs can truly offer and whether they should be isolated, instead of mainstreaming innovation into an agency.

This research seeks to understand the way in which innovation labs across several UN agencies are being used to foster new ways of operating within the UN's bureaucratic structures. We ask three key questions to help unpack how innovation labs are taking shape and to inform lessons for future labs about what works and what does not, in trying to achieve a culture of innovation and improved humanitarian solutions. These questions are:

- What form do innovation labs in UN agencies take?
- What motivated their initiation? What are their aims and objectives?
- What impact have they had and how is the impact being measured?

These questions are important because there is a lack of understanding and research to inform innovation activity in the humanitarian landscape and the UN system. The burgeoning establishment of labs demonstrates trust in using this approach, but there is little evidence or analysis available to show why. The UN system provides a useful case to analyse this type of innovation activity, since UN innovation labs are creating relatively independent spaces against a backdrop of a heavily institutionalised, complex global organisation. It is considered that over time "a significant shake-up in the way that the UN does business is essential to keep pace with the significantly altered circumstances six decades after its founding" (Daws and Weiss 2008).

This paper is based on research conducted to explore innovation labs within the UN system at large.[2] Research was undertaken through online sources, articles and grey literature, as well as some observational field work visits to labs, and eight semi-structured and open interviews with staff and others involved in a selection of UN innovation labs. Field visits and deeper research into some of the labs are presented as illustrative case studies in the paper.

The first section provides a brief overview of innovation and the definition of 'innovation spaces' as a foundation for this paper and wider research. The next section maps some of the UN innovation spaces – both physical and virtual working labs and units that are facilitating innovation. The mapping and analysis in this article is not intended to present a comprehensive view of all of the innovation activity in the UN system, but rather a taste of some of the activity that we captured under the rubric of innovation spaces. The analysis of the labs that are mapped in this paper reveals some of the nuances of diversity in physical forms and the types of collaboration that the spaces facilitate. The following sections explore our key research questions by delving into the motivations for the establishment of the labs, the activities that take place within them, and why the label 'innovation lab' has been used. Following this analysis, we briefly explore what has been done so far to measure the impact of the labs, both on their organisations in terms of cultural change, and the impact on the provision of services to target populations. We demonstrate that

Kosovo for their hospitality and time during the visit. Thank you also to UNICEF Uganda Innovation Lab for meetings in 2013, which have also helped to shape the thoughts in this research. Finally, thank you to UNHCR Innovation for their ongoing collaboration with the Humanitarian Innovation Project's research activities.

[2] This work represents findings at the particular time of research, but labs and innovation spaces are inherently fast-changing and flexible, so it is possible that the aims, activities etc of the spaces may have already changed since the time of writing.

there are dual innovation imperatives for innovation labs, of firstly, fostering a stronger innovation mindset and culture within the UN (which we describe as the 'indirect imperative'), and secondly, supporting the innovation that exists among the communities in and for which the labs operate (the 'direct imperative').

Finally, as innovation practice gains momentum, we turn to reflect on the future of innovation spaces as a way to foster innovation within the UN system. The paper explores the motivations of UN agencies to create separate innovation labs, rather than simply adopting innovative approaches within their core programmes, and reflects on how this model will survive in the humanitarian system of the future. We conclude with six key recommendations. These are:

1) To balance the dual innovation imperatives of organisational change and community support;
2) To ensure that labs in the future do not remain siloed from their agencies;
3) To view them in the short-term as a necessary 'halfway house' to experiment with new humanitarian solutions;
4) To see labs as just one tool in the innovation toolbox, and to ensure that innovation labs are not treated as a panacea;
5) To find creative ways to measure the impact of innovation lab activities;
6) To recognise the need for labs to maintain flexible funding sources which allow them to continue to experiment outside the box.

These lessons may also be used to reflect on innovation labs outside of the UN system, but the hope is that the UN will be able to even more effectively strengthen its capacity to achieve positive social change.

2 A background to innovation and spaces

Stemming from practice and models developed in management thinking for the private sector, a recent 'innovation turn' in the humanitarian sector has been met with enthusiasm (White 2008) and offers a toolbox of ideas and methods for addressing the challenges faced by the sector (Ramalingan, Scriven and Foley 2009; Betts and Bloom 2014). Innovation studies and business practices cover a diverse range of management techniques and approaches used during the process of product, service and organisational design (for example Tidd and Bessant 2013). Drawing on this variance, innovation has also taken different forms in the humanitarian world, with many traditional and non-traditional humanitarian actors wanting to play a role (Betts and Bloom 2014). Early discussions among humanitarian actors categorised innovation solely as the new products and inventions that had the potential to serve the needs of affected populations in the early phases of an emergency response. Filters to provide clean water or household lamps powered by solar light were examples that clearly aligned with this description of innovation. However, as the innovation debate evolves, theories of innovation are now being extended much more broadly, to include methods of problem solving and strategic approaches in the humanitarian ecosystem (Ramalingan, Scriven and Foley 2009; Betts and Bloom 2013; Betts and Bloom 2014).

There is recognition that innovation may serve as a useful way of thinking and operating at the organisational and system level (Bessant et al. 2014). Given that innovation has served to positively

impact the organisational culture of private sector tech giants such as Apple and Google, humanitarian organisations are now keen to explore what it may also offer them. Early on in the innovation debate, there was a heavy focus on innovation for organisational improvement (Betts and Bloom 2013). Now there is also increasing interest in using innovation to foster the ideas and solutions from affected communities themselves (Betts and Bloom 2014; UNICEF 2013b).

Given the UN's overarching role in tackling global challenges, the organisation provides a particularly insightful case for the importance of innovation in humanitarian practice at large. To date, various UN agencies have actively employed approaches drawn from innovation theory. This growing focus on innovation within UN agencies most prominently began with UNICEF's initiative to establish a dedicated innovation unit in 2007. The Innovation Unit at UNICEF's head office in New York was an opportunity to support the agency's programmes around the globe with new technologies, ideas and partnerships. Later in 2010, champions of innovation within the organisation launched UNICEF's first innovations lab in Kosovo – an open space to support youth to engage with problem solving in their own society. The lab in Kosovo has evolved over the years to adapt to changing organisational and community needs, as described in the case study later in this paper. Impressively, UNICEF has leveraged this innovation lab model and established 14 innovation labs around the world (UNICEF 2013a), all based on local needs. UNICEF has also created significant in-house research and development capacity for designing new products, and it also actively captures the details of nearly three hundred innovation projects throughout its programmes worldwide (UNICEF n.d.a). Demonstrating leadership in innovation activity within the UN, UNICEF has developed a set of guiding principles for innovation and technology and included innovation in their organisational strategy (UNICEF 2014a, 2014b).

Other UN agencies have followed UNICEF's lead. In 2012 the UNHCR launched its Innovation Unit, a small team that aims to 'amplify' the good practice already happening in the UNHCR, as well as 'connecting' people together to solve problems and 'explore' solutions with new partners (UNHCR 2014a). The World Food Programme has created two distinct innovation divisions. The first is a Division for Policy, Programming and Innovation, which focuses on supporting programme-level innovation, and the second is a Business Innovation Support Office that focuses on financial and systems-level innovation in the agency. OCHA, UNDP and others have also started to take on new innovation activities, although these are currently less formally developed compared to the specialised units of the UNHCR and UNICEF. UN Global Pulse has established another initiative that spans the existing UN agencies to harness the benefits of 'big data' to improve humanitarian solutions. Across the UN's humanitarian work, increasing numbers of agencies are initiating bespoke innovation projects, hiring staff trained in innovation theory and opening innovation spaces. This paper focuses on these innovation spaces, commonly termed 'labs'.

Beyond the UN, there is a global movement to create innovation spaces. Within this umbrella of innovation spaces, there are thousands of community-led 'hackerspaces' – hobbyist-tinkering labs with tools and computers for any technical project; community spaces for technology entrepreneurs across Africa[3]; and myriad 'co-working spaces' – forms of shared offices and thinking spaces worldwide that are specifically designed to encourage creativity inspired by collaboration and interaction. Innovation labs and spaces have also been popular within organisations to foster workforce creativity, and UN agencies are following suit. With the aim of encouraging an innovation culture, several agencies within the UN have established bespoke units and labs in which innovation activity can be fostered. These innovation spaces typically house experimental activity, and have varying degrees of autonomy within their parent agencies.

[3] There are currently thought to be nearly 200 'tech hubs' across Africa alone.

Despite the aforementioned examples, the movement towards using labs and bespoke innovation spaces as a way of bringing together communities to cooperatively innovate is still in its infancy (Gathege and Moraa 2013; Tiesinga and Berkhout 2014), so there is a lack of substantial literature on the topic. The largest movements of innovation spaces have been dominated by those with a technology or community focus, such as the European Network of Living Labs (ENoLL)[4], Hackerspaces[5] and an African movement of tech hubs[6]. The majority of analysis on these types of labs is published by people working within the innovation spaces themselves, as well as some reflections from users of spaces. For example, a recent collaborative book publication entitled *Labcraft* describes the experiences and practices of twelve social innovation labs worldwide (including UNICEF Innovations Lab Kosovo), from the perspective of the people working in them. The book also addresses a gap in the material available relating to the challenges and lessons involved in running social innovation labs (Tiesinga and Berkhout 2014). Several publications across different sectors and organisations have also analysed the practice of innovation spaces and provide guidance on establishing a space of your own (Doorley and Witthoft 2012; Ståhlbröst and Holst 2012; UNICEF 2012). However, there is still little research to help learn how these innovation labs succeed, a recent concern for the African technology hubs in particular (Friederici 2014). Specific to the UN, a key staff member at UNICEF recently stated that "there isn't enough research to reflect and evaluate what they are doing" in their innovation work (Campo 2014). This paper therefore seeks to contribute to the scholarship by offering an external and focused perspective on UN innovation spaces and unpacks some of the motivations and future prospects for the use of 'labs' and 'spaces' as a model for innovation.

The meaning of 'spaces' and 'labs'

It is important to first define the meaning of an 'innovation space' or 'lab'. Several attempts in the sparse literature have provided definitions. The *Labcraft* publication defines social innovation labs 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. We cross-pollinate new methods, approaches and perspectives between groups. We provide oxygen, fresh ideas, and protected space to enable new things to emerge. (Tiesinga and Berkhout 2014: 13)*

Specific to the African tech-hub movement, iHub Research has conducted analysis to compare some of the innovation spaces on the continent, and defines 'innovation spaces' as:

> *physical environments that promote community, learning, and making. They come in different flavours: Hubs, labs, libraries, hackerspaces, makerspaces, telecentres, coworking spaces. Yet all provide opportunities to (1) engage with people, ideas, and technologies, (2) experience participatory culture, and (3) acquire the literacies and skills needed to prosper in the 21st century. (in Gathege and Moraa 2013 as translated from Audette-Chapdelaine 2011)*

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[4] ENoLL is a network to support innovation labs globally working in various industries and working with private-public-partnerships. ENoLL's work and listings of over 340 labs can be found online at: http://www.openlivinglabs.eu/

[5] 'Hackerspaces' is a term given to the recent global movement of new community-initiated spaces often used by those carrying out technical and web-based projects. The Hackerspace wiki is an open platform which lists over 1,000 independent physical Hackerspaces around the globe and can be viewed online at: http://hackerspaces.org/wiki/

[6] There are now over 100 technology and innovation spaces across Africa. AfriHive is one network which is aiming to bring together thinking for those working in and with these spaces, available online at: http://afrihive.com/

Innovation labs have also been described by UN Global Pulse 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).

