THE ADOPTION OF INNOVATION IN INTERNATIONAL DEVELOPMENT ORGANISATIONS: LESSONS FOR DEVELOPMENT CO-OPERATION

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Abstract

Addressing 21st century development challenges requires investments in innovation, including the use of new approaches and technologies. Currently, many development organisations prioritise investments in isolated innovation pilots that leverage a specific approach or technology rather than pursuing a strategic approach to expand the organisation's toolbox with innovations that have proven their comparative advantage over what is currently used.

This Working Paper addresses this challenge of adopting innovations. How can development organisations institutionalise a new way of working, bringing what was once novel to the core of how business is done? Analysing successful adoption efforts across five DAC agencies, the paper lays out a proposed process for the adoption of innovations. The paper features five case-studies and concludes with a set of lessons and recommendations for policy makers on innovation management generally, and adoption of innovation in particular.

Foreword

The persistent and pressing challenges facing humanity in the 21st century are complex and systemic in nature. This is illustrated by the breadth of the Sustainable Development Goals (SDGs) and their mutual interdependence. Without political will and rapid, ubiquitous innovation, the ambitious goals of the 2030 Agenda are unlikely to be met (Kenny and Patel, 2017[1]).

Despite the impact that many successful stand-alone innovations in development co-operation have had over recent decades, such as cash-transfer programmes, new and improved vaccinations, or deworming initiatives, there are few examples of international development organisations consistently and systematically innovating over prolonged periods of time (OECD, 2020[2]). A systematic approach to innovation involves strategy, management, governance, investments in a conducive organisational culture as well as a wide range of collaborative mechanisms with external partners. The Organisation for Economic Co-operation and Development's (OECD) Development Assistance Committee (DAC) has been working on innovation for development for several years. At the 2017 High-Level Meeting, innovation for development and humanitarian work was defined broadly as "finance and technologies as well as new policies, partnerships, business models, practices, approaches, behavioural insights and methods of development co-operation across all sectors".

Against this background, in 2018, OECD DAC designed and launched a peer-learning exercise on innovation for development. Peer-learning exercises complement traditional DAC peer reviews, with a focus on learning, knowledge exchange and capacity strengthening. This peer-learning exercise aimed to generate actionable insights that can help improve capabilities for innovation in development. The key insights are captured in the 2020 OECD report *Innovation for Development Impact: Lessons from the OECD Development Assistance Committee* (OECD, 2020[2]). The analysis showed that among the most advanced DAC members, the innovation approach is becoming more structured, systematic and goal driven, especially at programme and project level. However, prevalent shortcomings were revealed in the field of innovation management. These include a widespread absence of a strategic approach to innovation portfolio management, to medium and longer-term scaling trajectories and to the adoption of innovation. To support development co-operation organisations, accelerate learning and strengthen practice on development innovation, OECD DAC members endorsed the launch of the OECD Innovation for Development Facility (INDEF) and the i31 Group as the peer-learning mechanism for development innovation across the DAC membership in 2021. INDEF works on three main pillars to advance innovation for development: undertaking research to establish a common understanding of innovation, systems innovation, scaling, and related concepts; collaborating with DAC members and global south partners to improve innovation practices and investments; and providing a space for peer learning.

The focus of this paper is on the adoption of innovation. This refers to the process of institutionalising or mainstreaming a new way of working, such as a specific approach or method, or an emerging technology. The paper captures research across DAC members undertaken by INDEF in 2021 with the support of a team of Capstone students of the School of International and Public Affairs (SIPA) at Columbia University. It complements an INDEF advisory service to DAC members to support the systematic adoption of innovation in their institutions.

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Abbreviations and acronyms:

AFD	Agence Française de Développement (French Development Agency)
AI	Artificial Intelligence
ANR	Agence nationale de la recherche (French National Research Agency)
BI	Behavioural insights
BIT	Behavioural Insights Team
CIRAD	French Agricultural Research Centre for International Development
CLA	Collaborating, Learning and Adapting
DAC	Development Assistance Committee
DCD	Development Co-operation Directorate
DFID	Department for International Development
ERM	Enterprise Risk Management
FCDO	Foreign, Commonwealth and Development Office
FCO	Foreign and Commonwealth Office
GIZ	Gesellschaft für Internationale Zusammenarbeit (German Development Agency)
INDEF	Innovation for Development Facility
IDIA	International Development Innovation Alliance
IRB	Institutional Review Boards
ISO	International Organization for Standardization
ITU	International Telecommunications Union
KOICA	Korea International Co-operation Agency
ODA	Official development assistance
ODI	Overseas Development Institute
OECD	Organisation for Economic Co-operation and Development
OMB	Office of Management and Budget
OPSI	Observatory of Public Sector Innovation
PPL	Policy, Planning and Learning
RREDI	Reviews, Results, Evaluation, and Development Innovation

SBCC	Social and Behaviour Change Communication
SDG	Sustainable Development Goals
SIPA	School of International and Public Affairs
TAG	Technical Assurance Group
UAVs	Unmanned Aerial Vehicles
UNICEF	United Nations International Children's Emergency Fund

Executive summary

Innovation is becoming increasingly important in international development co-operation. Without new approaches and technologies, the complex and often inter-connected development challenges of our times cannot be adequately addressed. Yet many development organisations are finding the process of innovating long and arduous: innovative approaches or technologies can take years, even decades, before they move out of the "innovation space" and are adopted into an organisation's normal way of working. Many development organisations prioritise investments in often isolated pilot projects that are often managed by external experts and not in identifying what institutional capabilities for a specific approach or technology should be attained and then putting an adoption strategy in place. The 'adoption of innovation' challenge is a challenge of public sector capability building and innovation management.

Innovation in development co-operation in this context can refer to a novel approach, such as human-centred design, or an emerging technology, such as unmanned aerial vehicles. The adoption of innovation refers to the mainstreaming or institutionalising of a new way of working into an organisation, bringing what was once novel to the core of how business is done. Without the systematic adoption of innovation, these new and effective ways of working will not be able to be fully leveraged or exploited by a development organisation in its programmes, portfolios, and policy work.

Adoption does not refer to a specific innovation in the context of this paper, such as a digital dashboard, or specific solutions. For example the Government of Bihar adopting the women's health Mobile Academy programme (Srikantiah et al., 2019[3]), or Kenya's embrace of school-based deworming (Miguel and Kremer, 2004[4]). These examples refer to specific solutions which are scaled up or institutionalised, as opposed to building institutional capabilities on the specific approach or technology overall.

Key findings

There are similarities in the adoption journey whether for an approach or a technology. Although there are important differences between new technologies or new approaches, there are many parallels when it comes to defining what specific capabilities an organisation should built, which boundaries need to be drawn and the process of moving what was once novel into the mainstream of an organisation. Notable differences between approaches, such as human-centred design or behavioural science, and technologies, such as blockchain or artificial intelligence relate to how proof-of-concept trials are designed and assessed and how governance processes and stewardship responsibilities are designed within an organisation.

A business case for adoption must be developed, reflecting a variety of relevant metrics. A specific approach or a technology should only be considered for adoption when compelling evidence is created that it adds value to the mission of the organisation and value to the constituencies targeted, that it is cost-effective and that it has comparative advantage over what is currently being used.

Roadblocks to mainstreaming innovations include:

- Priority of investment in new innovations rather than pursuing a strategic approach to expanding the organisation's toolbox
- Insufficient investment in establishing a compelling evidence base for the innovation to be adopted
- Lack of incentive to adopt when metrics and hype are built around new innovations
- Loss of expertise and experience when innovation staff move on or change role
- Lack of senior management engagement for multi-year adoption efforts

Research across DAC members revealed that teams that successfully steered adoption efforts over multiple years pursued similar approaches. Firstly, **all reflected on five specific criteria to determine the suitability of the innovation** in question: relevance, observability, complementarity, trialability, sustainability. Secondly, **all established a realistic vision for adoption** and engaged senior management in developing and sponsoring the process. Thirdly, **innovation teams working with the following framework of five organisational factors had greater success** in bringing innovations to adoption.

- **Clear mandate**. Innovation and adoption should be clearly inscribed into the organisation's strategy and the necessary resources engaged. At least one team needs a specific mandate to drive adoption efforts, which includes change management and organisational capability-building.
- **Context**. The innovation in question should align with the organisation's priorities or is itself a priority. A coherent portfolio and the administrative context should enable innovation, with the policies, rules, and regulations in place to facilitate the development, implementation and adoption of innovative approaches and technologies.
- **Collaboration**. The organisation should build effective internal and external networks to enable learning, information exchange and co-operation across organisational silos.
- **Culture of learning**. The organisation supports and encourages people and teams to take calculated risks, learn, and share the learning internally and externally.
- **Capacity**. Key teams have relevant skills, experience, and the confidence to pursue testing the approach or technology in question and to drive adoption in parallel. The organisation ensures sufficient resources in terms of staff and time to provide continuity throughout the adoption journey.

Key recommendations

Increase focus on the adoption of innovation. Development organisations should position innovation efforts as a way to advance the 2030 Agenda as well as a contribution to the overall development and reputation of their organisation. New approaches and technologies that add value to the mission need to be made an integral part of the organisation's toolkit. Bilateral agencies and other development organisations should assess their specific comparative advantages and unique strengths, and use this analysis to inform their vision for the adoption of innovation.

Champion investment and leadership support for the adoption of innovation. Unlocking funding for not only the innovation efforts but also for the internal change processes is necessary for the adoption of innovation. Senior management should lead and explicitly task relevant teams to spot promising technologies and approaches and formulate a future vision of the organisation. Such a vision needs to reflect realistic ambitions, including defining boundaries for the scope of their innovation and institutional capability-building potential.

The field of innovation management needs to be further explored and established in the international development sector. This includes improvements in monitoring, evaluation, learning, in different forms of portfolio management and the documentation of innovation adoption efforts, with a particular focus on contributions from innovators based in low and middle-income countries.

1 The adoption of innovation: state-of-play

Innovation, and in particular innovation within development co-operation organisations, has to go through a long and sometimes arduous process to be mainstreamed or fully integrated into the normal way of working, being no longer viewed as "novel". The objective of this paper is to explore this process as it unfolds in international development organisations, the challenges, and the pathway to success. The research and case studies examined help define what the "adoption of innovation" in the context of development co-operation means and does not mean. It highlights patterns and good practice that can serve as a platform for the more rapid and successful adoption of innovation in development organisations in the future.

This chapter looks at the current state of play for the adoption of innovation in development co-operation organisations, provides a clear definition of what the adoption of innovation means, why it is important, and the challenges faced during this process.

