

## Dissertation

# Managing, Structuring and Scaling Innovation in International Organizations

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This article summarizes my award-winning dissertation on innovation for transforming the United Nations (UN) to solve the grand challenges in a technologically evolving world. It answers: how do the processes of managing, structuring and scaling innovation impact international organizations and the fulfilment of their missions? Findings show that innovative initiatives lead to the development of responsible innovation capacity, that scaling digital solutions for wicked problems requires global/local ecosystem actors to take on new roles in each location, and that innovation units create value through relationships not owned by one party. These contributions exhibit the cross-sectoral potential for delivering global impact through innovation. It also shows that IB scholars have the frameworks and tools to move beyond traditional contexts to address real problems in the global economy.

## BIG QUESTION

How do the processes of managing, structuring and scaling innovation impact international organizations and the fulfilment of their missions?

## INTRODUCTION

International business (IB) researchers have the frameworks and tools to move beyond traditional contexts to address real problems in the global economy but, to date, the field has limited itself to specific contexts and there has been a call by many scholars to move towards identifying the next big questions relevant to the field. In the past, IB research explained phenomena that stand-alone theories were unable to address adequately, such as foreign direct investment (FDI) flows, the evolution of multinational enterprises (MNEs), and globalization (Buckley, 2002). But in today's world, we see that IB researchers have not only run out of contexts but are also searching for relevance in the broader changing world where the themes of sustainability, digital transformation, and cross-sector collaboration are increasingly pertinent. Shenkar (2004) urged IB scholars to contribute directly to solving real problems in the global economy, while Cheng and colleagues (2009) outlined the potential role of interdisciplinary research in IB. These examples illustrate that IB scholars – like those in other man-

agement disciplines – are facing increasing calls to link IB research to real world phenomenon.

One of the most important phenomena today is the need to collaborate across sectors, often using digital tools, to address the grand challenges – problems that are globally intertwined but locally embedded. But the organizations who are supposed to be leading this problem solving, specifically the United Nations, are often labelled as slow and bureaucratic, limiting their ability to adapt to a changing world. In 2017, a massive movement started in these organizations both from the top and the bottom to create new innovative processes and mechanisms to enable not only digital transformation but also new ways of working and collaboration – with a view to potentially changing the roles and narrow mandates of their work. These organizations are huge global mammoths that often have up to 180 field offices (subsidiaries), and complicated structures of stakeholders and managerial arrangements. Surprisingly to date, few international business scholars have addressed this interesting context – neither to understand the parallels to MNCs nor to use existing theories to help these organizations move towards a globally beneficial transformation.

As the world grows increasingly interconnected, technology raises expectations for how organizations should engage with customers and is increasing transparency on organizational processes. While all organizations face calls for periodic renewal, there has been a particular public out-

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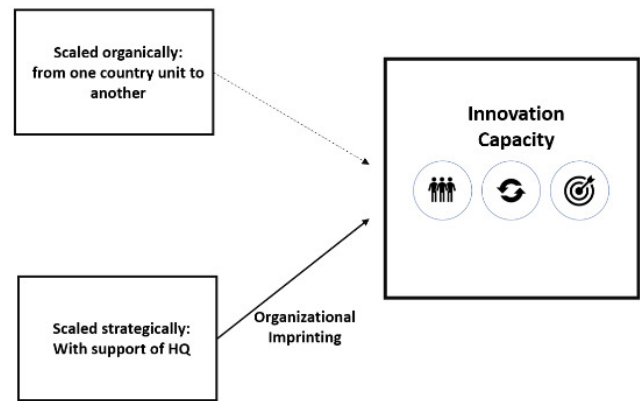
Dissertation title: "Managing, structuring and scaling innovation in international organizations"