UNICEF formally defines its labs 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).

In this paper, we define innovation spaces as physical or virtual spaces that enable and support the innovation (technological or otherwise) of those who participate in the space. Innovation spaces facilitate the creativity and critical thinking of their participants through a range of activities and events. 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 (Tiesinga and Berkhaut 2014: 37). It should be noted that many of the innovation spaces within the UN use the term 'labs', so this paper will often refer to 'innovation lab' in a generic sense, recognising that labs are one subset of the umbrella term of innovation space.

As can be seen, the definition of innovation spaces and labs can be broad and varied, but these terms nonetheless hold meaning and are actively being used to label and brand innovation practice across several UN agencies. The definitions imply a new way of approaching work in what are often rigid-structured organisations, and reflect a challenge to the status quo of how humanitarian and development work is being conducted. The following section maps examples of these innovation labs within the wider UN system.

3 Mapping innovation spaces within the UN

The UN is a highly complex system, made up of several organs containing agencies all mandated with specific functions and aims (UN 2015). The UN was founded upon a structure aimed to serve its member states in promoting international peace and to "achieve international co-operation in solving international problems" (UN Charter 1945). Although the UN exists to tackle global issues, the reality of finding agreement by consensus within its heavily institutionalised structure is not without problems. In some cases the UN has been criticised as slow and bureaucratic (Müller 2001; Orr 2011; Tiesinga and Berkhaut 2014), and over time has been accused of "becoming slower and more unwieldy, like some prehistoric monster" (Jackson 1969). The UN faces a great challenge of balancing state interests, which pull the purse strings and slow down the processes, with the interests of the world community that are the very reason for the organisation's existence (Weiss 1982). Although the system appears to be relatively organised, Weiss compares it to a dysfunctional family, lacking centralisation, which "thwart[s] dynamic leadership" (Weiss 2012, 1982: 299). Weiss sets out a number of institutional limitations that prevent the UN from serving the world community in a flexible, fast-moving and innovative way, including permanent employment contracts, the struggle for consensus amongst an increasingly large and heterogeneous staff, and reliance on voluntary contributions (Weiss 1982). Often decisions are made at the very top levels of management, which is problematic if there is weak leadership and a lack of independence from the political pressure of member states. Global agreements are hard to negotiate. Some member states opt out of international agreements, while others simply do not follow them, and there is often a stark divide between North and South state representation (Weiss 2012). It is thought to be a system where reports and recommendations for reform to reduce

impediments to efficiency are often ignored (Fomerand and Dijkzeul 2008). It is in this context that innovation spaces might present another means by which change could be introduced in a proactive way.

With the recent trend in understanding humanitarian innovation, several UN agencies have shown a strong motivation to implement changes in their structures and operations in the last few years. The World Humanitarian Summit planned for 2016 has thematic areas of work that include 'transformation through innovation', while ECOSOC in 2013 also spotlighted the role of science, technology and innovation. Both of these arenas, along with many others, invite active participation from what has been termed the 'third UN' – the body of NGOs and civil society that plays a role in the wider UN system. Members that work closer to the ground and within specifically designated innovation initiatives such as the World Food Programme Innovation Department have stated that innovation is on-going in the UN and that UN employees are "innovative by necessity" (Conte 2014). Robert Orr also describes experiments within the UN as "represent[ing] important initial successes that provide foundations and important clues for navigating the strong currents of the 21st century" (Orr 2011). So, what does humanitarian innovation really look like in the UN system, and how is it being managed? In this section we attempt to bring to life some of the day-to-day practices of innovation in labs (both physical and virtual) within the UN system, and to observe some of their successes, challenges and remaining opportunities.

Example UN spaces

Our research revealed great diversity amongst innovation spaces within the UN system. Although they all broadly meet the definition described earlier in this paper, the labs that we discovered have a diverse range of activities and aims, and vary in the way in which they interact with external actors including the public, their target populations and partners. The innovation spaces that we chart below (see Figure 1) are a snapshot of innovation activity within the UN rather than a comprehensive representation of all UN agencies, but give a sense of the forms that these innovation labs are taking.

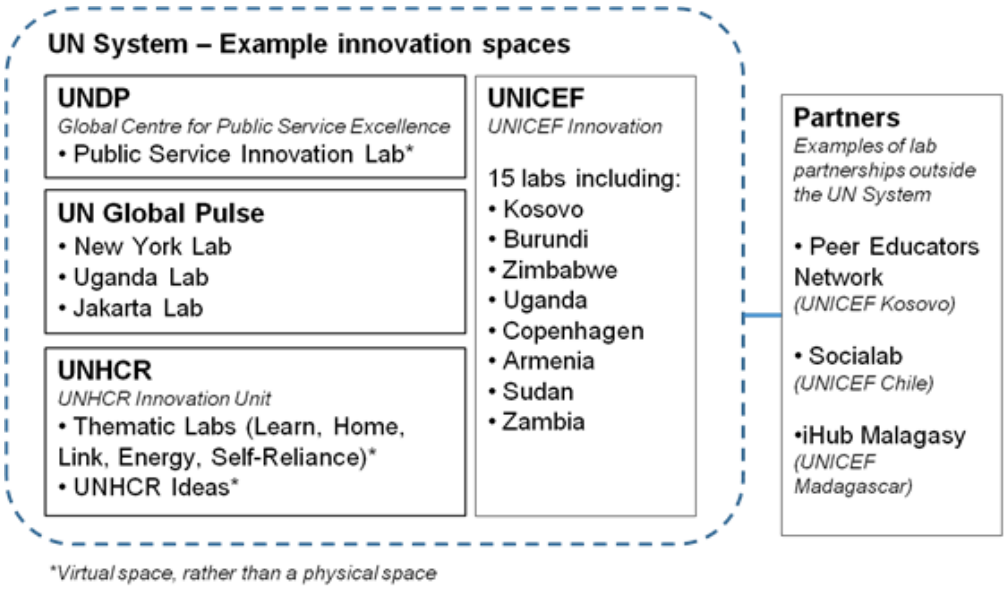

Figure 1: UN System – Example Innovation Spaces

An important element for several of these UN innovation spaces is their partnerships with local NGOs. UN agencies focusing on humanitarian and development goals have a regular interface

with the 'third UN', and it is at this interface that important changes and innovation have a real impact on the lives of many. The 'third UN' has been said to "often combine forces to put forward new information and ideas, push for new policies, and mobilize public opinion around UN deliberations and operations" (Weiss 2012: 9). It has been clear from our research that many innovation labs in UN agencies rely on the partnerships and expertise of this 'third UN'.

These partnerships take different forms but are based on the sharing of networks, resources and in some cases physical space. For example, the UNICEF Innovations Lab Kosovo is partnered with the Peer Educators Network (PEN), which provides the Lab with links into networks of marginalised youth, who are the target population of the Lab (Innovations Lab Kosovo 2013). These networks are absolutely crucial to the work of the Lab, as they allow the Lab to reach deeply into communities and design its work alongside the end-user (Harvey 2014). iHub Malagasy is a partnership between UNICEF Madagascar and a local independent lab (UNICEF n.d.b). Likewise, the UNICEF Lab in Chile is in collaboration with Socialab, an innovative NGO that aims to reduce poverty and social inequality (UNICEF 2013a, Socialab n.d.). Partnering with local NGOs is a practical way of tapping into resources that already exist, including the expertise and networks needed to effectively engage target populations. Many labs also benefit from open innovation with the private sector, partnering to exchange knowledge and resources. For example, UNICEF's Lab in South Sudan draws on toolkits from private companies, such as OpenIDEO (an online idea collaboration platform) and collaboration with Frog Design (a private design consultancy) (South Sudan Innovation Lab 2013)[7].

Some spaces facilitate and operate through partnerships more so than innovating themselves. UNDP's Public Service Innovation (PSI) Lab is one example of this (see Box 1). Likewise, UNICEF's Lab in Burundi does not focus on developing technology itself, unlike its sister UNICEF Lab in Uganda. Rather, it engages in partnerships with companies and individuals that are better equipped to design technology that addresses a particular need (Lepage 2014) (see Box 2). Additionally, the UN Office for the Coordination of Humanitarian Affairs (OCHA) does not have its own labs as yet, but it supports research into innovation within the humanitarian sector through its Humanitarian Research and Innovation Grant Programme (UNOCHA n.d.). The head of OCHA's Policy Development and Studies Branch, Hansjoerg Strohmeyer, has also stated that innovation is a priority for OCHA (UNOCHA 2013). The case study boxes that follow highlight a few of the different forms of innovation labs that we captured in our research.

[7] At time of writing the UNICEF web page shows South Sudan's Innovation Lab activities as on hold due to conflict (posted 23 May 2014, http://www.unicef.org/innovation/innovation_73201.html), though evidence of some ongoing activities since this time are also publicised. For example see the news post from 5 July 2014 online: http://unicefstories.org/2013/07/05/innovate-for-independence-sound-sudan-innovation-lab/

Box 1: Case Study - Public Service Innovation (PSI) Lab [Singapore]

Working as a subset of UNDP's Global Centre for Public Service Excellence, the PSI Lab aims to bring social innovation and design thinking to the attention of policy-makers, engaging them in public service reform (UNDP Public Service Innovation Lab n.d.). The Lab acts as a liaison between the public service (for example, it is partnered with the Singaporean Government) and innovative thinkers such as MindLab, a 'cross-governmental innovation unit' that brings together businesses and citizens to innovate for positive social change (Mindlab n.d.). Together, these actors explore new tools and methodologies that can shake up bureaucratic structures and enable them to provide better services.

The UNDP Global Centre for Public Service Excellence (GCPSE) has certain mandated functions, and the Lab is essentially one of the 'vessels' through which these core functions can be achieved (Husar 2014). Despite it not being a physical space with permanent staff, UNDP decided to use the label 'lab' for a series of prototyping events because this work represented a creative exploration of new approaches to public service innovation (Husar 2014). The Global Centre for Public Service Excellence recently published a paper, stating that "Design labs... disentangle the dominant bureaucratic culture informing the public sector" (Allio 2014).

The PSI Lab evolved out of the Social Innovation Camp Asia 2013, which gathered together citizen innovators to work on prototypes. The continuation of the PSI Lab initiative will have a sharper focus on governments and policy-makers. GCPSE is no longer running social innovation camps, but engages with other UNDP offices that run similar innovation labs and supports the development of design thinking and tools for the sector inspired by social innovation.