Moving novel ways of working from the edge to the core

In the early 2010s, a multilateral development organisation in partnership with a national government in a small lower middle-income country set out to tackle a persistent development challenge: how to best support people with chronic diseases to follow through with their medical treatment. Inspired by the emerging field of behavioural insights in public policy, the international development organisation instigated an innovative approach to the problem. It brokered a partnership with a team specialised in behavioural insights, engaged national health authorities, invested in on-site ethnographic research and designed an experimental approach to testing solutions.

The partners discovered that taking the medication at the clinic was a major barrier. Following a randomised control trial, they found that allowing people to take the medication at home (with a doctor or nurse on a camera phone, or a time-stamped recording sent to health personnel if a live call was not possible) doubled the number of patients who took the entire course of medication (from 43% to 87%).

Following this successful trial, the international development organisation invested in a wide range of behavioural insights trials, targeting a variety of development challenges and implemented in different countries and regions. However, despite the increased number of behavioural insights trials that have been run by intrapreneurs in this organisation – often supported by the in-house innovation team – the approach of behavioural insights is still considered "innovative." The approach has not (yet) been integrated into normal business practice, enabling staff across the organisation to understand when it is appropriate to leverage the approach and how to go about it.

By contrast, around the same time in the mid-2010s, intrapreneurs in the Western Cape Government in South Africa initiated behavioural insights trials to address a number of behavioural challenges related to issues such as early childhood development (Apolitical, 2020[5]). The team pioneering behaviourally informed approaches did not only focus on creating better evidence and policies in the context of the

various trials, but also on changing their institution. This included work on staff capacities, on research protocols and ethics, and on partnerships with specialised organisations. Within a decade the application of a behavioural insights approach came to occupy a secure place in the government's toolkit. Public servants know when it is appropriate to take a behavioural approach and they are supported through in-house expertise and guidance. In a distinct and dramatic sense, behavioural insights as an approach has been *adopted*.

During the same period, another bilateral development organisation, spotted an opportunity to leverage an emerging way to do business differently: using drones to generate geo-spatial data for better decision making and to deliver goods. Following the request of a minister and inspired by novel practice in this field, this organisation's innovation team invested in a feasibility study on the potential of using unmanned aerial vehicles (UAVs) to deliver life-saving medicines to areas of conflict (OCHA, 2014[6]). While the findings suggested that using drones in this context was not appropriate, the feasibility study triggered a portfolio of experiments with UAVs with partners in different country contexts, addressing a wide range of development challenges. A few years into supporting UAV experiments, the organisation established a part-time policy position dedicated solely to drone technology and building institutional capability on UAV's. This led to the setting up of a steering committee, chaired by a senior manager which helped advance the strategic use of UAVs across the organisation, build relevant capacities in procurement and partnerships, and advance the adoption of UAVs. However, with the departure of the senior manager, disruptions in the organisational context and the policy position staff member leaving his post for a role in another ministry, the steering committee was phased out. The mechanism to help the agency become an informed user of UAVs largely vanished for some years. New initiatives using drones are still considered to be innovative, and strategic adoption efforts at an organisational level have only recently been picked up again.

This and the first example underscore the importance of a strategic approach to adoption. In both cases, an organisation has been branding work with a specific approach – behavioural insights – or with a specific technology – drones – as 'innovative' for more than a decade. This is not likely to contribute positively to a brand of a 21st-centry fit organisation.

The three stories furthermore highlight the importance of individuals in the context of organisational reform and the adoption of novel approaches and technologies. Efforts to formulate a future state vision of the organisation as an informed supporter of drone technologies in international development were largely driven by three individuals. When these individuals switched roles or left the organisation, initial progress rolled back.

Adoption processes are not linear and require a combination of top-down support, bottom-up traction and codification: the intent to develop institutional capabilities on specific approaches or technologies needs to be documented and made the responsibility of a range of persons within the organisation. One senior champion does not suffice.

Similar lessons emerge from the successful adoption journey of adaptive management within the United States Agency for International Development (USAID) as discussed in Chapter 6. Framed as "collaborating, learning, adapting", a set of tools and mechanisms was pioneered in the early 2010s in a small number of USAID country missions. The methods have been tested and refined over the past decade and today adaptive ways of working are largely institutionalised as a standard way to design and implement programmes. It is no longer labelled "innovative" but is rather positioned as a complementary way of working.

These examples illustrate a range of challenges for institutions and decision makers. Research indicates that one question is rarely raised explicitly in discussions on strategy in international development organisations: how long can and should a new approach or an emerging technology be treated and labelled as "innovative"?

Why the adoption of innovation matters

Many of the major 21st century challenges are complex in nature, with uncertainty characterising both the problem and the potential solutions. To support the economic and social transformations required to address the climate crisis and other development challenges, development co-operation organisations need to invest in diverse forms of innovation (OECD OPSI, 2021[7]).

Many approaches and technologies that have the potential to add to development impact currently seem to be stuck in an "innovation space", in terms of branding and practice, for a period of a decade or more, highlighting the important need for improvement. Establishing clear evidence that points to the comparative advantage of individual approaches and technologies is vital to make strategic use of these opportunities, and for branding and reputation management. There are good reasons why private sector companies cease to brand most of their products and services as innovative once they are established on the market. Google Maps is one such example. Early in 2005, Google Maps was first launched for desktop computers as a new solution to help people "get from point A to point B" (Reid, 2020[8]). It was framed and perceived as an innovation. As of September 2022, there are more than a billion people in 220 countries and territories that use Google Maps every month (Earthweb, 2022[9]). The product Google Maps aligns with Google's core mission "to organize the world's information and make it universally accessible and useful", and is being continuously improved with a focus on the user. However, Google is not perceived as a prime example of innovation due to its branding of products and services as innovative, but rather due to de-facto innovating in pursuit of its mission. Adding what was once innovative to its suite of products and services and enabling employees to further innovate are two of the components of Google's success in this area and a good lesson regarding branding for those working in development co-operation.

The 2019 OECD DAC peer-learning exercise on development innovation found that across development co-operation organisations, emerging technologies and novel ways of working are frequently applied in small, often isolated parts of the organisation (OECD, 2020[2]). Research conducted in 2019 along with interviews of seven DAC member organisations in 2021 and 2022 showed that many organisations find it difficult to adopt new ways of working. This results in projects, programmes and other initiatives leveraging specific approaches and technologies being labelled as innovative for prolonged periods of time.

Enabling the journey from exploration to exploitation is a key role of innovation management within organisations. Innovation management is an emerging practice that spans across several organisational functions, from programme and policy to procurement, partnerships, finance, and human resources. A growing number of organisations, particularly from the private sector, are increasingly investing in formalised innovation management, including one or more "innovation manager" positions and competencies specified in formal human resource management systems (OECD OPSI, n.d.[10]). Over the last ten years, different organisations have published guidance to help standardise the practice of innovation management, including the 2019 ISO standard for innovation management (ISO, 2019[11]). The OECD Observatory of Public Sector Innovation (OPSI) identified ten key activities pertaining to innovation management. These include portfolio analysis and management, to identify how multiple activities are oriented toward innovation goals; opportunity hunting, to identify signals of the future, identify early opportunities to shape innovations as they emerge, and scale innovation along with partners and stakeholders; process leadership and facilitation, including individual and organisational agency to develop and adopt new approaches; technology and method navigation to apply the relevant innovation approaches according to the problem and circumstances (OECD OPSI, n.d.[10]).

The adoption of innovation: What it is and what it is not

There is no universally shared definition of innovation for development. The High-Level Communiqué of OECD DAC proposed a broad view of development innovation in 2017, including "finance and technologies

as well as new policies, partnerships, business models, practices, approaches, behavioural insights and methods of development co-operation across all sectors" (DAC, 2017[12]). The International Development Innovation Alliance (IDIA) defines innovation as "a new solution with the transformative ability to accelerate impact" (IDIA, n.d.[13]). A range of OECD DAC members have adapted these definitions with one characteristic in common across all organisations: the notion of novelty, of newness.

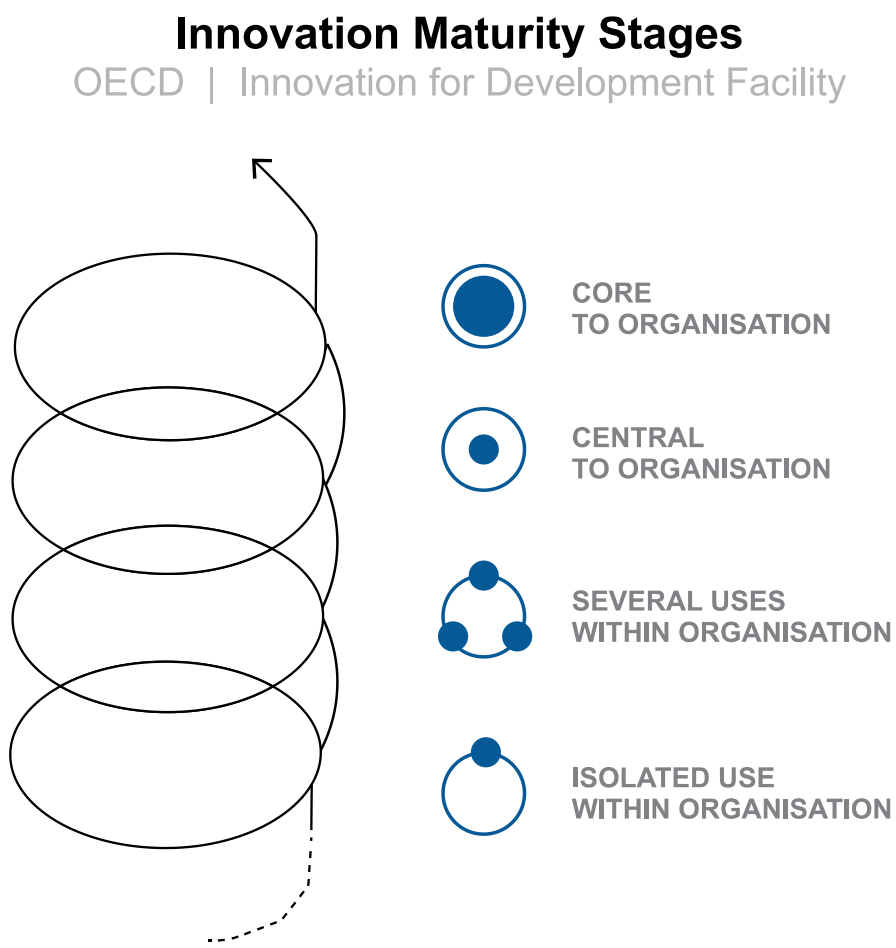
Adoption is synonymous with building institutional capabilities that enable an organisation, its staff and partners to leverage a specific approach or a technology when appropriate.