cry and donor push to make the United Nations (UN) more efficient and effective as pivotal actors in achieving the Sustainable Development Goals (SDGs). These pressures, originating from employees, beneficiaries, and donors, have resulted in innovation becoming a priority for the UN specifically to address three major challenges. The first is the need to create greater social impact for the beneficiary by delivering innovative products and services to address the world's pressing problems. The second is about fostering the organizational processes, mindsets and structures to enable greater efficiency. And the third is to scale innovation to solve the world's grand challenges, which are global problems that require local solutions. This makes the UN an interesting context for studying digital transformation, innovation, and scaling across global boundaries and transferring new findings to the MNC. By applying IB theories on intrapreneurship, ecosystems, scale and digital transformation to this emerging phenomenon, my thesis looks at how innovation can be the force to make the UN organizations more efficient at addressing their important mandates, which include alleviating hunger, poverty, and disease.

My dissertation, summarized in this article, focuses on understanding innovation in the international organizations from three viewpoints: initiative level, organizational level, and ecosystem level. Together, the three papers answer: *how do the processes of managing, structuring and scaling innovation impact international organizations and the fulfillment of their missions?* This is a qualitative thesis and the data for these papers came from over 100 interviews conducted with innovators, intrapreneurs (both in HQ and in the field), and innovation teams; as well as focus groups conducted at the University of Geneva; and secondary data sources. These conversations and observations allowed me to understand the nuanced ways in which innovation was happening in these organizations and engage at a deeper level with this emerging phenomenon while establishing empirical evidence that innovation exists in the UN.

## DIGITAL SOLUTIONS SCALED THROUGH HQ HAVE THE POWER TO TRANSFORM ORGANIZATIONS

At the initiative level, I examined the renewal and impact potential of bottom-up intrapreneurial initiatives in a responsible innovation environment and identified the impact of different scaling mechanisms. In this paper, I advance the conceptual development of responsible innovation (Ambos & Tatarinov, 2021), to do good while doing no harm (Voegtlin & Scherer, 2017). By studying how initiatives are born and grow in the UN, I identify that these initiatives lead to an organizational capability for responsible innovation that is produced through competence development, structural alignment, and mission stretch. Specifically, by allowing innovative initiatives to flourish and scale in these organizations, I saw that it led to the development of new skills (around new technologies for example); I saw previously siloed teams starting to work with one another (such as the education team and innova-



**Figure 1. Scaling Innovative Initiatives Imprints on the Organization for Developing a Responsible Innovation Capacity**

Adapted from: Ambos & Tatarinov, 2021, Building Responsible Innovation in International Organizations through Intrapreneurship, *Journal of Management Studies* <https://onlinelibrary.wiley.com/doi/10.1111/joms.12738>

tion team at a large UN organization developing a new work stream around connected education); and finally I even saw some organizations using innovation to solve their mandates in a new way (ex. the World Food Programme using the blockchain to deliver cash based transfer to give more resilience and independence to refugees) (Ambos & Tatarinov, 2019). The UN organizations are struggling to create innovative approaches to fulfil their core missions in today's digital world and this work shows that intrapreneurship and scaling innovation will be critical for transformation (Tatarinov & Ambos, 2022). This is new because while intrapreneurship has been studied in the for-profit world, its implications in large non-profit organizations, those tasked with addressing the grand challenges, has not yet been studied. Furthermore, my findings showed that the initiatives that were based on frontier technologies (artificial intelligence, blockchain, etc), and those scaled through HQ, were able to create the greatest transformational change in the organization by impacting how these organizations delivered on their missions - moving some organizations from reactive to proactive and expanding the value they could provide. Figure 1 shows the different scaling mechanisms an initiative can take (either through HQ or organically country to country) and which ones imprint on the organization as they create social impact, organizational internal impact, and eventually add to enabling the organization to create greater value by incorporating new ways to achieve their missions.