Box 2: Case Study UNICEF Burundi Lab

The core aim of the UNICEF Lab in Burundi is to bring the relevant actors – including volunteers, students, partners and community members – together to create a 'melting pot' for new ideas and to devise solutions with the end user in mind. The Lab focuses on improving service delivery, particularly in rural areas, because approximately 90% of Burundi's population lives in non-urbanised areas that are more difficult for service providers to reach (Lepage 2014). Burundi has a strong volunteer sector, so the Lab leverages the many volunteers and supports them in gathering and disseminating information, thus improving communication processes between young people, policy-makers and service providers across the country.

Box 3: Case Study UNICEF Copenhagen Lab

The focus of UNICEF's Lab in Copenhagen is on supply chain logistics, innovating to improve supply chains in humanitarian emergencies. The Lab is a physical space that includes a meeting room with movable furniture to facilitate various types of collaboration – from large meetings to smaller working sessions. The Lab in Copenhagen focuses on scalable solutions in product innovation, and has partnered with Frog Design to develop a prototype emergency situation (UNICEF 2014c). The Lab also conducts workshops and trainings on a range of topics (UNICEF 2012).

Box 4: Case Study UNICEF Innovations Lab Kosovo

The UNICEF Lab in Kosovo was one of the earliest experiments in developing an innovation space within the UN. It was set up in 2010 in response to the immense population of youth in Kosovo, and the core aim of the Lab is to create a generation of young people who are equipped with the skills and ambition to try to solve their society's problems (Harvey 2014). The Lab does this by attempting to break down the power hierarchy between young people and duty-bearers, teaching young people that they have just as much capacity to effect change as people in traditional positions of responsibility. The Lab is centred around 3 core 'pillars': *By Youth For Youth,* an incubator for young Kosovan social entrepreneurs; the *Design Centre*, which develops technologies to improve service delivery and capacity amongst government institutions (such as a birth registration application that improves data collection); and the *Youth Advocacy Platform*, which uses innovative approaches to help young Kosovans make their voices heard and advocate for their rights. For example, the Lab supports youth groups to develop advocacy campaigns around issues that concern their communities. The significant degree of autonomy of the Lab allows it to focus more on the grass-roots level, to reach more adolescents and young people from pockets of the most marginalized families (Mugaju 2014). The Lab staff can also devote some time to considering the more ideological aspects of innovation within UNICEF and methods to stimulate organisational change for the betterment of both UNICEF and its target population (Harvey 2014).

The Kosovo Lab has taken a number of forms over its period of existence. Originally, it was a large open space that was purposefully designed to achieve certain aims. There were flexible glass walls dividing the space so that everyone could be part of the activity happening at all times and feel connected to it. There was plenty of light and flexible furniture (such as bean bags), and the Lab was a comfortable, inviting space into which young people could walk off the street and give life to their ideas (Zymberi 2014). This directly reflected the Lab's aim to be a space that its target population could easily access, bringing ideas, issues and energy. The Lab was intended to be flexible enough to respond immediately to the demands of young people. If a young person walked into the lab and expressed an issue or concern in their community, the Lab was ready to switch into gear and act upon the issue. This clearly reflected the mentality presented in the publication *Labcraft*, that physical lab spaces should be purposefully designed so that their format can be easily and quickly modified to facilitate various different types of work (Tiesinga and Berkhaut 2014: 41).

The Innovations Lab Kosovo has since moved out of this space and is currently situated across two sites: an office in the centre of Pristina, and a function space elsewhere, called the 'bunker' (when Kosovo was enduring conflict it literally was a bunker, used to hold ammunitions). The bunker is used for large events like workshops and social innovation camps, but otherwise the physical space no longer plays a core role in the work of the Lab. Neither the bunker nor the office is very accessible for young people to just 'walk in off the street', so the Lab's main mechanism of remaining accessible to young people is now through online networks. Therefore, the 'Lab' now really means the online social and digital space, as well as the experimental mentality in the office (Harvey 2014). Evidently, the objectives and focus of the Lab in Kosovo have changed over time, for various reasons both within and outside of the Lab's control.

…continues

Box 4 (continued)…

The Lab has been flexible in adapting to external changes and modifying its approach, whilst still maintaining its core principles, including, and perhaps most importantly, human-centred design. The Lab staff in Kosovo also undertakes considerable outreach, going to rural areas to work with people in their own communities, which is especially important given that many of the most marginalised in Kosovo do not have regular access to the internet (Veseli 2014). This reflects the Lab's strong human-centred approach, working very closely with the communities themselves and giving communities the toolkits to solve problems themselves (Harvey 2014). Whilst the majority of the Lab staff are local, and thus have an understanding of the needs of the population, the Lab still uses specific methods at times to ensure that the local context is completely understood when developing its projects. For example, the Lab engages with community leaders who have a much closer understanding of the most effective and culturally sensitive ways to work with the marginalised communities (Hajdari 2014).

The case studies above help answer our inquiry into the forms that UN innovation labs have taken. It is clear that they are extremely varied, and aim to meet specific organisational and local demands. At UNICEF, a 'Do-it-yourself-guide' has been created to help UNICEF offices start their own labs, and also as a way to share UNICEF's learning more broadly with the public. The guide, despite its name, is not a prescriptive set of instructions that describes one form of lab, but instead contains guiding principles that can be adapted to the local context. For example, the innovation principles used across UNICEF's innovation work, and which are included in the guide, are to conduct work that is "user-centred, built on experience, sustainable, open and inclusive and scalable" (UNICEF 2012). This guide also describes three forms of work that appear in the labs, which are also visible in the case studies above. One focuses on improvements to product and service delivery, another on community engagement and the third on operational research to inform projects and strategies. As labs are emerging across the UN system with varied aims, the next two parts of this section detail the differentiated forms they have taken.

Variations in local context and purpose

At the moment, the models for innovation spaces have developed organically within their various departments, and there is no single UN model or form for innovation spaces. Some agencies are seeking opportunities for streamlining across the UN, a movement that is reflected in the development of the UN Innovation Network, which has only recently been formed (UNHCR 2014b). The UN Innovation Network is a collection of innovation representatives from different UN bodies coming together to ensure that unnecessary duplication of innovation activity is limited, for which the UN has been criticised in relation to its operations more broadly (Fomerand and Dijkzeul 2008). UN Global Pulse also stated in 2011 that it was looking to streamline innovation across the UN, drawing together the various units working on innovation into one unit so that agencies can better learn from each other's innovative practices. Global Pulse has even designed a blueprint for this unit, which it calls "Blue Hacks", but it is unclear whether this plan is still on foot (Farmer 2011).

In any discussion of centralisation of the UN innovation space model, it is crucial to remember that the local context is at the core of a lab's work, and what works in one country will not necessarily work in others. Therefore, of necessity, there should be vast differences between innovation spaces. Indeed, the differences in aims, methods and design of space that we discovered

across the UN innovation spaces reflects the specific needs of each location. Therefore, any push for a streamlined model of an innovation space or innovation processes should be resisted, to preserve the primary importance of focusing on the local context.

This prioritisation of the local context is clearly evident in UNICEF's approach. UNICEF's 'Do-it-yourself-guide' draws global lessons from the multitude of labs that they have established, yet leaves space for variation and creativity. There is still great diversity across UNICEF's various innovation labs around the world (UNICEF 2012). Each lab operates quite autonomously and there is a great range of focuses – technology, data, youth advocacy, emergency response, supply chain processes etc – depending on the needs of the communities in which they work (Lepage 2014).

There is nonetheless some degree of interaction and knowledge-sharing between various UN innovation spaces and agencies, although there is still much room for improvement in this area (Tiesinga and Berkhaut 2014: 16). The UNDP Global Centre for Public Service Excellence (GCPSE) in Singapore is intended to act as a hub for documenting new trends, solutions and ideas with a view to spreading them to UNDP country offices around the world (Husar 2014). The PSI Lab has considered a range of methods and institutional models for public policy innovation labs and promoted their successes amongst public services in the developing world (UNDP 2014). Likewise, UNICEF supports open innovation and broadcasts its stories of innovation as well as producing guides to share its experiences (UNICEF Stories 2013a; UNICEF 2012). Teams in the various labs communicate with each other, and some of the labs (for example the Uganda and Kosovo Labs) regularly host visitors seeking to learn about their work (UNICEF Stories 2013c). UNICEF's intentionally progressive outlook on open innovation and knowledge-sharing stems from the agency's core principles and the belief that sharing knowledge will benefit the world's youth (Harvey 2014). The aim for UNICEF is to get as many people interested in its work as possible: the agency defines its stakeholders broadly, which translates into openness in relation to knowledge-sharing (Harvey 2014). Like UNICEF, UN Global Pulse also seems to have quite an open approach to innovation, and is keen to share its breakthroughs, in order to promote global best practices and improve services for vulnerable populations, as well as its failures and lessons learnt (Farmer 2011).

There are instances of UN innovations labs collaborating on projects, but this is not widespread. The UNICEF Innovations Lab Kosovo worked with UNHCR for its birth registration project (using a 'rapid SMS' platform to register births that would otherwise not be recorded in Kosovo), amongst others, and UNICEF has invited agencies such as UNHCR to contribute to its 'Know Your Rights' campaign, which is making simple education about rights more accessible to young people (Hajdari 2014). Many of the labs operate in the UN's name but actually have a high degree of autonomy, so it is interesting that there are only very few labs that operate to support multiple UN agencies simultaneously. Given that labs often establish strong networks within communities 'on the ground', they would be useful spaces and sources of information for various UN agencies. There could be potential for labs to be less UN agency-specific and to feed innovation work into multiple UN agencies simultaneously. The UN Global Pulse Labs are perhaps the closest to this approach, as they support various UN agencies. However, their focus is limited to data (UN Global Pulse 2014). The Kolba Labs, which run social innovation camps for youth in Armenia, are also supported jointly by UNICEF and UNDP (Hodge 2013; UNICEF Stories 2013a), but there seems to be further potential for innovations work to bridge UN agencies where such collaboration would increase efficiency and improve the service provision of multiple agencies simultaneously.

As one interviewee commented, it would certainly be productive to have a centralised source of information on innovation practices within the UN: a "resource library" and knowledge-base that

can support and facilitate innovation and positive partnerships (Harvey 2014). Whilst knowledge-sharing is of course very important across innovation spaces and UN agencies, caution should be taken not to 'UNify' and centralise innovation space models. This could not only burden innovations labs with unnecessary top-down bureaucracy, but crucially, it could also undermine the importance of the end-users, who should be the heart and soul of innovation spaces, determining their direction.