A specific approach or a technology should only be considered for adoption when compelling evidence is created that it adds value to the mission of the organisation, that it is cost effective and that it has comparative advantage over what is currently being used.

Proof-of-concept trials differ depending on the approach or technology. The case studies presented in this paper and research across DAC member countries suggest, however, that despite important differences between technologies and approaches there are commonalities in strengthening institutional capabilities and moving what was once novel into the mainstream of an organisation. The process of spotting a novel way of working, from running and assessing experiments to formulating and working towards a future state vision, have remarkable similarities when it comes to both technologies and approaches. There are considerable parallels to lessons learnt on capacity development within DAC members, drawn from OECD DAC peer reviews (OECD, 2012[14]) such as the centrality of a vision and the role of evidence and storytelling to mobilise political will for change.

This paper defines the adoption of innovation as institutionalising a new way of working in an organisation and bringing what was once novel to the core of how business is done. This can refer to institutionalising an approach such as behavioural insights or establishing institutional capabilities to provide for sufficiently informed users of an emerging technology such as blockchain. This refers to blockchain technology generally, and not to one specific blockchain application such as for land title management, to list one of multiple possible use cases of the technology (Eder, 2019[15]). A key question to address when adopting an innovation within a development organisation is: how can organisations work towards becoming informed users or informed supporters of a new method, approach, or emerging technology? How can the responsible use of such novel methods be institutionalised so that it moves from the innovation space to being used as a tool in the organisation's "business as usual" activities? Other important intermediary questions relate to creating suitable metrics and monitoring mechanisms to assess and demonstrate the relevance and comparative advantage of the innovation, and to tactics of change management.

Figure 1.1. The four stages of growth for an innovation



Source: Adapted from Junginger (2009[16]) by Brink and OECD Innovation for Development Facility.

Adoption is also sometimes referred to as “institutionalisation”, “internal scaling” or “mainstreaming”. All these terms refer to a process and encompass a strategic intent and supporting activities to either move towards a new way of working or bring an emerging technology from the edge of an organisation to its core (see Figure 1.1). It becomes part of the day-to-day work across as much of the organisation as is relevant and appropriate.

Although mainstreaming a way of working may mean it becomes an intrinsic part of the organisation’s identity and practice, it does not necessarily mean that a particular approach needs to be adopted by everyone. Successful adoption, and the journey to adoption, looks different for each innovative approach and technology, and for each organisation. The table below presents an illustrative overview of the different stages of adoption, to help those working in development co-operation to assess the current state-of-play within their institution. Table 1.1 shows that a new approach or technology does not need to be the default across the organisation. The focus is not on maximising the scale of operation of the new technology or approach, but rather on equipping the organisation to be an informed user of the innovation.

Table 1.1. Adoption maturity stages

The edge			The core	
Outside	**Isolated use**	**Several uses**	**Central**	**Core**
Others outside the organisation support and influence the organisation in taking up the innovation. Internal allies may also exist. For example, other bilateral agencies in a country advocating for an innovative joint fund, or implementing partners encouraging an adaptive programme management approach.	A specific unit or several units focus on the innovation, but the innovation isn't integrated into wider operations or practices. For example an innovation unit/lab using human-centred design methods, or a team in a country office using drones to address a challenge.	The innovation is pursued somewhere in the organisation by one or more people or units, but not throughout the organisation. There is a lack of clarity on when and how the innovation should be used.	The innovation is a central part of the organisation's work, although it may not be deployed to its full potential. For example, it might not be fully integrated into operational practices. The pursuit of adoption is, however, part of its mission and strategy. There is greater clarity on when to use and when not to use the new way of working.	The innovation is deployed to its full potential. It is central to how business is conducted, with high awareness and organisational factors enabled. It is used whenever relevant and appropriate and staff are equipped to assess this. E.g. all programmes consider how digital approaches could enhance outcomes, but not all will integrate digital approaches. Even at this stage, the innovation may still not be default, e.g. the application of behavioural insights is only applicable to specific cases, when measurable behaviour change of a significant number of people is concerned.

Source: Adapted by Brink from Brooking Institute's Five Stages of Scaling.

Adoption does not refer to a specific innovation, such as a digital dashboard, or specific solutions such as the Government of Bihar adopting the women's health Mobile Academy programme (Srikantiah et al., 2019[3]), which was originally designed by BBC Media Action (BBC, 2022[17]), or Kenya's embrace of school-based deworming (Miguel and Kremer, 2004[4]), based on a programme run by Investing in Children and their Societies (ICS-SP) (ICS-SP, n.d.[18]), or UNICEF and other organisations adopting "Wash'Em", a process for rapidly designing evidence-based and context-adapted handwashing promotion programmes in crises and outbreaks (Wash'Em, 2022[19]). These examples refer to specific solutions, as opposed to a novel approach or technology generally.

Adoption is distinct from scaling. At present, development organisations use a wide range of terminology linked to scaling. Scaling-up describes "taking successful projects, programs, or policies and expanding, adapting, and sustaining them in different ways over time for greater development impact", as laid-out in the 2020 Focus Brief on Scaling-Up (Hartmann and Linn, 2007[20]). Scaling-up, scaling-deep or scaling-out refers to maximising impact, and the process of scaling describes iterative steps with partners to bring a solution to optimal scale (McLean and Gargani, 2019[21]). It involves *different* organisations, and focuses on a specific service, product, or delivery model and implies optimising results to maximise impact.

Common challenges to adopting innovation in development co-operation

The challenges to adopting innovation in international development organisations are often interlinked:. **Precedence of novelty**. Hype cycles, particularly those on emerging technologies, often influence senior management support for specific innovation efforts (similar to the "Peak of Inflated Expectations" of the

Gartner Hype Cycle (Gartner, 2018[22])). Good marketing of a technology does not necessarily mean utility or suitability for an organisation's strategic intent. When attention shifts, it can become challenging to pursue the work and advance adoption efforts requiring many years and financial resources. This happens because organisational energy and resources often lie with new initiatives. Institutional and political pressure often lead to evidence from problem analyses being set aside in the interests of speedy and timely action. Some organisations have dedicated innovation teams that are then tasked with advancing such action. These teams typically balance innovation commissioning and programme management with technical advisory work across the organisation (OECD, 2020[2]). However, investments in organisational capability-building and change management are usually not prioritised, often owing to the lack of explicit mandates for such work. The support requested for designing and launching new initiatives from across the organisation often takes precedent, leaving core innovation teams considerably overstretched.

- **Lack of compelling evidence**. Discussions on whether to adopt a technology or approach must be grounded in compelling evidence, generated in part by the organisation and its partners. Without careful assessment of proof-of-concept trials and clear evidence pointing to cost-effectiveness, value for the users and other factors that prove comparative advantage, there is no business case for adoption. Clear objectives, indicators and baselines are needed, not only at the input and output levels, but also in terms of scaling stages. Different metrics are relevant at the ideation, research and development stages, than for proof-of-concept. In the development sector, a considerable number of innovation projects and trials fail to demonstrate how contributions are made towards outcomes and how these will support broader development goals.
- **Innovation metrics**. Another challenge related to novelty are metrics that attempt to track innovation efforts and investments. For example, in its strategic plan results framework, a multilateral organisation tracked the number and percentage of "innovative tools and methodologies that are being piloted or scaled" (Kumpf and Bhandarkar, 2022[23]). This approach to measuring results by its nature works against the goal of adopting new tools and methodologies by providing a clear incentive to continue labelling projects as "innovative" as previous innovations that have been adopted are not counted in such metrics.
- **Short-term support**. Innovation efforts usually have short-term investments as they either fall under standard three to five-year programme cycles, or even shorter funding support as is often the case for Innovation Challenge Funds and other open innovation mechanisms (Pompa, 2013[24]). The usual short-term support for innovation efforts does not reflect the need to plan for scale and accordingly for multi-year investment and support (Deiglmeier and Greco, 2018[25]). Additionally, staff turnover (Lee, Kim and Bae, 2016[26]) and disruptions in the organisational context such as organisational change initiatives and government changes create a challenge for adoption.
- **Islands of excellence**. Meaningful innovation cannot exist without people. Organisations do not innovate, people do. In international and local development organisations, meaningful innovation is usually advanced by above-average intrinsically motivated individuals (Fischer, Malycha and Schafmann, 2019[27]). They often rely on supportive management to innovate, and usually focus on specific place-based challenges. These people and ventures deliberately seek to remain under the radar to advance meaningful work. They do not intend to transform the entire organisation, but rather pursue better development processes and outcomes in specific areas. As a result, there are islands of excellence across many organisations, with little influence on the entire institution and its ways of working. There is anecdotal evidence from OECD DAC member countries where certain individuals played important roles in strengthening a positive enabling environment for innovation. But when these individuals moved on and with the ensuing loss of staff and knowledge, this enabling environment often deteriorates rapidly.
- **Inflated expectations**. Development progress is complex: solutions are usually not simple or obvious, those who would benefit most lack power, and political barriers are too often overlooked

(ODI, 2016[28]). In addition, innovators and innovation teams can be prone to unrealistically inflate the utility and potential of innovative methods, approaches, or technologies. It is a thin line to promote new ways of working that require a shift in mind-set and practices without overselling their potential. Approaches and methods such as human-centred design, behavioural insights or agile management need to be adapted to the context with a clear framing of when and how they add value.

These challenges not only slow down the momentum of the adoption of innovation within an organisation but also limit the effectiveness of development efforts. Some of these challenges can be addressed by ensuring that the significant time and resources invested in testing innovation are capitalised upon. Once an innovative approach or technology has been tested in different contexts and is believed to have relevance and potential across the organisation, mainstreaming it enables the organisation to become an informed or expert user of the method or technology. It increases organisational capacity and technical know-how before moving onto testing the next big innovation.

Once an innovation is mainstreamed it becomes easier, both cognitively and practically, to use it. Rather than a novelty that requires the burden of proof, the approach or technology becomes part of the organisational toolbox. People know what it is, when and how to use it, and who to ask for help. For example, if an organisation is an informed user of approaches such as adaptive management or behavioural insights, the approach is not necessarily the default, but more and more people across an organisation think in adaptive and behavioural terms and understand when and how to apply the relevant approaches.

Adopting innovation also addresses the prevalent dynamic related to the phenomenon of “islands of excellence” witnessed in the sector, i.e. the frequent turnover of employees that lead relevant innovative work, and with it the loss of continuity and often the abandonment of working together in novel ways. Investing in adoption seeks to distribute access to the use of methods, approaches, and technologies when appropriate. It delinks organisational use of a method or technology from having personal connections to entrepreneurial colleagues and makes it an option for everyone.