For practicing managers in the UN and beyond, this means that fostering digital technology initiatives, and scaling these through headquarters, can have overarching impact that can change the entire value delivery process through knowledge sharing that becomes inherent to the process. This research shows that nonprofit intrapreneurship can foster organizational learning for digital transformation and provides an important insight about how international organizations can achieve greater impact from responsible innovation.

## EMERGING INNOVATION UNITS IN SOCIAL, RESOURCE CONSTRAINED ENVIRONMENTS CREATE RELATIONAL VALUE IN NEW WAYS

But to foster innovative initiatives, organizations need the right processes and structures at the organizational level. There has been a strong push in the last five years to set up innovation teams and labs in the UN, with over 20 units created since 2018. I saw that these new structures were doing much more than just developing patents and new products, they were building relationships with new partners *outside* the organization and trying to create culture change through trainings and other activities *inside* the organization (Tatarinov, Ambos, & Birkinshaw, 2021). To understand the true value of these new teams, I took a longitudinal approach to provide a broader perspective on how to organize or structure innovation internally within organizations and the relational value that these units can provide (Dyer & Singh, 1998; Nahapiet & Ghoshal, 1998). I found that units create relational value through building and linking activities, both internally (linking internal units and building capacity) as well as externally (through linking stakeholders and building ecosystems). Interestingly, the units did not stick to one type of relational value creation, but the ones that grew the most and had greatest impact were the ones that first oscillated from one type of relational value creation to another. For example, the innovation lab at the International Trade Centre (ITC) initially started in 2015 with an internal focus trying to foster more innovation within the organization, later it moved towards ecosystem building to bring external actors together and build an innovation community. Then over the years, it started to build up the relational value creation types until by 2022, the unit was creating value both through linking and building as well as internally and externally. This highlights one path for a unit to take – to maximize relational value by temporally moving from one to another until resources and know-how are built up to be able to perform all. We saw that units could take two paths though. The other type of unit in the study would pursue only one relational value type – such as the innovation unit at another organization which started with an internal focus in 2018 but eventually moved to focusing only on ecosystem building due to its resources and strategic choices.

According to the established view, innovation units need clarity in their goals to ensure their attention is focused on the right types of opportunities. My alternative view shows that innovation units benefit from having relatively ambiguous goals and create additional value when allowed to oscillate their attention back-and-forth between internal and external audiences. This has practical implications for how an organization can set strategic priorities and direction for an innovation unit in a resource constrained environment (such as the UN). Specially, it shows that organizations can welcome flexibility and change when in the early stages of a unit's development. More importantly, this work shows that a unit's key performance indicators and success metrics are beyond the products and patents it develops but can be measured through its relational value. By charac-

terizing the different relational value types, I provide organizations a first glimpse at a relational value framework through which activities can be mapped onto the type of value they create – to measure the success of a unit in relational terms. A relational value framework can be useful for innovation managers looking to show the importance of their work in a complex ecosystem of stakeholders.

## SCALING DIGITAL SOLUTIONS FOR WICKED PROBLEMS REQUIRES A CROSS-SECTORAL ECOSYSTEM APPROACH

The UN is a central actor in solving development problems, which can be labelled as “wicked problems” with complex properties that make them difficult to define and impossible to find optimal solutions for. This applies to poverty, climate change, or migration (Churchman, 1967), where the root causes may be multiple, entangled, and socially and culturally embedded. In addition to a deep understanding of the local conditions, scale is particularly important for development contexts, since the needs are for so many and are pressing (Busch & Barkema, 2021). These are problems that are global in nature but require local solutions. The rise of ubiquitous innovative technology (McLachlin, Tatarinov, Ambos, & Puranam, 2021) could provide a mechanism to reach more people and create greater impact globally, but to date little is known about the intersection between technological innovation and what role the UN needs to play in using technology to solve the grand challenges. There is need for a cross-sectoral approach to solve these wicked problems using digital technology, but creating ecosystems to scale solutions requires overcoming multi-level organizational complexities and diverging goals.