Variations in the nature of space

The meaning attributed to 'innovation space' varies widely across UN agencies – from physical spaces, to virtual networks, to the label 'lab' being used to describe the employment of creative processes and ideas, as in the case of UNDP's PSI Lab (Husar 2014). When we look beyond the UN and humanitarian systems, it is clear that there has been a heavy focus on the physical nature of innovation spaces. Google has been known for its appreciation and execution of modern physical spaces designed to facilitate innovation (Google 2011), and the Hasso Plattner Institute of Design (d.school) at Stanford University has carefully designed physical spaces that allow for flexible and creative work. The physical design of the space at the d.school is thought to have a knock-on impact in creating a unique educational environment that "nourishes creative confidence". Here the space is seen as "a valuable tool that can help you create deep and meaningful collaborations in your work and life" (Doorley and Witthoft 2012). Modern innovation thinkers such as Johnson (2010) also view the elements of our environments as factors that enable innovation – claiming that when interacting with innovation spaces, we are in a constant dialogue, taking from the environment and giving back. Similarly, when returning to look at the UN system, the Global Centre for Public Service Excellence at UNDP highlights the process and environment for innovation as more important than the final results:

> *How labs approach decision-making is more important than the end-result, although successful projects bear significant potential for lesson-drawing and the progressive institutionalization of design thinking. For this reason, the logistical arrangements of design labs are as relevant as the type of expertise they manage to mobilize. (Allio 2014)*

In humanitarian work, however, the physical nature of the space has not always been the main focus or contributor to enabling collaborative innovation to occur. A field staff member of an NGO operating in Uganda described how he finds new innovative solutions in his work without the need for defined physical spaces:

> *I go to the groups and ask 'what are your challenges? What ideas do you have?' I have interactive discussions with groups. Talking is the important part – you can just meet under a tree. (Interview with NGO staff in Kyangwali refugee settlement, Uganda 2013)*

A few of the UN agencies have also recognised the importance of a network and personal relations as more important at times than physical space, and have therefore established virtual spaces to support innovation. For example UNHCR has labelled some of their groups of practice 'labs', such as their Self-reliance Lab and Energy Lab (UNHCR 2014c). Although these are not physical spaces like the UNICEF labs, they do form a type of innovation space – in this case they are virtual networks. The UNHCR labs connect staff globally around their respective thematic areas and facilitate ongoing innovation projects in the field. The innovation projects are supported by the UNHCR Innovation team through programming advice and the mobilisation of resources.

Many target populations of development and humanitarian agencies are highly mobile and interact with their communities, cities and spaces in kinetic, often transient ways. Many experience

extreme levels of dynamism due to the changing and uncertain nature of their physical environment and resources, and this liminality calls for a dynamic provision of services. There can be a tendency for international civil society to perceive the communities with which they work as static in their movements and their interactions with support systems, causing services to be provided in ways that fail to recognise the mobility of their end-users. However, a number of UN innovation labs are beginning to respond to the mobility and dynamism of end-users in more effective ways.

Online tools and technologies have been one of many strategies that innovation labs employ to better communicate and collaborate with a dynamic constituent. For example, 'UNHCR Ideas' is an online platform that may be conceptualised as a virtual innovation space. The UNHCR platform is a website where invited users can log in to contribute their ideas in relation to specific problem statements for the agency and field programmes. Whilst there are still some barriers faced by certain partners and refugees globally to connect to the internet, UNHCR Ideas has so far managed to reach many field-based staff and a handful of refugees in field locations (Bosley 2014). The tool offers users a new way to share their ideas and for remote staff and partners to voice opinions. UNHCR Ideas also acts as a platform for discussion around the ideas and therefore enables users to connect with one another even at a geographical distance. Conclusions from a review of the pilot of the online platform found that the tool was well received by its users and has helped to raise the profile of innovation within the agency (Bloom 2014). UNHCR Ideas is just one of the tools that UNHCR Innovation is using to facilitate innovation across the agency, but has succeeded in creating a safe space for employees, partners and some members of the affected population to share ideas at the early design stages of new programmes within the UNHCR. The UNDP PSI Lab is another example of a non-physical innovation lab (see Box 1).

A number of labs are conceived of as *both* a physical and a virtual space, bringing various actors together in meeting places, both online and in person (Lepage 2014). The UNICEF Labs in Kosovo and Burundi provide examples. Some labs undergo a transition from a virtual to a physical space. UNICEF South Sudan is a very recent space, and was initiated as a 'pop-up' virtual structure; however, it is eventually intended to become a permanent physical space (South Sudan Innovation Lab 2013). The spatial transition can also occur in the reverse direction, from physical to a greater focus on the virtual, which has been the case with the UNICEF Innovations Lab Kosovo (see Box 4). Such structural malleability is important for labs to best respond to the methods of engagement that are preferred by their particular end-users.

Another strategy employed to respond to end-user agility is ensuring that labs are themselves physically mobile – for example through the use of remote staff and pop-up locations. The Innovations Lab Kosovo has a mobile staff because that is the most effective way to centralise the Kosovar youth in programme design (see Box 4). Mobile and transient end-points allow the Lab to reach end-users who are physically remote or without access to online networks, and to work with them in a flexible, deeply engaged way.

This mobile strategy will not necessarily be appropriate for other labs with different objectives. The nature of a lab's 'space' and the strategies that it employs to engage with end-users should depend on the specific aims and constituencies of a particular lab. For example, a lab focusing on academic cooperation and incubation of student-driven innovations might better achieve its end through a physical co-location with the academic programme. Labs that exist to connect parties that traditionally consider their objectives to be in tension with each other (for example, activists and government, or the public and private sector) might also be better served by a physical location where the neutrality of the convening body reinforces its role as facilitator (Harvey 2014).

There is no one-size-fits-all form that a lab should take. What is most important is that the nature of a lab – whether physical, virtual, permanent or temporary, etc – is decided for the purpose of enabling the lab to best serve the needs of its dynamic end-users. In Josh Harvey's words, "what a lab is should be second to what a lab does" (Harvey 2014). Lab teams should be reflecting upon the nature of their location and space, and given that the lives and needs of end-users are kinetic, it is crucial that the nature of a lab space is constantly re-evaluated to ensure that it is not out of step with the people it exists to serve.

From this analysis of the variation in forms of innovation spaces within the UN, it becomes evident that innovative thinking and methods are often more important than the physical space of a lab, if such a physical space even exists. Whilst the location and design of a physical lab space are incredibly 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: 46).

Given that 'lab' no longer merely means a physical space, as it is commonly used in the natural and physical sciences, we now turn to analyse what the term 'lab' actually means in the context of innovation spaces. This will help us to understand why UN agencies are seeing value in creating separate innovation labs for their humanitarian and development work. Through this analysis, we will question whether there is a need for separate innovation spaces, as opposed to simply employing the innovation methodology within an agency's core work, and what motivates the creation of separated innovation labs.

4 Motivations and approaches underlying innovation spaces

A number of UN agencies seem to be using 'lab' in the sense of a laboratory of ideas, for the testing of new approaches to development and humanitarian work. There is a fundamental notion that innovation is experimentation, and that spaces are a way of facilitating this experimentation in a 'safe' environment that allows ample room for failure – as much as possible within the constraints of time, funding and institutional control, which can certainly be significant hurdles to overcome (UNICEF Stories 2013b). One aspect that sets innovation labs apart from many physical science laboratories is that they are not quarantined or isolated from the outside world. The opposite is true – they often seek to develop the deepest relationships with the outside world possible, interacting side-by-side and within communities, as if they had no walls (which also reflects the value and importance of virtual networks).

Tiesinga and Berkhout (2014) view labs as a way to allow for experimentation and collaboration in a way that existing institutions do not have the freedom to do. They describe institutions as "skyscrapers" that are "powerful, enduring, and rigid structures that dominate the landscape", leaving little space for innovation and social change (Tiesinga and Berkhaut 2014: 13). The authors see labs as a way to connect, collaborate and push forward social change within these rigidly structured landscapes. UN innovation labs challenge power structures, but they must also inevitably work within them, if they are to effect change in the UN system (Tiesinga and Berkhaut 2014: 14). Stuart Campo from UNICEF has described two key challenges to achieving innovation in the UN system: firstly achieving behavioural change and secondly overcoming barriers in the UN structure. In one sense, we may conceive of the labs as a way to overcome the structural challenge as well as to slowly influence behaviour. Labs are a way to innovate somewhat autonomously within the institutions, meaning that they have the potential to generate change

more sustainably and effectively. UNICEF's Innovations Lab Kosovo is in fact described in *Labcraft* as a:

> *...relatively autonomous unit of UNICEF's (the United Nations Children's Fund) Kosovo Program. As such, we operate within the enormous apparatus of UNICEF and the wider constellation of United Nations agencies. Together these organisations comprise the definitive "skyscraper" in some ways. They pair unparalleled resources, expertise, capacity, reach, and political might with often burdensome, labyrinthine bureaucratic apparatus. (Tiesinga and Berkhout 2014: 21)*

These possibilities lead one to question the motivations behind the various UN innovation spaces. Does the creation of an innovation space serve a clear operational purpose, and if so, what is that purpose? Are innovation spaces just new labels for environments and approaches that would have developed anyway, or are they really taking fundamentally different approaches and changing the way UN agencies are operating? If they are altering the approach of UN agencies, are they here to stay, or are they no more than a passing fad?

Aims and imperatives for innovation spaces

The driving force behind innovation labs is to create change by testing and applying new approaches, products and services. There is hope that the innovation process may help to find creative solutions to a range of existing problems in the humanitarian and development sectors. We have observed two means by which innovation labs are striving towards this goal. These means are described here as 'innovations imperatives' – one to create organisational change, and a second to enable a community to lead its own change.

In relation to the first imperative, innovation labs support the growth of an innovation culture that helps shift bureaucratic stasis within large organisations (Aleinikoff 2014; UNICEF 2014). Underlying such organisational cultural change is the idea that it will ultimately improve the organisation's ability to have a positive impact at the community level. In other words, a more innovative and flexible organisation will be better able to provide services for its target population. This may be thought of as an indirect approach – generating organisational cultural change in order for the organisation to then ultimately achieve better outcomes in terms of its mission. This indirect approach of generating organisational cultural change is certainly not easy, and might be particularly difficult when innovation spaces are perceived as external entities (even if they are technically working under the umbrella of one organisation) and thus more vulnerable to facing hostility amongst staff within the organisation. The work of innovation spaces inherently disrupts the status quo, and can therefore be controversial within UN agencies. General organisational cultural change is difficult at the best of times, but mainstreaming a disruptive, innovative mentality can prove especially difficult if it is perceived to be an injection from the outside, rather than arising from the core of an organisation itself.

A second imperative that guides innovation labs is to support the ideas and facilitate the projects of affected communities themselves, thus generating positive change for the target population through a more direct route. This direct imperative to support the community's initiatives is reflected in the way that Josh Harvey, head of UNICEF's Innovations Lab Kosovo, describes the ultimate goal of the Lab: to "work ourselves out of a job" (Harvey 2014). The Innovations Lab Kosovo seeks to give the community the tools to create their own solutions and improve their own futures, such that they eradicate dependencies on humanitarian or development sector support, thus disrupting the traditional models of humanitarian and development aid.

The concept of direct and indirect innovation by humanitarian agencies is depicted in the model below. The UN labs we have observed aim to affect organisational change, as well as supporting the innovation of communities directly.

The imperative to build a culture of innovation within a UN agency should improve the organisation's ability to develop humanitarian solutions, which will in turn positively impact communities on the ground. The imperative to support the innovation of affected communities themselves impacts humanitarian solutions more directly, as this eliminates the prior step of generating organisational change.