This paper looks at various journeys leading to the adoption of innovation and examines why context matters in each case. It considers similarities between the adoption journey for innovative approaches and emerging technologies and how to spot new opportunities. Using the experience of five development organisations, the paper outlines lessons and provides recommendations on how development co-operation organisations can mobilise innovators, ensure sustained support, and successfully adopt innovation into their core way of working.

Box 1.1. Methodology

The research undertaken for developing the adoption factors framework highlighted in Chapter 2 and the following five case studies was carried out in collaboration with Brink and scholars from the School of International and Public Affairs (SIPA) at Columbia University.

The first stage included desk research, particularly on innovation management within private sector companies and across development agencies who were working with an innovative method or technology and are advancing towards its institutionalisation. Based on the results from the desk research, interviews with a selection of OECD DAC members and multilateral organisations were conducted in collaboration with Brink and SIPA.

The interviewees were chosen based on several criteria, with a primary focus on exploring two types of innovation: methodological and technological innovation, to be representative of a range of adoption practices based on these different types. Methodological innovation takes the form of new ways of working, such as adaptive management or agile management within an organisation. Within this project,

France's Agence Française de Développement (AFD) Intrapreneurship programme (see Chapter 7), the UK's Foreign, Commonwealth and Development Office (FCDO) Behavioural Insights initiative (see Chapter 5), and United States Agency for International Development's (USAID) Collaborating, Learning, and Adapting Framework (see Chapter 6) were explored as methodological innovations, i.e. new ways of working. In comparison, technological innovations typically involve the use of digital technology to improve agency effectiveness and resultant development impact. The technological approaches explored in these case studies include Germany's development agency's (GIZ) Blockchain Lab (see Chapter 3) and Korea's International Cooperation Agency's (KOICA) digital mainstreaming strategy (see Chapter 4).

In 2021, the OECD Innovation for Development Facility (INDEF) and Brink brought together innovation experts from 15 DAC member countries for a learning journey of the OECD i30 Network, the peer-learning mechanism on development innovation facilitated by the OECD. These workshops informed and validated the framework of organisational factors required to drive mainstreaming efforts. It was noted that some development organisations are early on in their adoption journeys, with more progress on the institutionalisation of approaches such as agile, human-centred design or behavioural insights rather than technologies, while some have made considerably greater progress, such as the aforementioned organisations. But for many the concept of adoption is fairly new. Irrespective of the different stages in their journey, a need for systematically approaching the adoption of innovation was voiced across the DAC members in these working sessions.

The factors identified in the research also inform a forthcoming advisory service to support DAC members with adoption efforts.

2 Understanding the adoption process

This chapter helps to demystify the adoption journey by identifying common factors between the processes that have worked in several member countries of the Organisation for Economic Co-operation and Development's (OECD) Development Assistance Committee (DAC). The research highlights characteristics of innovations suitable for adoption and has enabled the construction of a framework of organisational factors for adoption that if employed consistently, could facilitate development organisations' ability to move new approaches or technologies from the innovation space to an organisation's normal way of working.

Identifying adoptable innovations: Key criteria

Research findings from OECD DAC member countries demonstrate that several agencies have approached adoption strategically. Innovation teams that reflected on clearly defined, specific criteria for the innovation they sought to adopt were able to identify areas that required dedicated work. Key criteria include:

- **Relevance**. This refers to the confidence that the innovation can help in advancing the organisation's core mission. Is the novel approach or technology helping to do the right things? What difference could the organisation make if this approach or technology was leveraged properly, when appropriate? For example, if a significant part of a development agency's efforts include behaviour change interventions in specific constituencies, testing and adopting behavioural insights can create added value. Relevance can also refer to the probability of the innovation contributing to disruptions in the external environment related to the organisation's mission. For example, studies by multiple think tanks highlighted that blockchain technology might undermine the trust of citizens in public institutions and affect the field of governance (Santiso, 2018[29]). Considering such projections, it seems prudent for organisations that work on governance and strengthening democracy to invest in understanding the technology and building institutional capabilities.
- **Observability**. This refers to how difficult it is to generate evidence of cost-effectiveness and the comparative advantage of the innovation in question. How can the positive impact of this new way of working or application of a technology be demonstrated? What kind of evidence can be generated to show its comparative advantage to the current way of doing things? It is often easier to unlock smaller investments for country-level experiments compared to multi-year funding enabling organisational change and capability building leading to adoption.
- **Complementarity**. This refers to the ease of building institutionalising capabilities to use a specific approach or technology when needed. What kind of skills and knowledge are needed? Are reforms to rules and regulations required, for example updates to how partnerships or procurement are managed? This is not only about recruiting specialised staff, but also about ease in adapting to new ways of working. For example, institutionalising experimentation is likely to appear as a

significant break from previous practice in project and programme management that traditionally invests in one, but not in multiple, competing solutions. Successful cases of adoption demonstrated not a radical break from how business was done, but rather the introduction of complementary methods that align with how people think and behave.

- **Trialability**. This refers to the process of experimentation of a new method or technology that is undertaken by the organisation before reaching a decision to adopt the innovation. Does the innovation in question lend itself to being trialled in a relevant context? Trialability supports the organisational culture of testing and experimenting, allowing them to be an informed user and supporter of the innovation (Rogers, 2003[30]).
- **Sustainability**. To enable an organisation to leverage a specific approach, or technology when appropriate, specialised staff and personnel might be required; and recruiting and retaining such personnel requires resources. The business models for organisational structures that sustain new ways of working and responsible tech-use are key to longevity of adoption efforts.

Organisations which reflect on, continuously re-assess, apply and generate evidence based on these criteria show a significantly higher degree of success with adopting innovations.

The importance of a realistic vision

Assessing the technology or approach in question using the criteria described above is the first important step in formulating a strategy for adoption. The second crucial step is to formulate a clear vision on how to adopt the innovation. This includes answering the question: how should our organisation look three to five years after adopting the innovation?

An aligned organisational vision of the future builds commitment and momentum to accelerate adoption efforts (OECD OPSI, 2018[31]). Additionally, it creates the space to “think backwards” and raise critical questions on the current approach and existing skills and capability gaps in the organisation. It also encourages the organisation to establish boundaries (Seelos and Mair, 2012[32]): evaluating the unique strengths and realistic options to build institutional capabilities for adopting a certain method or technology.

For instance, innovation efforts are often focused on short-term horizons and specific place-based challenges (Ingram and Lord, 2019[33]; OECD, 2020[2]). The latter is necessary to advance meaningful change with partners in low and middle-income countries. However, a common effect of this focus is the under-emphasis on creating enabling organisational environments. Such work is quite distinct from designing and executing country-level experiments with novel approaches, methods, or technologies. It requires knowledge of the organisation, solid networks and social capital within the agency, operational dexterity to articulate a business model for sustained adoption, storytelling skills, expertise in innovation metrics and experience in change management (Kumpf and Bhandarkar, 2022[23]).

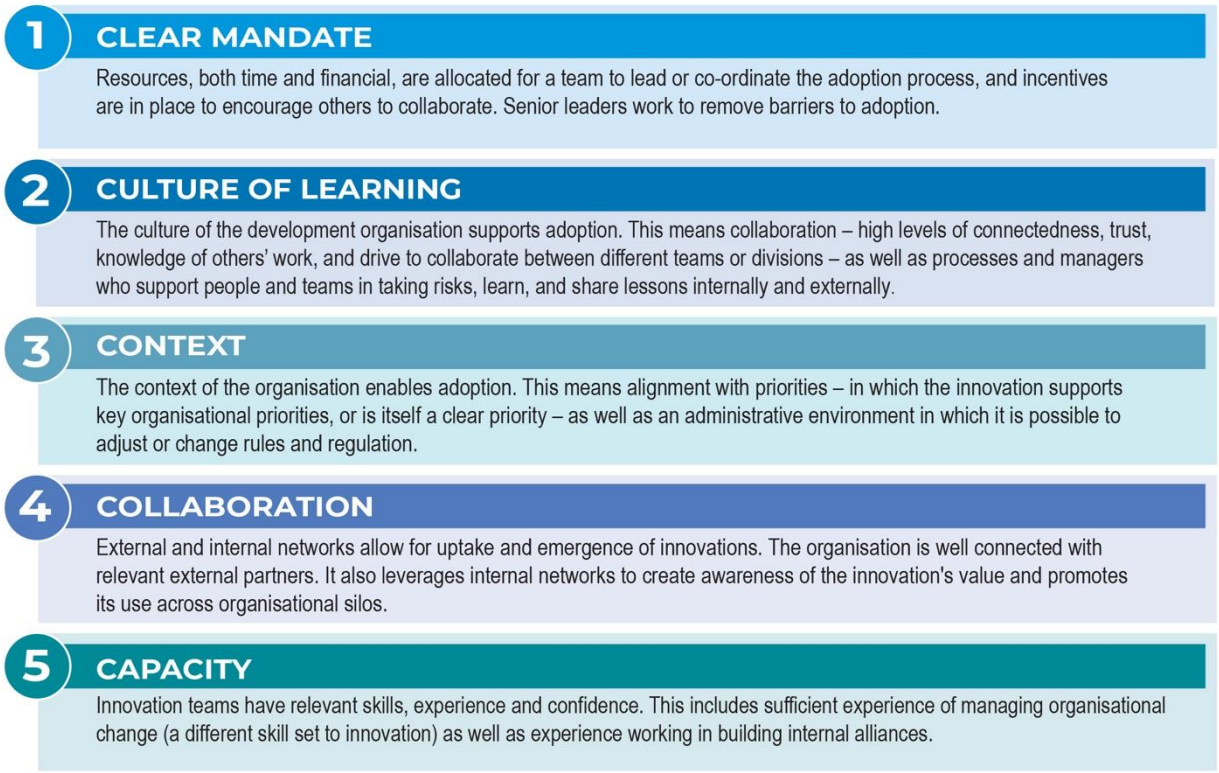
A vision of the future draws a realistic picture of who oversees the innovation, where the organisational functions sit in the organigram, how they work and how staff members – and partners if applicable – can be informed users and supporters of a specific method or technology. A clear vision allows the organisation not only more clarity on the path moving forward, but also the opportunity to look back and assess what gaps need to be filled and chart a bespoke plan of action.

The United Kingdom’s Foreign, Commonwealth and Development Office (FCDO), for example, developed such a vision that entails behavioural expertise in several organisational functions, along with governance mechanisms to ensure co-ordination, constant learning, and a clear division of responsibilities. It also includes a framework on staff competencies and mechanisms to ensure that information on the value-add and operationalisation of behavioural insights is communicated in a timely manner to staff, for example, automated nudges when a concept note for a new programme is being developed.