Based on this idea, the third paper in my dissertation takes an ecosystem lens to analyze the roles that global/local players take on when scaling frontier technology solutions, particularly digital solutions for wicked problems (Tatarinov, Ambos, & Tschang, 2022). This study analyzes how four digital solutions, driven by UN organizations, build and adapt their ecosystems when scaling internationally. It adds to our understanding of ecosystem configurations to address different institutional contexts (Li, Chen, Yi, Mao, & Liao, 2019; Nambisan, Zahra, & Luo, 2019). In all four case studies, the UN took on the role of the orchestrator, but interestingly, I saw it required a close collaboration with a newly identified role (that of the integrator) which would help an organization that may not have the technical knowhow to connect with complementors link to the final users at the local level. Orchestrators in this case bring in their legitimacy and global vision but require an intermediary to help mitigate the diverging goals of multi-sectoral ecosystem actors. The ecosystem roles are highlighted in [Figure 2](#).

What I saw was that when an initiative moved from one location to another, it required a certain ecosystem versatility to adapt to the local needs in that particular context. This finding adds to the replication-adaptation discussion by showing that different characteristics of digital solutions result in the ecosystem adaptation and highlights

**Figure 2. Ecosystem Roles for Scaling of Digital Solutions**

| Ecosystem Role      | Primary Activity in Drive Innovations at Scale   |
|---------------------|--|
| <b>Orchestrator</b> | Ideate and set up the ecosystem around the innovation by using their global legitimacy and activating their network    |
| <b>Integrator</b>   | Contextualize and provide local knowledge and access to partners   |
| <b>Complementor</b> | Assist in on the ground delivery and access to end-users/beneficiaries through value-creating activities and resources |

Adapted from: Tatarinov, K., Ambos, T., Tschang, T. Scaling Digital Solutions for Wicked Problems: Ecosystem Versatility. *Journal of International Business Studies*. 2022. <https://doi.org/10.1057/s41267-022-00526-6>.

the interaction between the global-local configurations in the internationalization process. These insights in relation to wicked problems in development contexts show the need for localization and adaptation of technology through different partner configurations, to create greater impact and value.

#### PRACTICAL, PEDAGOGICAL, AND POLICY IMPLICATIONS: A NEW ROLE FOR THE UN

This phenomenon driven work delivers cross-cutting value to several debates, including those on innovation management, managing grand challenges, and digital transformation. This dissertation has important managerial implications for the UN to show managers the importance of fostering innovative initiatives, particularly digital solutions that can be scaled through HQ, how to set-up and adapt ecosystems when scaling for the grand challenges, and how innovation units in this context can demonstrate their value through relationships. There are cross-sector

implications for measuring impact and goal setting in innovation units – moving beyond patents and products to latent metrics around relationship building within and across organizations. And finally, by opening a deeply understudied context, this dissertation develops frameworks to show how MNCs can learn from the transformation of global bureaucratic UN organizations and particularly how these organizations can work with MNCs to scale digital solutions for wicked problems. In fact, I see the emergence of a new role for the UN – that of orchestrator – which may be the transformation required to make this organization more efficient and effective. The findings are promising in that they show the cross-sectoral potential for delivering global impact through innovation as well as revamping institutions that are crucial actors for development and humanitarian sectors globally. As IB researchers, we have to date limited ourselves somewhat to specific topics, my dissertation shows that we have the frameworks and tools to move beyond those traditional contexts to address real problems in the global economy.

#### ABOUT THE AUTHOR

**Katherine Tatarinov** is Postdoctoral Scholar and Research Director of the Center for Innovation & Partnerships at the Geneva School of Economics and Management, University of Geneva. Her research focuses on social innovation, digital transformation and managing the grand challenges. Katherine lectures at Ecole Polytechnique Federale de Lausanne (EPFL) and is the Managing Director of the Geneva Innovation Movement Association, where she translates her research findings into applicable insights and community building.

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