Figure 2: Direct and indirect innovation

The ideas captured by the terms 'direct' and 'indirect imperative' have been framed previously as 'two worlds' of innovation: top-down innovation to improve organisational response and 'bottom-up' innovation that facilitates the innovative activity of traditional beneficiary populations (Betts and Bloom 2013). We have observed that these two theoretical worlds of innovation play out in the practice of UN innovation labs, which employ a range of activities and tools to simultaneously push for 'top-down' and 'bottom-up' innovation. In practice these dual imperatives are both simultaneous aims of most UN innovation labs.

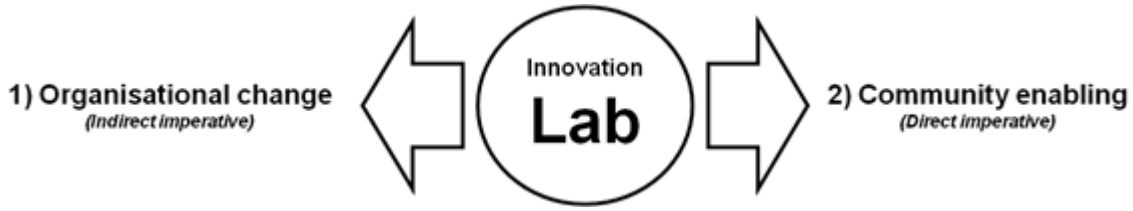

Figure 3: Dual imperatives of a UN innovation lab

To bring to life how the innovation labs are meeting these two imperatives, the image below illustrates a number of innovation lab activities on a spectrum between supporting the community directly in their own innovations, and focusing first on organisational change, to ultimately better support the community.

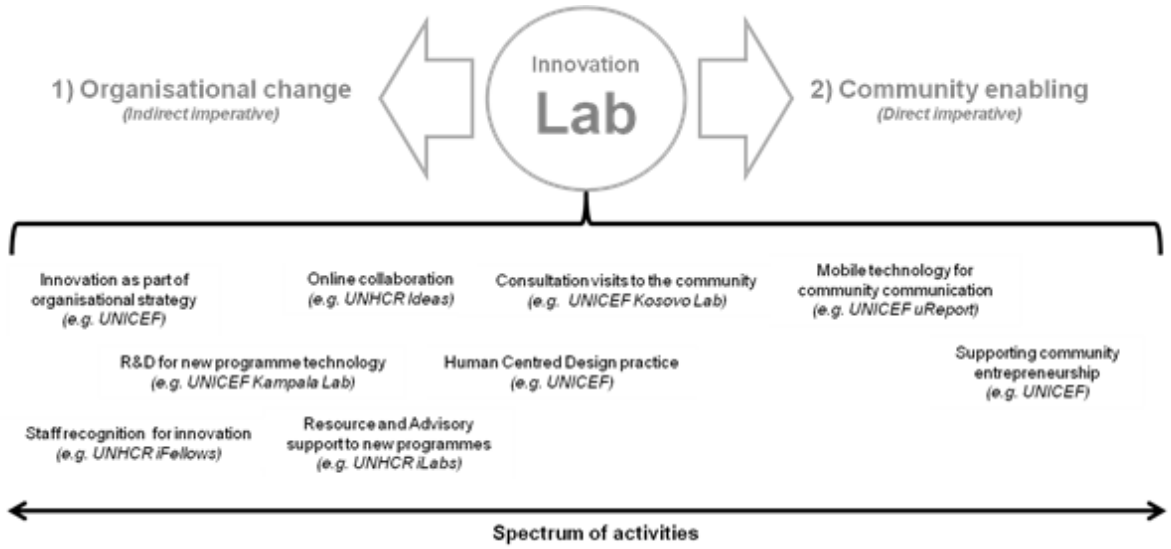

Figure 4: Innovation lab activities

The range of activities across the diagram above shows their varying nature, all of which contribute to solving different problems in their particular contexts. On the left of the spectrum, UNICEF has now included innovation in its organisational strategy, with the core aim of creating organisational change. On the right-hand side, UNICEF's UReport project is a technology solution that allows youth to send messages via their mobile phones and contribute to discussions about political and community issues that they are faced with. UReport has been successful in Uganda and is now being spread to other countries. UReport is directly supporting the community to act. In the middle of the diagram, the online collaboration tool at UNHCR is used to try and create a culture of innovation within the agency, and also acts as a platform where staff, partners and beneficiaries can share their ideas for organisational projects, targeting both direct and indirect imperatives.

Like many development and humanitarian actors, UN agencies have historically struggled to effectively engage communities in their work on the ground (Brown and Donini 2014). Innovation labs have started to implement activities that show promise for more dynamically working hand-in-hand with communities. It is evident that the two imperatives underlie the work of UNICEF and the UNHCR, and are likely to also be infused in work across other UN innovation spaces. As shown by Figure 4, the tools and activities of the labs are not clearly delineated and relevant only to one imperative or the other. Rather, they sit on a spectrum in terms of their relationship to the two imperatives, and the two imperatives naturally interact and influence each other. That said, it is important that innovation lab teams are conscious of the separation between the two imperatives, so that the direct imperative, with the ultimate goal of facilitating bottom-up change, is not lost amidst the aim of achieving the first imperative of organisational change. The staff in innovation labs should be aware of the differences between the two imperatives and the short and long-term aims of both, such that they can monitor whether the imperatives are being balanced and both goals are being achieved.

The direct imperative of strengthening the capacity of communities to "create solutions to their own pressing problems" (UNICEF 2013b) is a slower process and a long-term goal for many UN innovation labs. In the meantime, there is a need for labs to continue working towards the indirect imperative, of improving the ability of UN agencies to provide better services within the existing model of humanitarian and development aid. Innovation labs therefore sit as necessary 'half-way houses' for the time being, working simultaneously through both their direct and indirect imperatives to effect positive change. In that sense, innovation labs fulfil an important role in bridging the two worlds of humanitarian innovation.

What unique improvements can innovation labs achieve?

In determining the motivations for establishing innovation spaces, it is useful to analyse how innovation spaces differ from standard UN offices, and therefore what added input they can provide in improving the UN's work. One element that sets innovation spaces apart from their non-innovation UN office counterparts is their deliberate and determined prioritisation of flexibility. Innovation spaces are intended to be constantly evolving locations, both physical and virtual, where people can share their ideas and energy, to which the space will adapt in a nimble, responsive way (Tiesinga and Berkhout 2014). As Josh Harvey of the UNICEF Innovations Lab Kosovo explains, innovation labs do not have all the answers to the new problems that the world is facing; however, they are trying new approaches, forging new networks and calling on a broader range of disciplines to try to deal with the changing world. Part of this changing world is the erosion of traditional binary distinctions such as rights-holders versus duty-bearers, experts versus non-experts and haves versus have-nots, and innovation labs aim to harness the break-down of these traditional boundaries (Harvey 2014). Being entities that exist for the very purpose of trying new techniques and disrupting methods that have come to be seen as the norm in service delivery, innovation spaces can overcome inertia that UN agencies may face but find difficult to erode. This fluidity is fundamental to an innovation space, imbued in its flexible approaches, and will hopefully enhance its ability to trigger more widespread organisational change (Ferreira and Armagan 2011).

As mentioned briefly above, this flexibility is abundantly clear at the UNICEF Innovations Lab in Kosovo. The Lab differentiates itself from the main office of UNICEF because it works within communities, deeply understanding the issues on the ground and responding to them as immediately as possible, rather than responding to an agenda set by UNICEF headquarters months or even years earlier. The Lab is using new approaches to communicate rapidly and effectively with its target communities, and working through very horizontal relationships that it cultivates with them (Hajdari 2014). Flexibility and human-centred design are at the core of many innovation spaces, whereas other non-innovation departments are often more restricted by strategic plans and institutional bureaucracy (Allio 2014). Many innovation spaces have the potential to transform the roles of the traditional "beneficiaries" of UN work so that they can actively contribute and guide project design rather than remaining at the receiving end of activities (Husar 2014). Compared to many UN agency offices, UN innovation spaces often take more of a back-seat role and let their destiny be guided by the people who best understand the problems – those who are actually experiencing them (Harvey 2014). Thus, it is clear that innovation spaces are fundamentally different to traditional UN agency offices because the perspective from which they are approaching issues (that is, the perspective of the end-user) means that they are actually creating demands on UN services that were not previously captured, and responding to them with new tools and a more fluid, less risk-averse mentality (Lepage 2014).

Of course, the degree to which such flexibility is practically possible in UN innovation spaces varies. A certain degree of autonomy is required for an innovation space to have real flexibility to operate responsively and in an experimental manner (Harvey 2014). Even those spaces that do have significant autonomy (such as UNICEF Innovations Lab Kosovo) are nonetheless not immune to structural and financial constraints or to the demands imposed by donors and mother agencies. Whilst UN Global Pulse aims to innovate from the grass-roots, it nonetheless responds to an annual research agenda, which would undoubtedly constrain its flexibility (UN Global Pulse 2014).

Connected to flexibility, another aspect that fundamentally underpins the innovation space ideology that is not commonly prioritised in non-innovation UN work is the creation of 'failure-friendly' spaces. UNICEF has initiated a practice of 'Failure Fridays' whereby they share reflections on the week, including one failure, thereby "institutionalizing risk taking" (UNICEF Stories 2013b). The co-founders of UNICEF Innovation, Chris Fabian and Erica Kochi, have said that there is a problematic lack of openness to failure within the broader development community (Perkins 2013). Innovation spaces are therefore places where the approach of 'admitting failure' is more welcome and encouraged.[8]

That said, a strong failure-friendly approach might be difficult to achieve in the face of resource and time constraints, as well as obligations to funders and to head offices. Within UN (and most) organisations, there is often pressure not to fail. For humanitarian and development practitioners the concept of failure raises concerns about the ethics and accountability of their actions. In most cases a realistic balance must be found, but it is important that learning from failure is at the heart of the innovation ideology, and that labs maintain the requisite independence to allow themselves a free space to fail. Lab creators promote the mantra: "fail fast, fail often, and fail early" (Tiesinga and Berkhaut, 2014: 29). There is certainly space for this to be better understood in practical terms by UN humanitarian and development actors before innovation becomes the norm. Innovation labs that are able to spread their lessons and methodology will help UN agencies understand and reap the benefits of the innovation approach.

Box 5: Reacting to failure

The UNICEF Innovations Lab in Burundi changed its focus quite dramatically after realising that its projects had a focus that was misaligned with community needs. One of the Lab's core projects is UReport, which is an SMS system to facilitate communication across the country on topics of concern to the people. The Lab found that UReport was not having as great an impact as it could have done because only approximately 3% of people in Burundi have access to electricity from the grid, meaning that it was very difficult for them to charge their mobile phones. The Lab therefore turned its focus towards energy projects to help people charge their phones more easily, even though this was not a traditional area of focus for UNICEF. The Lab learnt from the weakness in its original project design, and this adaptation of focus demonstrates the Lab's approach of responding actively to the needs of the community on the ground. An innovation lab will be strengthened if it can react to its beneficiaries' feedback that a project is not working (Lepage 2014).