Having established clarity on the method or technology to be adopted alongside a strong vision, organisations must systematically reflect on certain factors that can enable or inhibit the adoption of innovation. Figure 2.1outlines a framework of five key factors.

Organisational factors driving the adoption of innovation

Figure 2.1. The organisational factors driving adoption of innovation:



Insights from the research and case studies considered for this paper revealed similarities in several organisational factors that contributed to successfully advancing adoption efforts. Systematic reflection on these factors, and identification of those requiring most improvement, will increase the chances of success in building institutional capabilities. The following continuously evolving framework includes several inter-related factors that drive adoption:

Clear mandate

There needs to be a clear organisational commitment to adoption. This includes inscribing innovation and adoption into the organisation's strategy (locking in support from leadership) and earmarking specific resources (time, money, staff) to advance adoption efforts and support institutional change.

- **Mandate and resources**. A team or role in the organisation has the explicit mandate to work on the adoption of innovation and on institutional change. This requires allocating human and financial resources to enable the team to lead or co-ordinate adoption efforts, and that incentives are in place for others to collaborate. At the UK FCDO, for example, the teams working on advancing

behavioural insights work closely with the unit of portfolio and programme management regulations on institutionalising behavioural insights.

- **Distributed leadership**. A key component in advancing adoption efforts is support from senior leadership in promoting the innovation and acknowledgment of the need for change management and the time it will take to achieve. It is not uncommon to find senior management focusing on single innovation initiatives and their public relations value in the sector. The research indicates that successful teams worked strategically on securing the support of at least three senior managers to accelerate adoption efforts. This minimum number of core supporters is the result of relatively high staff turnover rates among senior management and the need to diversify the support base. What worked in the case of the French Development Agency (AFD) was to diversify the support base among senior management. Given staff turnover rates, the innovation unit decided to invest in securing support from at least four individuals across senior management. The formalisation of support played an important role in top-down support. They also designed and launched an "Executive Committee on Innovation and Entrepreneurship" which proved to be a conducive vehicle to engage senior management in designing strategies and overseeing the progress of their implementation.

Context

The organisational context enables adoption.

- **Alignment with priorities**. For effective implementation of the mandate, the innovation must support key organisational priorities or itself be a clear priority. This includes not only overall organisational priorities, but also the degree to which initiatives that leverage the novel method or technology are nested in larger programmes of the organisation. Several development organisations often test methods and technologies in country-level initiatives in an isolated manner. This includes for instance, launching a behavioural insights trial on issues related to gender-based violence in a low-income country without investing in situating this work in all the other programmes and policy initiatives on gender-based violence carried out by the same organisation. Such boutique innovation initiatives frequently fail to demonstrate why a given method or technology should be part of the larger toolbox of a public sector entity.
- **Administrative environment**. To enable an organisation to be an informed user or supporter of a given method or technology requires more than ensuring staff exposure to induction programmes, mandatory staff training modules and organisational programmes and toolkits. Building an administrative environment in which policies are agile, minimal, and speak to fundamental values, is essential to advancing adoption. This necessitates making changes to organisational rules and regulations, procurement and partnership modalities and risk management guidance among others. The German Agency for International Co-operation (GIZ), for example, invested in data privacy guidelines and formal partnerships with top technology companies to enable the organisation to act as an informed user of blockchain and successfully navigate the thin line between hype and meaningful application.

Collaboration

Building effective internal and external networks to enable learning, information exchange and co-operation across silos.

- **External networks**. Formal and informal partnerships with external organisations need to keep up to date with the latest developments in a specific field of innovation such as AI or agile management. It also allows them to stay within the boundaries set by the development organisation. For example, KOICA's management realised that it is impossible to attract and retain

top-notch digital experts in all domains that KOICA covers in its development activities. The organisation invests in strengthening the capacities of development co-operation experts in general digitalisation knowledge. KOICA also invests in strategic horizon scanning and partnership building to bring in specialised expertise. KOICA officers are charged with scanning the private sector and academia in South Korea for relevant expertise, to initiate collaboration and to formalise partnerships, strategically filling gaps that cannot realistically be covered with in-house experts.

- **Internal networks**. In development organisations there are a number of geographical and thematic silos. Structurally, innovation has sat on top of these silos rather than being used as a means of bridging them, as demonstrated across OECD DAC member countries in a 2019 analysis of organisational innovation capabilities (OECD, 2020[2]). Internal formal networks and communities of practice can help to connect staff across these silos. The UK FCDO, for example, manages several thematic networks with dedicated community facilitation functions. The communities of practice on adaptive management and innovation ensure exchanges among core staff, and the cross-government network on behavioural science connects practitioners from various ministries. The UK FCDO also set up a network focused on behaviour change with government partners and key implementers to co-ordinate behaviourally informed responses to the COVID-19 crisis and accelerate learning on behaviour-change interventions.

Culture of learning

- **A culture of collaboration**. For effective internal collaboration, an organisational culture that enables smooth and effective collaboration within and across teams is crucial. This includes ensuring high levels of connectedness, building trust among colleagues, gaining knowledge of others' work, and incentivising the drive to collaborate between different teams or divisions, for example, country offices and headquarters, to support institutionalisation efforts.
- **A culture of learning**. Processes and managers who support and encourage people and teams to take calculated risks, learn, and share the learning internally and externally, contribute to a strong culture of organisational learning. Prioritising learning and adapting leads to the creation of an enabling environment to innovate seriously and strategically, which in turn favours adoption. While DAC members often celebrate effective innovations, these successes do not always lead to more systematic learning about innovation pathways. Building evidence about pathways to scale would benefit from a balanced examination of the successes that have already been achieved and inform adoption efforts. Small changes in learning practices can trigger positive changes in project outcomes and quality. For example, the United States Agency for International Development's (USAID) Collaborating, Learning and Adapting (CLA) team, realised that the traffic light scoring system to mark programme progress was not conducive to learning. Yellow or red marks generally induced a sense of fear and defensiveness in staff, which prevented open conversations about progress, changes in the external environment and what USAID and partners could learn. Accordingly, the team advocated to decommission the traffic light scoring system and replaced it with open narratives and a mandatory question "What have we learnt that suggests adaptation?" (See Chapter 6).

Capacity

Key teams have relevant skills, experience, and the confidence to pursue adoption.

- **Organisational change capacity.** Many development organisations undergo structural and other change initiatives frequently. These often induce uncertainty and additional stress for staff and partners. The research indicates that teams that successfully advanced adoption efforts operated in environments characterised by a combination of stability and productive "permanent beta" mindsets of staff and management. Successful teams also framed the adoption of new ways of

working and emerging technologies as a contribution to the reputation of the organisation. Their focus lies on innovating meaningfully without explicitly labelling their work as innovative.

- **Experience and confidence**. Adopting new ways of working is distinct from planning and implementing development initiatives which employ a new method or technology. Subsequently, advancing adoption requires a different set of skills. The latter involves exciting collaborations with partners and working towards progress in people's lives. On the contrary, adoption entails navigating politics within institutions and investing significant time, effort, and collective energy to change a large, rigid bureaucracy. Steering through such inherent organisational characteristics demands experience, confidence and leadership to make a case for institutionalisation. This necessitates an adequate distribution of tasks that are aligned to the skill set of staff. For example, to assign the best-suited people to the various tasks, an innovation team in the UK's FCDO adapted the "Pioneer, Settler, Town Planner" concept from Simon Wardley (Goldminz, 2016[34]). This helped to distribute tasks related to spotting new approaches and methods, testing them with partners and working on adoption, based on the team member's unique strengths, interests and patience with bureaucratic procedures.

In conclusion, reflecting on the five criteria to analyse the potential of an innovation for adoption and following the framework of five organisational factors outlined above can support the adoption process for both innovative approaches and technologies. Figure 2.2below outlines the pathway that the adoption of innovation follows in an organisation. This process starts with identification of the innovation use cases, moves into the stage of assessing the innovation's comparative advantage, validating innovation criteria, formulating a vision, and addressing the five organisational factors that drive adoption. Goals related to adopting a specific approach or technology need to be measurable and should be time-bound. A key objective is to move what was once novel and innovative to a 'business as usual' stage and enable everyone in the organisation to leverage the approach or technology when appropriate. Building such institutional capability does, however, not have an end point. Approaches such as behavioral insights, human centered design or agile management and technologies such as AI or blockchain constantly evolve. Every organisation needs to ensure that dedicated functions follow developments in the field and stay abreast of developments that matter to the approach or technology and the mission of the organisation. The following chapters present in greater detail five case studies from development co-operation organisations in DAC member countries that have successfully institutionalised innovations to a large degree or have made significant progress in their efforts by employing similar frameworks in their adoption journey.

Figure 2.2. Pathway for adopting innovations within organisations

3 Germany's Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)

The *Deutsche Gesellschaft für Internationale Zusammenarbeit* (GIZ) is a service provider for the German government, helping it to achieve its goals in international co-operation for sustainable development by providing new solutions to current challenges. GIZ has been operational for over 50 years in over 130 countries, supporting economies and employment, and in the fields of environmental and energy management, and peace and security. Primarily commissioned by the German Federal Ministry for Economic Co-operation and Development (BMZ), GIZ works to generate ideas and implement plans for political, social and economic change (GIZ, 2022[35]).

GIZ puts a premium on supporting and scaling digital solutions, digital upskilling, and technological collaborations through the mandate on Digital Transformations (GIZ, 2022[36]). Through its support to digital transformations, GIZ aims to better address global challenges including poverty, corruption, and limited access to education. In the context of GIZ's digitalisation agenda, the organisation decided to invest in exploring the potential of blockchain technology.

Blockchain can be defined as a shared, immutable digital ledger that is used to record and distribute data that is open to individuals who have been specifically granted access, and cannot be altered, deleted, or destroyed by external parties, ensuring high levels of information security (Hayes, 2022[37]). The ledger maintains complete transparency of information, and thus can build trust in the service. In financial settings or business models, a blockchain application records transactions of "assets (tangible and intangible) …, [and can] track orders, payments, accounts, productions, etc." (IBM, n.d.[38]). In the context of international development, blockchain could hold value in creating a transparent mechanism for communities and stakeholders to collaborate for common purposes, and by being applied to issues such as land registration, supply-chain monitoring and other areas.

GIZ established the Blockchain Lab with the sole purpose of further exploring and testing the viability and value-add of this technology in areas specifically pertaining to development co-operation, and in turn building institutional capabilities that would enable GIZ to act as an informed user and supporter of blockchain in the future.