'Innovation lab' as a strategic label?

In our questioning of the motivation behind innovation labs, discussions arose around the use of the term itself. Cynics might claim that there is a recent trend in labelling everything a 'lab' and that UN agencies are using the word as a mechanism of trendy marketing, and possibly to connect more easily with private sector innovation hubs and labs (Husar 2014). The world of humanitarian and development work is certainly not shielded from the importance of branding, and the innovation label could be seen as a pragmatic tool for improving the 'good looks' of UN agencies, enticing both external and internal support and interest. For example, UN Global Pulse Kampala has noted the interest that private sector companies like Nokia and Microsoft have shown in their work (UN Global Pulse 2014). It is possible, although not necessarily a given, that the 'innovation' label helped generate such interest. Innovation work is often broadcast by the outreach teams at UN agencies (Farmer 2011; UNICEF Stories 2013a; UNHCR 2014; Husar 2014), so there is clearly

[8] See also Admitting Failure website, for further elaboration of this ideology of welcoming failure: http://www.admittingfailure.com

a perceived benefit in highlighting certain aspects of an agency's work under the label of innovation. This is perhaps the work that is considered more likely to have public, donor and private sector appeal. If this is the case, then attaching the 'innovation lab' label may serve as a pragmatic way of strengthening fundraising activities.

Arndt Husar of the UNDP Global Centre for Public Service Excellence stated that working under the label of an 'innovation lab' helps to achieve certain outcomes (Husar 2014) by making an immediate connection with others working in this field. The innovation label has generated greater awareness for the Public Service Innovation (PSI) Lab and interest in its work, by enabling the UNDP to tap into the existing network of innovation labs and build connections with them. At the end of the day, collaboration and knowledge-sharing is a crucial element of open innovation. In the case of the PSI Lab, even if the term 'Lab' is less reflective of a physical innovation space and more of a desire to be connected with innovation approaches and methodologies, this does still align with the core aims of innovation spaces. Labs may themselves be a way for UN development agencies to collaborate with people from outside of the development sector and benefit from the fresh ideas to which they are exposed. These external interactions have been thought to bring more disruptive innovations into the UN system (Aleinikoff 2014).

Through the innovation labs we have found, it seems that the labelling may have been one way to engage with new funding partners and obtain funds through new means. In the case of UNHCR innovation, in its first two years of operation, the IKEA Foundation supported its innovation projects and research and development with grants amounting to more than one million US dollars. UNICEF's innovation labs have also partnered with governments, businesses and other partners who have helped to fund its unique projects.

Even if innovation spaces do achieve the unique aims that set them apart from non-innovation departments – of being highly flexible, failure-friendly environments where energetic people can experiment and develop innovations with the end user at the forefront of programme design – this does not necessarily exclude the possibility that they are simultaneously employing the term 'innovation lab' as a strategic label. If this is the case, it is not something that ought to raise concern. Using the label of 'innovation lab' strategically may in fact be instrumental in serving specific purposes. As well as strengthening fundraising, separating and labelling innovation might also generate greater legitimacy for new approaches within an organisation itself and help overcome bureaucratic politics. That said, this is not always the case, given the fact that changing the cultural mindset of an organisation can still be a very difficult task for an innovation lab to achieve, as discussed above.

To a certain extent, the innovation hype could be simply hype, but that is not to say that it is not useful hype (Husar 2014). In order to determine whether the hype is indeed productive, UN agencies will need to monitor the impact of their innovation spaces, a task that is usually carried out by the teams in innovation spaces themselves. We now turn to the mechanisms and issues associated with measuring the impact of innovation spaces.

5 Impact of innovation spaces

As the innovation movement grows, there is increasing impetus to understand how the outcomes of innovation practice may be measured and proven to work. Without evidence of impact, there will not be as much awareness raised about innovative approaches, and they will not generate

much uptake. This is also true of the justification for the existence of innovation labs. This section unpacks some of the challenges associated with impact measurement and what has been done so far in the innovation labs that we explored.

Measuring the impact across all sectors of work in international development and humanitarian aid has been a point of debate and a focus of energies in recent years (Proudlock and Ramalingan 2009). Measuring social change and thus the impact of humanitarian intervention is neither straightforward nor clearly defined. Most organisations find their way using methods that are familiar to them, and through the creativity of dedicated staff. Some groups have collaborated to help standardise and consolidate some of the progressive ideas in monitoring and proving impact – for example, the Humanitarian Accountability Partnership (HAP) and Active Learning Network for Accountability and Performance (ALNAP). One main point of contention for impact measurement is the pull between accountability and reporting visible impact to donor bodies, versus seeking real impact measures for the purpose of improving the lives of those who are served (Knox-Clarke and Mitchell 2011). Perhaps misaligned with the motives of most innovation labs, formulated metrics and measures in their traditional forms may stifle innovation and fail to capture the dynamic nature of most innovation initiatives.

These traditional conversations of measuring impact have not yet been integrated into the debate about humanitarian innovation. 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. Yet we have few good metrics for innovation, and monitoring and evaluation standards in the area remain underdeveloped. (Betts 2014)*

Speculative debate has started to emerge as the need to legitimate the innovation movement becomes more pressing. A recent blog post draws from examples of measurement found in national innovation systems. The author suggests that a Humanitarian Innovation Index could be established, along the lines of the 'Global Innovation Index', which is comprised of several metrics (such as knowledge and technology outputs and market sophistication) (Verity 2014).

In practice, innovation labs and spaces are aware of the need to better measure what they are doing from an early stage (Harvey 2014). Given the flexible and failure-friendly nature of innovation lab work, monitoring impact against traditional criteria often used in bureaucratic organisations can pose problems (Tiesinga and Berkhout 2014). In a sense, innovation spaces are feeling their way through the process of monitoring and evaluation, using trial and error, and being forced to innovate in the way they measure impact and learn from their work. This is unsurprising, given the nature of the projects that they are monitoring, which employ new techniques, equipment and actors.

The UNHCR provides one example of the potential for UN innovation teams and labs to generate new solutions not only for new programmatic activity, but also for monitoring and evaluation. UNHCR Innovation is leveraging its small team and limited resources by collaborating and supporting projects run and led by existing programme staff in the agency. UNHCR Innovation in its first two years has already been successful in obtaining buy-in from within the organisation and is now overwhelmed with requests for input into projects across the agency (Earney 2014). Due to the increased demand, UNCHR Innovation is considering its approaches and formalising its mechanisms for selecting which projects to work on. The internal demand for the facilitation that the UNHCR Innovation team provides is in itself proving that the unit is impacting the agency as a

whole and providing a unique space for staff to engage in the development of ideas. The team at UNHCR Innovation has been aware of the need to capture, learn from and communicate its impact. Since its inception in 2012 the innovation team has documented activity, using it to reflect, and adapt what they do. However, UNHCR Innovation is now seeking to develop more strategic and structured ways of measuring its work. The interest in measuring impact at UNHCR Innovation has not come from requirements by donors, but is instead driven by the team – as a way to learn and plan for the future, and to also remain accountable to their various stakeholders. UNHCR's interest in demonstrating its success is intended to serve several purposes. The reflections are a way of communicating and explaining to refugees the work that the innovation team does, showing superiors in the agency that the unit is providing value to the UNHCR as a whole, and also demonstrating accountability to UNHCR staff with whom the unit works, and likewise to donors and partners. At UNHCR Innovation the need to create new metrics and measures of impact has been 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.

The *Labcraft* publication is one of the few discussions that analyses methods of measuring the impact of innovation labs. Tiesinga and Berkhout posit that four different levels of impact measurement would be of use to social innovation labs at large: "1. impact at the level of the lab itself, 2. the spin-off labs that we generate, 3. the innovations and innovators we cultivate and support, and 4. an emerging new narrative" (2014: 106). In other words, it is important to question what would have happened if the lab did not exist, what the impacts of the labs are, especially on end-users, and whether there is an emerging new narrative whereby the lab is influencing the wider societal landscape. It should be remembered that the impact of innovation spaces will often be slow to manifest itself, both on the populations of concern and on the UN agencies in which the spaces work. Change should not be expected to be rapid. However, the very existence of labs shows positive change within societies and institutions that are working to do things differently and better (Tiesinga and Berkhaut 2014): "The key challenge here is to find a way to grow our impact without becoming the same rigid system we're trying to transform. Can we work at scale and still be nimble? Or does scale imply compromise?" (Tiesinga and Berkhout 2014: 114).

On the ground, whilst some projects may have clearly measurable outputs to present to donors and stakeholders, for others the impact may be more holistic, "fuzzy" and difficult to measure (Tiesinga and Berkhaut 2014: 27). For example, UNICEF Burundi's UReport is highly useful as it provides a relatively constant measurement of impact, given that it is an information collection tool. UReport is a platform through which members of the public can express their concerns about issues in their community via messages and public polls on the SMS-based system. These concerns are reported to community leaders, to effect positive change (UReport 2014). The impact of UReport can therefore be quantitatively measured in terms of the numbers of people using the platform and frequency of use, location etc, as well as to pin-point some of the community and policy changes that the tool influences. In this way UReport has proven its success, and shown that there is a demand for it to exist. With nearly 300,000 users in Uganda[9] it is now being scaled for use in other countries through the UNICEF lab network.

Likewise, some projects that have been developed through UNICEF Innovations Lab Kosovo's social entrepreneurship incubator have gone on to secure further grant funding and scale up. The impact in these cases is measurable in terms of the amount of financial support obtained and the extent to which the initiatives are scaled-up. Scale is one common way to measure successful

[9] User count on UReport's Uganda site with a count of 271,602 on 19th November 2014, http://www.UReport.ug/

impact – it appears self-evident that if an initiative is able to grow sustainably, it is clearly successful. However, if success is measured by the degree of scaling up, then how should that scale be measured? The answer will depend on the specific project and context. Even if scale can be measured, the ultimate impact of projects on society is often very difficult to measure. This is particularly the case for projects for which there are fewer quantitative metrics that could be used. As one example, the Innovations Lab Kosovo is faced with the challenge of accurately measuring an increase in confidence amongst young people who have been involved with the Lab's Youth Advocacy Platform. The Innovations Lab Kosovo draws on a mix of quantitative and qualitative (for example ethnographic) methods of measurement, recognising that both are necessary to give a more complete picture of progress (Harvey 2014). Importantly, the Innovations Lab Kosovo very deliberately prioritises constant reflection and measurement – projects are being analysed, criticised and modified at all stages and by all members of the lab, rather than waiting until the end of a project or strategic agenda period to realise that aspects could have been improved (Harvey 2014).

In conclusion, the 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 from their work (Farmer 2011; UNICEF Stories 2013a; Allio 2014; UNHCR 2014). However, given that the labs are still very young, 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. One question that should be posed is how innovation labs can prevent their measures becoming bureaucratic and stifling the innovation that they work so hard to progress. To move forward on this debate, it will be important for UN innovation spaces to maintain their autonomy and to generate new ways of thinking about what, how and why they measure their impact.