Inception of the innovation

In the second half of the 2010s, there was a certain buzz around the globe about blockchain applications, especially in the private sector (Chen, 2018[39]). The discourses on this emerging technology contributed to a decision by the GIZ management board to invest in experiments with this technology to explore its potential in tackling public sector challenges, in alignment with the German Federal Government's plan of drafting and adopting their first blockchain strategy (which was finally adopted in 2019) (Federal Ministry of Finance, 2019[40]). This exploratory push from the German Federal Government, coupled with the GIZ

digitalisation agenda already in place, triggered the establishment of GIZ's Blockchain Lab in February 2018, with the aim of testing a variety of use cases of this novel technology to address challenges related to the 2030 Sustainable Development Goals. Given that the Lab was entirely internally funded by GIZ, it initially enjoyed tremendous flexibility, not only in finding, building and leveraging experimental partnerships, but also in exploring and implementing projects with a certain freedom to fail and learn.

In its initial stages, the Lab did a systematic screening of public-benefit use cases of blockchain as well as responding to GIZ projects worldwide whose partners approached them with blockchain-related ideas. Scrutinizing a broad range of suggested use cases soon developed into a systematized approach to evaluate the added value and viability for each case in its respective context. This process involved scrutinising proposals against criteria such as: "Is the problem at hand likely to be solvable, by [this] sort of technology? Does the solution need a database? Is there a partner demand, in that they are able to identify a partner organisation that would specifically have that need? What are other technological and non-technological approaches to solve the problem at hand? Does the envisioned funding model look realistic to allow sustainable operations of the solution?" (von Weizsäcker, 2022[41]). Additionally, the project was also evaluated in terms of its need for data integrity and quality. The Lab team defined criteria related to the value-add of blockchain and the need for a database as "kill criteria", i.e. proposals that didn't meet these would be removed from the review process right away.

If a project did not meet other criteria for the viability of blockchain technology, the team would either engage with the applicants over several follow-up conversations to better understand details of the proposals or end the appraisal process. However, if a project passed all these considerations, the Lab team worked in collaboration with the project teams to develop blockchain solutions. As the project moved past its initial phases of conceptualisation and planning, and depending on the need for digital expertise, the Blockchain Lab team helped project teams identify qualified partners (both from start-ups in the private sector or other development stakeholders such as partner government departments and civil society organisations). Following this, the actual implementation, monitoring and evaluations as well as scaling of the solutions was owned and managed by the project teams. The Blockchain Lab did not follow one standard procedure of engagement with all its partners for all the projects; rather it internalised the uniqueness of each project's problem and blockchain-based solution to ensure flexibility in project design and execution.

The Lab examined and assessed a wide range of blockchain applications, before providing advice to the most promising cases, which had a clear value proposition in terms of SDG achievement (GIZ, 2018[42]). Over the course of two years, the Lab supported multiple projects, ranging from examining machine learning approaches to fighting money laundering in Peru to developing a due diligence mechanism for land transactions in Bangladesh. However, the ratio of actual blockchain projects reaching the next phase of implementation was rather low; the reason for this typically a weak problem-solution match between the identified problem and the proposed blockchain solution. The Lab team realised that blockchain has a comparably narrow and specific scope of added value within a rather broad range of development co-operation context. This led the Lab team to the conclusion there is a need to pivot away from its original approach.

Luckily the framework conditions of the Lab were not cast in stone, so GIZ management allowed the Lab to transition from a blockchain-solution centered lab towards a more generic "digital innovations lab", where the team assesses projects not only for the viability of blockchain solutions that fit their content, but rather the viability of a diverse range of available digital solutions (von Weizsäcker, 2022[41]). The example of the Bangladesh land registry illustrates the pivot. It started exploring a blockchain use-case and it concluded by instead designing (non-blockchain) due diligence mechanisms that would help prospective buyers avoid fall victim of fraud in a land transaction.

A key part in building institutional capability on blockchain was to build in-house capacity that can advise teams when to use and particularly when not to use blockchain technology. The Lab officially completed

its operating term in 2020, while several of its projects and ideas continued to be implemented within GIZ's worldwide project portfolio, and the user-centric design methodology was adopted in several units of GIZ.

The adoption journey

This case study examines how GIZ strengthened technical and methodological expertise related to blockchain in the context of the Blockchain Lab. It is structured around five factors that shape the intentional mainstreaming of a specific innovation in an organisation: clear mandate, culture of learning, context, collaboration, and capacity.

Clear mandate

Definition. Resources, both time and financial, are allocated for a team to lead or co-ordinate the adoption process, and incentives are in place to encourage others to collaborate. Senior leaders work to remove barriers to adoption.

In the mid-2010s, GIZ senior management decided to create several new positions, including senior roles with a focus on digitalisation and digital partnerships. One objective of this suite of newly established functions was to conduct research on the use of blockchain technology in the development context and to establish connections with organisations, including think tanks, start-ups, and any other technology-driven outlets that would be important for the future of development co-operation (von Weizsäcker, 2022[41]). This aimed at building institutional capability on blockchain technology as senior management acknowledged the need to better understand this emerging technology.

The Blockchain Lab emulated a start-up model and had worked with a relatively small project budget and a team of 3 staff plus several consultants and interns. The Lab was managed as a GIZ project and set out to provide small catalytic funding to support the early stages of digital innovation initiatives. Successful trials would then leverage funding from across GIZ's larger programme portfolio, as integrated elements in existing programmes. As a result, the Lab team formulated key requirements for investing its resources, including: a) a strong comprehension of the wants and needs of the user. b) a good fit between the problem and the solution, and c) the willingness of stakeholders to adopt the solution including a viable funding and operations scenario.

"If you try to plan innovation ahead of time or put it into a strict corset of project planning, the more constrained the construct is and less possibility to integrate innovation" (von Weizsäcker, 2022[41]). This leeway of the Lab to jump onto ongoing projects (which already have fixed allocated funding) and integrate digital solutions into their design and execution, enabled it to explore and experiment with flexibility. The Lab team had flexibility not only to scout for their choice of internal partners to work with across GIZ country offices and headquarter locations, but also co-ordinate with different external implementing partners at different stages of the project to more effectively drive change.

Culture for learning

Definition. The culture of the development organisation supports adoption. This means collaboration – high levels of connectedness, trust, knowledge of others' work, and drive to collaborate between different teams or divisions – as well as processes and managers who support people and teams in taking risks, learning and sharing lessons internally and externally.

The Blockchain Lab team pivoted shortly after its inception from a supply-driven model to a "problem-driven" approach (von Weizsäcker, 2022[41]). This iteration enabled the team to not only provide better advice on blockchain but to expand its scope and integrate other digital solutions into their portfolio. This in turn informed the innovation methodology in various GIZ units

For example, Bangladesh's Access to Information (a2i) Lab which initiated a blockchain-based land registration project with GIZ's support is an illustrative case for the change of direction of the Blockchain Lab (GIZ, 2018[42]). Bangladesh faces major land governance issues, with more than a 40 year backlog of legal land disputes that remain unresolved to date, one of the most common challenges being that the purchase of a piece of land comes with little to no legal certainty, whether or not the seller of the property actually owned it before the sale. The GIZ team partnered with a start-up that aimed to solve this problem with blockchain technology applied to land title registration. In the process of designing the solution, the team interacted with a range of stakeholders including lawyers dealing with these land disputes to thoroughly understand the root of the problem. This sparked the deviation from a blockchain solution to prioritising other interventions. The team first analysed the land transaction process and other typical sources of land disputes that originate from fraudulent or inaccurate land transactions, then searched for solutions. The blockchain team recognised that while technological solutions may be applicable, a data-based ledger system like blockchain could not resolve the underlying challenges of land disputes.

As a consequence, the team underwent an internal learning exercise and changed the scope of their work towards functioning as a "User-Centric Design Lab", with the aim to explore, experiment and identify the most viable, state-of-the-art technologies that can be applied and contextualised to different targeted problems. Based on the Blockchain Lab's results and experiences, GIZ published a hands-on guideline (Figure 3.1) to assess prospective projects. The guide showcases the technology and its areas of application, to assist development agencies in assessing the effectiveness of adopting blockchain for their respective solutions.

Context

Definition. The context of the organisation enables adoption. This means alignment with priorities – in which the innovation supports key organisational priorities, or is itself a clear priority – as well as an administrative environment in which it is possible to adjust or change rules and regulations.

GIZ uses digitalisation in projects across the company and around the world to improve people's lives and promote long-term development. The organisation realised in the 2000s that an increasing number of partners want and need to be part of the digital transformation. Many of these partners, particularly governments in low and middle-income countries have already embarked on the process, but they face the challenge of finding their way and making decisions on technology in a highly competitive and global digital world. GIZ leadership highlights an important role for the entire organisation in equipping partners with skills and information that enable them to take informed decisions on digital transformation matters. In the early 2010s, GIZ issued a "digital by default" approach that included every project systematically being scoped for possible digital approaches that could contribute to the project's success.

Collaboration

Definition. External and internal networks allow for uptake and emergence of innovations. The organisation is well connected with relevant external partners. It also leverages internal networks to create awareness of the innovation's value and promotes its use across organisational silos.

Internal networks. The Lab team leveraged existing thematic networks of GIZ staff and an internal community-of-practice on digital to engage with project owners and to promote its services. "If you want to be demand-driven, you need to be a good listener" (von Weizsäcker, 2022[41]). According to the former Lab lead, the Blockchain Lab's preliminary work at GIZ was highly dependent on the informal engagement with colleagues from within GIZ focusing on a worldwide portfolio of more than 1 000 projects (von Weizsäcker, 2022[41]). Gradually the Lab team grew, and consequently so did the team's internal networks across the organisation This led to the Lab receiving more and more requests for support from different teams within GIZ to explore the potential of incorporating digital solutions in their respective projects.

External networks. The Blockchain Lab team also helped project teams identify qualified partners, both from start-ups in the private sector and from other development stakeholders like partner government departments and civil society organisations, depending on the digital expertise needs of the designed solutions (von Weizsäcker, 2022[41]). This required dedicated investments in horizon scanning, i.e. scoping the landscape for interesting partners related to blockchain, and partnership management. One such example is the Lab's collaboration with the Southeast Asian Ministers of Education Organization's Regional Center for Educational Innovation and Technology (SEAMEO INNOTECH) and the Technische Universität Berlin "to prove that blockchain-based education credentials can prevent widespread certificate forgery in the higher education sector" (GIZ, 2018[42]).

Capacity

Definition. Innovation teams have relevant skills, experience and confidence. This includes sufficient experience in managing organisational change (a different skill set to innovation) as well as experience working in building internal alliances.

One of the key skills of the Blockchain Lab team that played a crucial role in its inception and adoption is "an agile mindset". This is not the same as the ability and knowledge of agile methods, but rather "an ability to be able to work in a multi-disciplinary team, being open-minded, be able to change your own beliefs based on new learnings, and to fail" (von Weizsäcker, 2022[41]). The Lab was located in the social entrepreneurship co-working space of Impact Hub, with solutions coming from the merger of very different ideas from different people coming from very different backgrounds. (von Weizsäcker, 2022[41]). This approach ensured that the team as a whole not only had strong technical expertise (in terms of hard-core computer science and blockchain-focused knowledge) but also had industry-relevant management, support functions and organisational skills (needed for giving sharp analytical feedback, diplomatically engaging with partners, organising events and moderating conversations).

Lessons learnt

Establish clarity on when, where and how the innovation adds value

At the early stages of the inception of any innovation within an organisation, it is important to assess its role in the larger scheme of organisational priorities and ways of working. During the initial stages, the Blockchain Lab learnt to shift from a solution-driven approach to a problem-driven approach, where the focus is firstly on analysing the problem to ascertain which digital intervention is most capable of addressing the targeted challenge, where blockchain technology is just one of the tools in the toolbox.

Find funding models with the flexibility to take risks, fail, learn and hence, innovate

In public sector organisations, where the primary source of funding is taxpayer's money, it is incredibly difficult to propose and get approval for projects comprising a large component of exploration and experimentation, and thus having a higher risk of failure. Raising funding for testing certain innovations can therefore become extremely challenging. In such cases, it is important to devise a low-risk funding model that provides small grants and technical support with a catalytic aim. GIZ's Blockchain Lab did so by aligning their experimental work to ongoing projects (which already had allocated funding).

Leverage informal networks within the organisation to democratise the use of the innovation

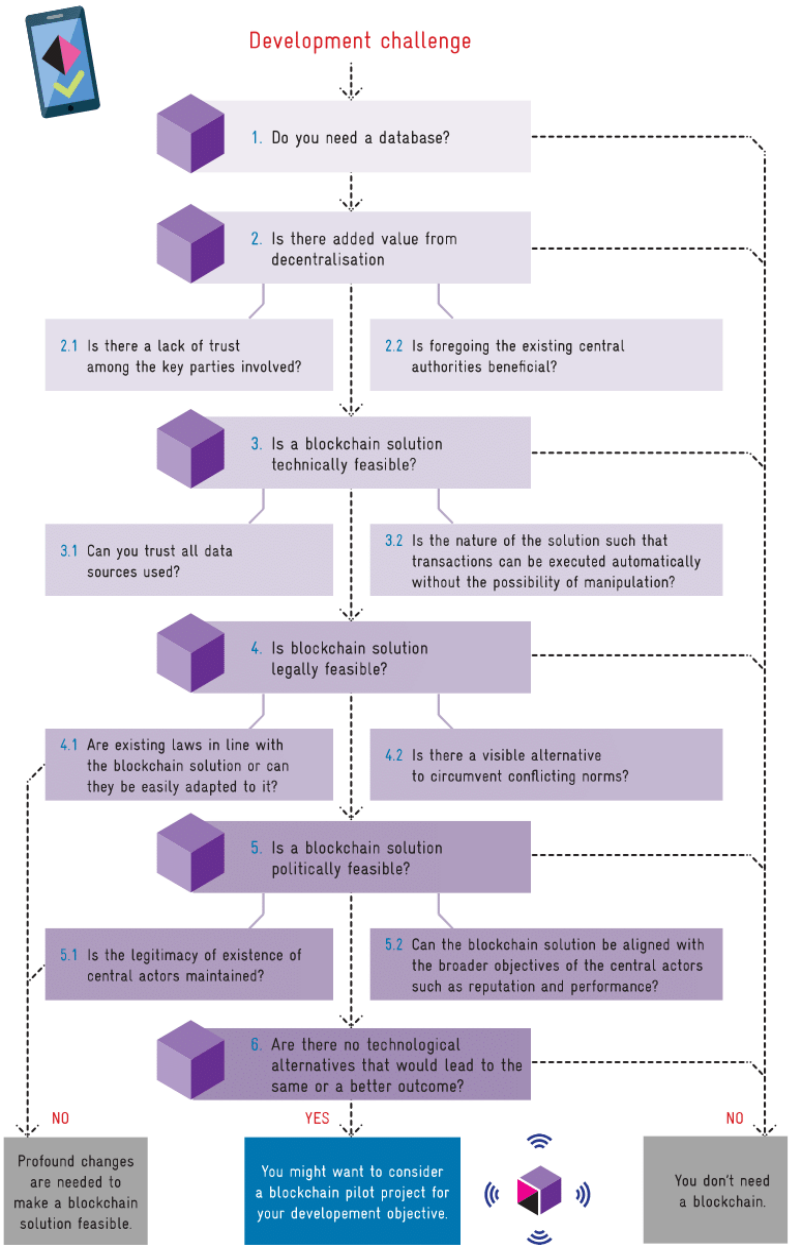
The Blockchain Lab's model to promote its services and encourage staff to submit project ideas relied heavily on informal networks in the early stages of the project. The team realised that staff with stronger

networks were more likely to engage in innovation activities, and thus set out to formalise the information flow and democratise the use of appropriate digital technologies across the organisation. Instruments to pursue this goal were strategic engagement in formal GIZ knowledge networks, adding relevant information to programme management guidance documentation as well as to onboarding packages for new staff.

Recruit a diverse team to facilitate learning

A success factor for the team and its efforts to strengthen GIZ's institutional capabilities was to combine expertise on a) innovation and startup ecosystem; b) development co-operation generally; c) research and development and d) public sector innovation. The latter is relevant in the context of the adoption of innovation and is often an overlooked skill set and mandate in innovation teams pursuing the exploration of a specific technology or approach. Success for the Lab is not only due to the individual projects and the impact they have in partner countries, but also to the degree to which the organisation at large is able to act as an informed user and supporter of blockchain.

Figure 3.1. A "How To" guide to blockchain for international development practitioners



Source: GIZ. (2022[43]), A 'How To' Guide to Blockchain for International Developers. www.giz.de/expertise/downloads/How%20To%20-%20Blockchain%20in%20for%20ID.png.

4 Korea's International Co-operation Agency (KOICA)

Korea's International Co-operation Agency (KOICA) was established in 1991 as the unified grant provider of the Korean Ministry of Foreign Affairs. Korea's Framework Act on International Development Co-operation puts forward the basic spirit, objectives and principles that guide and govern Korea's provision of official development assistance (ODA) (Korea, 2022[44]). KOICA's mission is to "contribute to the advancement of international co-operation through various cooperative projects to promote friendly and co-operative relationships and mutual exchanges between the Republic of Korea and developing countries and achieve poverty reduction, improvement of the quality of life, sustainable development, and humanitarianism of developing countries" (KOICA, 2022[45]). KOICA's strategic goals include accelerating achievement of the Sustainable Development Goals (SDGs), leading partnerships for development co-operation, and creating an enabling ecosystem in partner countries by strengthening their human and institutional capacities.

In April 2021, KOICA developed a Digital Mainstreaming Strategy (2021-25) to facilitate progress towards the SDGs and bridge the digital divide between and within countries, especially for the most vulnerable groups of society, by supporting the digital transformation of partner countries. This strategy seeks to add meaningful digital components across all sectors to maximise impact. It relies on the following guiding principles for digital development: user-friendly design to drive implementation; inclusive approaches to benefit the most marginalised; transparent and open systems; cybersecurity; and future scalability and interoperability (OECD, 2021[46]). The strategy further highlights four pillars to support the digital transformation of partner countries. These include:

- Digital Government: reinforcing effectiveness, efficiency, transparency, and accountability of the government's services to the public
- Digital Accessibility: enabling accessibility, availability and affordability of digital services, and improving digital literacy by supporting digital Social Overhead Capital (i.e. public infrastructure, communications and utilities)
- Digital Economy: improving market access, innovation, and entrepreneurship in the digital industry by creating an enabling environment
- Digital Safety: protecting privacy and security in a hyper-connected digital society.

This case study discusses KOICA's strategic efforts to strengthen its institutional capabilities to act as an informed user and supporter of digital technologies and digital transformations.

Inception of the innovation

KOICA'S establishment of the Digital Mainstreaming Strategy to accelerate digital transformation in the agency's management and project implementation was driven by several overseas and domestic factors.

In the 2000s, international development co-operation organisations increasingly acknowledged the importance of emerging digital technologies in advancing progress towards development objectives. In the

recent past, some key developments in the sector directed KOICA's attention to digital technologies and transformations, including the 2016 World Development Report *Digital Dividends* and the outbreak of the COVID pandemic in 2019 (World Bank Group, 2015[47]). In July 2020, KOICA launched a task force on digital transformation to identify strategies for its mid- and long-term roadmap for advancing digital ODA (KOICA, 2022[48]).

Domestically, the government of the Republic of Korea announced the Korean Digital New Deal 2.0 under the 2021 Korean New Deal 2.0; which aimed to accelerate the digitisation of all sectors in response to the "escalated competition in the global digital environment" following the pandemic (Korea, 2021[49]). The goal was to further the ambitious digitalisation agendas not only domestically, but also through overseas engagements. Consequently, KOICA was tasked directly by the government with internalising and operationalising the digital agenda. Defining digital ODA as development co-operation projects that use digital technology to help advance digital infrastructure or support the digital environment of a partner country, KOICA divided its activities into digital mainstreaming and core digital projects. Digital mainstreaming aims to "improve the accessibility, efficiency, and effectiveness of projects by applying digital technology to projects of all types and sectors"; whereas core digital projects "directly support the digital transformation of partner countries by using digital technology as their primary vehicle" (KOICA, 2022[50]).

KOICA had already been investing over the past decade in its digital capacities and in adding digital components to its projects, specialising in building digital information systems for and with partner countries. The change in core government policy constituted the main trigger of wider digital engagement in KOICA.

The adoption journey

This case study briefly describes the journey of strengthening institutional digital capabilities. It is structured using the following factors: clear mandate, culture of learning, context, collaboration, and capacity.

Clear mandate

Definition. Resources, both time and financial, are allocated for a team to lead or co-ordinate the adoption process, and incentives are in place to encourage others to collaborate. Senior leaders work to remove barriers to adoption.

KOICA's commitment to the mainstreaming process was based on positive evidence generated from evaluations of past digital programmes as well as larger strategic considerations, which directly shaped the organisational mandate.

Leadership. Both central government and senior leaders within KOICA are influential in promoting the digital agenda within the agency and enabling adoption. Members of KOICA's board, for example, actively promote the digital agenda. There is dedicated will among senior management to make digital projects and mainstreaming a core part of how KOICA pursues its international development co-operation objectives.