It is important to note that impact will take a different form for the direct and indirect innovation imperatives. Tools used for measuring how far organisational change has been achieved will not look the same as those used to measure how far a community's own innovation has been supported and has achieved change at the grassroots. Remaining accountable to the community is something that will be key in innovation work. It will be important to ensure measurements are not lost in upward accountability only, as many attempts at measuring impact in the sector have done in the past. Allowing communities to define the measures of impact is something that has been advocated in humanitarian evaluation (Anderson et al 2012; van Praag 2014), so labs might be able to help bridge the relationship gap and work hand-in-hand with communities in re-defining what humanitarian impact really means. This would certainly be a positive achievement for the innovation movement, and would be a worthwhile goal for innovation labs as they move forward.

6 The future of innovation spaces

The number of UN innovation labs is growing. UNICEF has recently opened new labs, and new spaces are touted in other agencies too (UNICEF 2013b; UNICEF Stories 2014). There is no doubt that the innovation lab movement is gaining pace, and the UN would be wise to keep abreast of this progress.

Several UN agencies have shown a strong commitment at their top management level to focusing on innovation as a key priority moving forward. Innovation is included in the strategic agenda for UNICEF, and staff members in the Senior Leadership Development Programme are exploring how

to make innovation the 'new normal' (Lake 2013; Campo 2014; UNICEF 2014). UNICEF is also working to integrate and mainstream innovation within its core programmes, rather than it merely being the domain of the innovation labs. For example, the UNICEF country office in Kosovo is generating stronger channels of communication to maximise the role of the Kosovo Innovations Lab in positive social change, because it recognises that UNICEF's services could have been scaled-up in the past through better mainstreaming of the lab's work (Mugaju 2014). For the UNHCR, innovation activity is becoming increasingly integrated into field projects and sectors of work. In the words of the authors of *Labcraft*, "even in the elevators and hallways of skyscrapers themselves...seeds of transformation are germinating" (Tiesinga and Berkhout 2014: 13). However, cultural change is slow – in the case of UNICEF, for example, collaboration often arises as a result of ad hoc personal relationships between employees in the UNICEF country office and the Lab rather than through any institutionalised process whereby the input of the Innovation Lab is indigenous to the development of all programmes from their inception.

Having presented a picture of the forms that innovation labs are taking in the UN system, what has motivated them and the challenges they are facing in defining impact, we can draw out some key recommendations for the future of innovation spaces in the UN. In order to be a key player in the progress of the innovation movement, the UN ought to keep the following insights in mind:

- **Balance the direct and indirect imperatives of humanitarian innovation**
  As emphasised throughout this paper, UN innovation labs have dual innovation imperatives – firstly to build an internal culture and mindset of innovation practice, and secondly to innovate as closely to the affected community as possible, for optimal impact on their lives. These dual objectives will have to be carefully balanced, and multiple approaches and structures should be used to simultaneously achieve both imperatives. Management policies and procedures cannot overshadow the way in which innovation activities directly relate to and include the affected population. Labs have proven their ability to brand and house new relationships with affected communities as well as to foster innovation among new stakeholders and participants. It is crucial that innovation labs do not focus so much on organisational change that they pay mere lip service to the direct imperative of facilitating change from within communities.

- **Be wary of the danger of 'siloing' innovation spaces in the long-term**
  When innovation spaces are operating quite separately from programme offices and calling upon new disciplines to develop solutions, they are at times required to translate their work into a language and format that can then be injected back into the agency's core programmes (Harvey 2014). It should be questioned whether having these separate spaces is actually then a brake on the process of organisational cultural change, if innovation is being injected from the outside rather than being indigenous to the development of all programmes within an organisation. There is therefore a possibility that the existence of labs may siphon innovation work off into 'silos' of activity, which could be counterproductive to the aim of changing the wider organisational mindset, and also be detrimental to defining how the wider organisation may work closer to communities on the ground beyond the space of the lab.

- **Recognise the important role for innovation spaces in the short-term**
  It is possible that the importance of innovation spaces as bounded, separate entities will dissipate and become a passing phase, if UN agencies are successful in mainstreaming innovation within every aspect of their core processes and programmes. In that case, there

may not be a need for separately defined innovation 'labs' or 'spaces'. However, until innovation cultures do become more mainstream within the UN, innovation labs might be a necessary 'halfway house'. As entities that maintain a degree of autonomy, they can develop their own cultures and foster innovation within target communities with fewer bureaucratic restrictions (i.e. meeting the direct innovation imperative). The successful results of this can then be fed back into UN agencies, gradually generating change within the UN system (i.e. meeting the indirect innovation imperative). It is also possible that maintaining a certain distance from a parent organisation can allow more neutral reflection, enabling the "system to see itself better" (Tiesinga and Berkhaut 2014: 65). Labs may be seen as facilitating the initial stages of innovation when experimentation and testing are required, and as long as ideas mature beyond the lab and into the organisation or communities, then both the direct and indirect imperatives are likely to be met. For the time being, innovation labs will continue to manually inject their new ideas and approaches into both UN agencies and communities in a way that allows these parties to absorb the benefits in practical terms.

Whilst incubating a culture of innovation within an organisation directly might be the most effective solution and the ultimate goal, for the moment, separate innovation spaces are needed to allow the development of innovation methodologies in a space that is less constrained by bureaucratic restrictions and risk-adversity. It should be noted that labs might be more useful structures for larger organisations (such as UN agencies) but might be less necessary in smaller organisations, if they are already more flexible in their approaches and structures and have less need to create isolated innovation spaces to allow for greater autonomy and freedom to innovate.

- **Use a variety of tools and innovation mechanisms**
  There ought to be an understanding that innovation labs cannot be the only mechanism to facilitate humanitarian innovation. As organisations are becoming more interested in measuring their impact and evaluating the results from innovation in practice, there is also growing activity that spans beyond the labs. Going forward, it will be important for UN agencies and the humanitarian sector at large not to turn to only one tool in the ever-growing innovation toolbox. Although a lab may house a range of tools and activities, a lab alone will not change the way a larger organisation functions. Like any innovation tool, there is in fact a system of innovation that needs to be built and managed in order for the tool to be used effectively and result in meaningful impact. Broader mechanisms will be key to embedding innovation within UN structures. These will include the building of trust, personal relationships and incentives among stakeholders, as well as managing innovation throughout its whole cycle as part of an organisation's budget and activities – even when this means that an idea may leave the control and safe space provided by a lab.

- **Be creative in defining impact measurement for innovation**
  As described in the previous section, the success of UN innovation spaces will depend in part on their ability to develop creative approaches to measuring their impact. Previous lessons from measuring impact in the sector should be taken on board. However, existing measurement tools used in humanitarian and development practice may not be appropriate for the new ways of working that innovation labs are generating. A deeper understanding of the impact of innovation will be required. Given that humanitarian innovation focuses on human-centred design, impact measurement could involve

communities much more, for example by allowing communities to define and measure the impact of innovation spaces with which they are engaging. If thinking out-of-the-box is something that UN innovation labs do best, then the ways in which they measure and define their successes should also adopt this approach.

- **Seek flexible financing**
  Linked to the previous recommendation, there can be significant barriers to funding innovation labs, and innovation spaces will need to prove their impact in order to sustain funding. It will be important for innovation spaces to also negotiate, wherever possible, flexible and innovative funding structures, so as to decrease the degree to which they might be inhibited by requirements imposed by funders. Rigid funding mechanisms have often stifled adaptability and flexibility in UN programmes. In order to continue to experiment with new approaches, non-traditional funding streams may be required.

Whilst the forms that UN innovation spaces take and the motivations for their existence vary, one thing is clear: there are obvious and impressive positive impacts from the work of innovation spaces across the UN, which should be celebrated and built upon for the future. As the movement grows, it is important that UN agencies and the teams in innovation labs regularly step back, take stock and reflect. There should certainly be critical analysis of two key issues: firstly, what the imperatives of the particular lab are, and whether these are being met in a balanced way, and secondly, whether the isolated innovations lab model is the most effective in achieving a UN agency's ultimate aim of improving social conditions. This paper has demonstrated that the innovation lab model can be an effective tool, at least for the time being. Innovation spaces constitute a significant step on the pathway towards the ultimate goal of communities having the resources and capacity to generate solutions for themselves. Given that innovation spaces are operating in a constantly evolving context, there needs to be very regular evaluation of external community needs and the most effective models by which innovation can help meet these needs. If the relevant UN agencies and innovations teams engage in frequent critical reflection, then innovation spaces have shown the potential to be a formidable force for social change.

7 References

Admitting Failure (2014) [Online] Available from: http://www.admittingfailure.com [Accessed 7 October 2014]

Aleinikoff, T. A. (2014) 'Innovation - what, why and how for a UN organisation'. *Forced Migration Review Supplement: Innovation and Refugees*, September 2014, 8-10.

Allio, L. (2014) *Design Thinking for Public Service Excellence* [Online]. Singapore: UNDP Global Centre for Public Service Excellence. Available from: http://www.undp.org/content/undp/en/home/librarypage/capacity-building/global-centre-for-public-service-excellence/DesignThinking.html [Accessed 7 October 2014]

Anderson, M.B. et al. (2012) *Time to listen: Hearing People on the Receiving end of International Aid.* Cambridge, MA: CDA.

Bessant, J. et al. (2014) 'Innovation Management, Innovation Ecosystems and Humanitarian Innovation; Literature Review for the Humanitarian Innovation Ecosystem Research Project', *DFID* [Online] June. Available from: http://r4d.dfid.gov.uk/Output/196762/Default.aspx [Accessed 23 September 2014]

Betts, A. (2014) 'Introduction: refugees and innovation'. *Forced Migration Review Supplement: Innovation and Refugees,* September 2014, 4-7.

Betts, A. and Bloom, L. (2013) 'The two worlds of humanitarian innovation', *Refugee Studies Centre Working Paper Series*, 94.

Betts, A. and Bloom, L. (2014) 'Humanitarian Innovation: The State of the Art'. *Occasional Policy Paper Series, UNOCHA.*

Bloom, L. (2014) UNHCR Ideas: Open innovation inspiring collaboration and new ideas within the UN, Humanitarian Innovation Project.

Bosley, A. (2014) 'UNHCR Ideas: an online platform for change'. *Forced Migration Review Supplement: Innovation and Refugees*, September 2014, 15-16.

Brown, D. and Donini, A. (2014) 'Rhetoric or reality? Putting affected people at the centre of humanitarian action'. *ALNAP Study.* London: ALNAP/ODI.

Campo, S. (2014) *Humanitarian Innovation Conference.* [Panel discussion]. Held on 19 July, University of Oxford.

Conte, A. (2014) *Humanitarian Innovation Conference.* [Panel discussion]. Held on 19 July, University of Oxford.

Daws, S. and Weiss, T. (2008) World Politics: Continuity and Change Since 1945, in *Oxford Handbook on the United Nations*, Oxford: Oxford University Press.

Doorley, S. and Witthoft, S. (2012) *Make Space*, New Jersey: John Wiley & Sons Inc.

d.school (n.d.) Make a space for innovation, *Hasso Plattner Institute of Design at Stanford* [Online] Available from: http://dschool.stanford.edu/make-a-space-for-innovation/ [Accessed 23 September 2014].

Earney, C. (2014) UNHCR Innovation Co-Lead. *Mapping Innovation Spaces in the UN System.* Interview with Louise Bloom, 18 August. Personal communication.

Farmer, S. (2011) 'Humanitarian Innovation and the United Nations'. *UN Global Pulse blog* [Online]. Posted 5 June. Available from: http://www.unglobalpulse.org/blog/humanitarian-innovation-and-united-nations, [Accessed 4 October 2014]

Ferreira, M. and Armagan, S. (2011) 'Using social networks theory as a complementary perspective to the study of organizational change'. *Brazilian Administrative Review,* 8(2): 168-184.

Fomerand, J. and Dijkzeul, D. (2008) Coordinating Economic and Social Affairs, in: Daws, S and Weiss, T.G, Eds, *The Oxford Handbook on the United Nations*, Oxford: Oxford University Press.

Friederici, N. (2014) What is a tech innovation hub anyway?. *The Connectivity, Inclusion, and Inequality Blog* [Online]. Posted 16 September. Available from: http://cii.oii.ox.ac.uk/what-is-a-tech-innovation-hub-anyway/ [Accessed 23 September 2014]

Gathege, D. and Moraa, H. (2013) 'Draft Report On Comparative Study On Innovation Hubs Across Africa, Nairobi: iHub Research' *iHub Research.* [Online] Available from: http://community.ihub.co.ke/blogs/13733/comparative-study-on-innovation-hubs-across-africa [Accessed 8 October 2014]

Google (2011). Innovation Spaces. [Online]. *Think with Google*, July. Available from: http://www.thinkwithgoogle.com/articles/innovation-spaces.html [Accessed 23 September 2014]

Hajdari, S. (2014) UNICEF Innovations Lab Kosovo. *Mapping Innovation Spaces in the UN System.* Interview with Romy Faulkner, throughout July. Personal communication.

Harvey, J. (2014) Lead, UNICEF Innovations Lab Kosovo. *Mapping Innovation Spaces in the UN System.* Interview with Romy Faulkner, 16 July. Personal communication.

Hodge, G. (2013) Armenia's innovation lab (Kolba Labs) is live!. *Voices from Eurasia Blog.* [Online]. Posted 20 August. Available from http://europeandcis.undp.org/blog/2013/08/20/armenias-innovation-lab-kolba-labs-is-live/ [Accessed 4 October 2014]

Husar, A. (2014) Deputy Director, UNDP Global Centre for Public Service Excellence. *Mapping Innovation Spaces in the UN System.* Interview with Romy Faulkner, 10 April. Personal communication.

Innovations Lab Kosovo (2013) [Online]. Available from: http://www.kosovoinnovations.org/ [Accessed 8 October 2014]

Jackson, R. (1969) *A study of the capacity of the United Nations development system*, Geneva: United Nations.

Johnson, S. (2010) *Where Good Ideas Come From: The Natural History of Innovation.* London: Penguin.

Knox-Clarke, P. And Mitchell, J. (2011) 'Reflections on the accountability revolution'. *Humanitarian Exchange*, 52, October 2011, 3-5.

Lake, A. (2013) Executive Board Meeting report, *UNICEF*. New York, 18 June [Online]. Available from: http://www.unicef.org/about/execboard/files/Executive_Director_opening_statement_18June2013.pdf [Accessed 7 October 2014]

Lepage, C. (2014) Co-Lead, UNICEF Burundi Innovations Lab. *Mapping Innovation Spaces in the UN System.* Interview with Romy Faulkner, 25 March. Personal communication.

Mindlab (n.d.) [Online]. Available from: http://mind-lab.dk/en/ [Accessed 4 October 2014]

Mugaju, J. (2014) Deputy Director UNICEF Kosovo. *Mapping Innovation Spaces in the UN System.* Interview with Romy Faulkner, 7 July. Personal communication.

Müller, J. (ed.) (2001) *Reforming the United Nations: The Quiet Revolution*. The Hague: Kluwer Law International.

Orr, R. (2011) UN Innovation: A Business Model for Solving Global Problems. *Harvard International Review*, Spring 2011, 64-68.

Perkins, N. (SciDev.Net) (2013), Are "Failure Fridays" Secret to Innovation, 12 Dec 2013, http://www.scidev.net/global/innovation/scidev-net-at-large/are-failure-fridays-secret-to-innovation.html

Proudlock, K. and Ramalingan, B. (2009) 'Improving humanitarian impact assessment: bridging theory and practice'. *In ALNAP 8th Review of Humanitarian Action*. London: ALNAP.

Ramalingam, B., Scriven, K. and Foley, C. (2009) 'Innovations in international humanitarian action'. *In ALNAP 8th Review of Humanitarian Action*. London: ALNAP.

Ståhlbröst, A. and Holst, M. (2012), The living lab methodology handbook. [Online] Available from: http://www.ltu.se/centres/cdt/Resultat/2.59039/Metoder-och-handbocker/Living-Labs-1.101555?l=en

Socialab (n.d.) [Online] Available from: http://socialab.com/paginas/ver/que-es [Accessed 4 October 2014]

South Sudan Innovation Lab (2013) [Online] Available from: http://innovateforindependence.strikingly.com/ [Accessed 4 October 2014]

Tidd, J. and Bessant, J. (2013) *Managing Innovation: Integrating Technological, Market and Organizational Change*, 5th Edition. Chichester: Wiley.

Tiesinga, H. and Berkhout, R. (eds.) (2014) *Labcraft: How innovation labs cultivate change through experimentation and collaboration.* London: Labcraft Publishing.

UN (1945) *UN Charter.*

UN (2015) *United Nations* [Online] Available from: http://www.un.org/en/ [accessed 30 Jan 2015]

UNDP (2014) *Public Service Innovation Lab* [Online] Available from: http://www.undp.org/content/undp/en/home/ourwork/capacitybuilding/publicservice/PSI-Lab.html [Accessed 4 October 2013]

UN Global Pulse (2014) *Pulse Labs.* [Online] Available from: http://www.unglobalpulse.org/pulse-labs [Accessed 4 October 2014]

UNHCR (2014a) *UNHCR Innovation, [Online], Available from* : http://innovation.unhcr.org/ [Accessed 23 January 2015]

UNHCR (2014b), 'UNHCR Innovation, UNHCR Standing Committee', 5 March 2014. [Online] Available from: http://www.unhcr.org/5319ddb39.pdf. [Accessed 23 September 2014]

UNHCR (2014c) 'UNHCR Innovation 2013 Annual Report 2013'. [Online] Available from: http://www.unhcrinnovation.org/ [Accessed 23 September 2014]

UNICEF (n.d.a) *Innovation, [Online], Available from: http://www.unicef.org/innovation/ [Accessed 23 January 2015]*

UNICEF (n.d.b) *iHub Malagasy & UNICEF. [Online]. Available from:* http://www.unicefinnovationlabs.org/?p=298 [Accessed 8 October 2014]

UNICEF (2012) 'UNICEF Innovation Labs: A Do-It-Yourself Guide' [Online] Available from: http://www.unicefinnovationlabs.org/?page_id=463 [Accessed 4 October 2014]

UNICEF (2013a) *Innovation Labs* [Online] Available from: http://www.unicef.org/innovation/innovation_73201.html [Accessed 23 September 2014]

UNICEF (2013b), 'UNICEF Innovation Labs: Empowering Youth in South East Asia' [Online] Available from: http://www.unicefusa.org/sites/default/files/NextGen_InnovLab.pdf [Accessed 5 October 2014]

UNICEF (2014a) UNICEF Strategic Plan 2014-2017' [Online] Available from: http://www.unicef.org/strategicplan/ [Accessed 23 September 2014]

UNICEF (2014b) Principles for Innovation and Technology, 14 July 2014 [online], available from: http://www.unicef.org/innovation/innovation_73239.html [Accessed 4 October 2014]

UNICEF (2014c) Email correspondence between Romy Faulkner and UNICEF Copenhagen Lab, April 4-7.

UNICEF Stories (2013a) Innovative Initiative Kolba Labs Empowers Youth in Armenia, 31 October [online], Available from: http://unicefstories.org/2013/10/31/innovative-initiative-kolba-labs-empowers-youth-in-armenia/ [Accessed 4 October 2014]

UNICEF Stories (2013b) Institutionalizing Risk Taking, 18 Dec. [Online] Available from: http://unicefstories.org/2013/12/18/institutionalizing-risk-taking-unicef-failure/ [Accessed 4 October 2014]

UNICEF Stories (2013c) UNICEF Afghanistan delegation visit to Uganda Innovation Lab, 3 Sept 2013 [online], available from: http://unicefstories.org/2013/09/03/unicef-afghanistan-delegation-visit-to-uganda-innovation-lab/ [Accessed 4 October 2014]

UNICEF Stories (2014) Newest UNICEF Innovation Lab in Zambia, 19 March [Online], available from: http://unicefstories.org/2014/03/19/zambia-chosen-as-the-latest-unicef-innovation-lab/ [Accessed 4 October 2014]

UNOCHA (n.d.) 'Humanitarian Research and Innovation Grant Programme' *[*Online] Available from: http://www.unocha.org/what-we-do/policy/humanitarian-research-and-innovation-grant-programme [Accessed 4 October 2014]

UNOCHA (2013) Innovation: OCHA announces grant winners [Online] Posted 30 October. Available from: http://www.unocha.org/top-stories/all-stories/innovation-ocha-announces-grant-winners [Accessed 4 October 2014]

UReport (2014) [Online] Available from: http://www.UReport.ug/about_UReport/ [Accessed 7 October 2014]

van Praag, N. (2014) Accountability to affected people made simple *Keystone Accountability Blog.* [Online] Posted 22 September. Available from: http://keystoneaccountability.wordpress.com/2014/09/22/accountability-to-affected-people-made-simple/ [Accessed 23 September 2014]

Verity, A. (2014) Could we measure humanitarian innovation? *Verity Think Blog* [Online] Posted 14 October, Available from: http://blog.veritythink.com/post/99988159809/could-we-measure-humanitarian-innovation

Veseli, R. (2014) UNICEF Innovations Lab Kosovo. *Mapping Innovation Spaces in the UN System.* Interview with Romy Faulkner, throughout July. Personal communication.

Weiss, T.G. (1982) 'International Bureaucracy: The Myth and Reality of the International Civil Service', *International Affairs*, 58 (2): 287-306.

Weiss, T. G. (2012) *What's wrong with the United Nations and how to fix it*, Cambridge, UK: Polity Press

White, S. (2008) 'Turning ideas into action: innovation within the humanitarian sector A think piece for the HFP Stakeholders Forum'

Zymberi, A. (2014) UNICEF Innovations Lab Kosovo. *Mapping Innovation Spaces in the UN System.* Interview with Romy Faulkner, throughout July. Personal communication.