An internal evaluation of 29 completed digital projects carried out in 2017 classified 52% of the projects as "successful" and 38% as "very successful" (OECD, 2021[46]). KOICA's 2021 digital mainstreaming strategy was informed by the high level of performance found in these evaluations.[1] The official launch of the mainstreaming strategy was a clear signal from senior leadership to promote digitisation to advance the adoption of digitalisation across the agency.

[1] The evaluations are available in Korean only.

Mandate and resources. KOICA specifically earmarked resources for digitisation projects. Korea has steadily increased its budget for funding digitalisation projects, a crucial enabler in advancing its adoption efforts. According to the OECD Creditor Reporting System, Korea is the largest bilateral provider (18.2%) of the total bilateral development finance for digitalisation from 2015-19 (OECD, 2021[46]). KOICA has also increased the proportion and budget of its digital ODA investments in 2022 (KOICA, 2022[50]).

Informed by past experiences, KOICA senior management understood the importance of creating a dedicated function to advance objectives related to digital mainstreaming. Accordingly, KOICA established the Digital Innovation Centre, which was responsible for overseeing "organisation-wide digital transformation and digital ODA project implementation" (KOICA, 2021[51]).

To support its digital project implementation, KOICA also provides support to overseas offices in decentralised capacity building on digital development. It has created a mandate to advance inclusive digital solutions in the project approval process. In 2014, KOICA launched its Technical Assurance Group (TAG), which provides support for quality checks at four points during the grants project cycle, including through discussion with partner countries, with scope for greater sectoral or strategic level inputs in the future (OECD, 2018[52]).

Before a project is implemented, a project document must be approved – this contains a detailed overview of the project design, the theory of change, a feasibility study, resources and a results framework, including costs and expected outcomes. For the project document approval process, a meeting must be held by TAG, wherein an intensive review is conducted on whether the project is well-designed, including from a digital perspective. Members of the overseas offices are part of the TAG. They call for the review of the project document, then TAG meets to revise it before giving approval for the project to move forward. This mandated process puts incentives in place for the team to co-ordinate and keep digital considerations on the priority list of project assessment and approval.

Culture for learning

Definition. The culture of the development organisation supports adoption. This means collaboration – high levels of connectedness, trust, knowledge of others' work, and drive to collaborate between different teams or divisions – as well as processes and managers who support people and teams in taking risks, learning, and sharing lessons internally and externally.

KOICA has a notable culture of innovation, learning and adapting. This is an important feature of adoption. Within the agency, there is an understanding, starting at senior management level, that mainstreaming digital components is an accelerator for development. To advance inclusive digital development, innovation needs to be a priority, with innovation being understood as a process with distinct characteristics. According to the leadership of the Digital Innovation Centre, most KOICA staff acknowledge the potential and importance of digital technologies, and the need to approach digital solutions and systems with an iterative, context-sensitive and culturally appropriate approach. Senior management frequently champion these principles in their communication with staff.

KOICA has introduced the Partner Countries Satisfaction Survey, specifically for its development projects, which serves as a strong feedback channel and learning process for KOICA. The annual survey, mainly intended for partner countries and their citizens, collects feedback on service quality and overall satisfaction, allowing KOICA to identify areas of programme improvement. This contributes to a culture of continuous learning and improvement (KOICA, 2022[48]).

There is a clear mandate for learning across all Korean implementing agencies. This obligates KOICA to submit an annual plan for self-evaluation to the evaluation sub-committee of the Committee for International Development (CIDC). Along with the evaluation results, a plan to integrate learning into future activities must be specified. To strengthen and support this learning culture, KOICA undertakes evaluation training programmes. KOICA has also launched a new method of disseminating evaluation lessons. These

include short films on online learning forums and “card” news – a description of evaluation methods used, often with illustrations or graphics to catch the reader’s attention (OECD, 2018[53]).

Context

Definition. The context of the organisation enables adoption. This means alignment with priorities – in which the innovation supports key organisational priorities or is itself a clear priority – as well as an administrative environment in which it is possible to adjust or change rules and regulations.

Administrative environment. To create an enabling environment for the adoption of innovative approaches and technology, KOICA worked to change its rules and regulations, programme and performance frameworks, and procurement and partnership modalities. KOICA had to modify its procurement modality, particularly for its digital innovation projects. This was due to two main reasons: a) the structure of the technical committee which reviews digital projects and b) availability of inhouse digital experts.

The Technical Advisory Group (TAG) illustrates how KOICA innovated to strengthen its institutional capabilities. Traditionally, TAG is made up of experts from each of KOICA’s five thematic priority areas: health, education, climate change, agriculture, and digital service. As there are not enough KOICA employees with the required specialised expertise in digital technologies, the organisation decided to bring in external experts to contribute to the programme assessment as special external TAG members.

KOICA recognises the need for expertise in digital technology, and the limits of their ability to provide that expertise in house. This is also related to salary differences between a post in the public sector and average wages for digital experts in Korea’s digital private sector. To address this limitation and ensure the right expertise is brought in to support TAG processes, KOICA has set up a dedicated position within the Department of Development Strategy and Portfolio Management to scout for specialised IT and digital talent in South Korea. The KOICA staff member tasked with this “horizon scanning” is also responsible for outreach, building and managing relationships with the individual professionals and their organisations to ensure KOICA’s work is supported by the most cutting-edge expertise. Furthermore, KOICA attempts to identify and assign specialists with expertise in niche areas which are best suited to the project requirement.

Korea is also working to improve its administrative environment by streamlining the approval processes at headquarters. Locally, the agency has implemented an efficiency action plan to shorten project management processes and is taking steps to increase the flexibility of its budgets (Endoh, 2021[54]).

Alignment with priorities. The central government has an important formative and oversight role for promoting and enabling the digital agenda. To ensure alignment to overall priorities, KOICA’s board is legally required to submit the organisation’s strategy to the Ministry of Finance and Planning every year. Since 2020, the board has been required to incorporate a digital focus in its operations.

Alongside ensuring that KOICA’s overall strategy is aligned with national and organisational priorities, all grants and proposals with partner countries must also be aligned with the country partnership strategy. Thus, the agency attempts to ensure the informed implementation of digital projects that support the key organisational priorities of both Korea and its partner countries.

In addition to the flexibility adopted in procurement processes, KOICA plans to revise its programme performance framework, which outlines the desired programme activities, outputs, outcomes, and impact indicators for digital projects. The framework will be modified to align with organisational priorities, tracking outcomes on progress in partner countries. For instance, the performance framework captures quantitative indicators for the programme (e.g. percentage of population satisfied with public services for project beneficiaries; number or percentage of population accessing mobile networks) and within the organisation (e.g. e-gov development index, e-participation index, ICT development index).

Collaboration

Definition. External and internal networks allow for uptake and emergence of innovations. The organisation is well connected with relevant external partners. It also leverages internal networks to create awareness of the innovation's value and promotes its use across organisational silos.

Internal networks. KOICA consciously endeavours to promote inter-department collaboration to efficiently promote digital development programmes and projects. Most digital programmes and projects contract local service providers and are strictly bound by domestic law. The relevant law stipulates that all public information system projects that intend to contract service providers by a public bidding system must undergo an impact assessment by external experts. The IT management office of each public agency meets as an official committee and if the assessment results in a service provider being disqualified, a thorough revision must be made before reapplying for the assessment, which seriously risks the timeline of the project. To prevent this risk, the Department of Development Strategy and Portfolio Management and the IT Operation Team have collaborated to adopt a "pre-impact assessment" as part of the TAG process, with the aim of providing consultation to the project offices and to prevent the digital programmes from being disqualified during the official bidding process.

The Center for Digital Innovation regularly holds inhouse capacity building programmes to strengthen staff understanding of digital transformation trends in both the private and public sector. KOICA is also planning a capacity-building programme for project managers to familiarise them with IT terminology and methodology while implementing digital programmes and projects.

External networks. KOICA leverages external networks and collaborates extensively with organisations leading digital mainstreaming to support its digitalisation efforts. The new position created in KOICA that ensures that the latest developments in the Korean private sector are identified and new partnerships are brokered is a key element of the organisation's approach to staying on the cutting-edge. Furthermore, the agency both learns from and contributes to knowledge expansion on digitalisation efforts in the field, which in turn aids its own adoption process. Alongside promoting collaboration with the Korean private and academic sector, KOICA is engaged in establishing overseas partnerships and networks to expand its learning and share best practices on digitalisation. This includes collaboration with international organisation-led initiatives related to the digital economy (monitoring discussions in the OECD Digital Economy Forum), digital technology utilisation (Giga Initiative jointly launched by the United Nations International Children's Emergency Fund [UNICEF], the International Telecommunication Union [ITU], and the United Nations Centre for Information and Communication Education); as well as launching joint projects via partnerships with other donor countries leading in digital transformation and reviewing donor-led initiatives such as the Digital Public Goods Alliance Collaboration plan led by Norway and UNICEF (KOICA, 2021[51]).

Capacity

Definition. Innovation teams have relevant skills, experience and confidence. This includes sufficient experience of managing organisational change (a different skill set to innovation) as well as experience working in building internal alliances.

KOICA has invested significant resources in building relevant organisational and staff capacity to advance the adoption of digitalisation in KOICA and partner countries.

Organisational change capacity. The organisation-wide digitisation efforts were primarily undertaken to improve operational efficiency by "employing new digital technologies and strengthening the agency's digital infrastructure". The establishment of a "process-based data management structure" and upgrade of its Integrated Project Management (IPM) system reflects the agency's efforts to enhance efficiency in their method of managing projects by leveraging digital technology.

To improve its programme delivery, KOICA implemented several operational changes. Aligned with its overall strategy, it integrated digital technology across all its international development projects and sectors; for example, supporting projects to digitise health information systems, building e-learning platforms to enhance digital literacy and establishing flood prediction warning systems or intelligent traffic information systems.

A main finding from a digital programme evaluation (OECD, 2021[46]) and organisational experience when implementing digital programmes, was that success in implementation was closely related to understanding the local policy environment, including laws and regulations, as well as other cultural and environmental factors. In consideration of this insight and to make informed investments in digital projects in partner countries, KOICA sends surveys and scoping teams to partner countries to assess if the project is aligned with the local development policy, local specificities such as digital infrastructure, digital ecosystem maturity and context-specific exclusion dynamics as well as KOICA's comparative advantages for the particular project. These concrete actions are reflective of KOICA's ability and openness to evaluate, learn and change ways of working in the organisation.

Experience and staff capacity. The agency also provides training according to the project need which can include: digital empowerment training for government managers and digital competency-building training for ICT practitioners to support digital government projects; digital technology-related global training courses, or education and digital literacy training for the general public to support digital accessibility projects; capacity building and digital finance literacy to support digital economy projects; and strengthening digital investigation capabilities to support digital safety projects.

Lessons learnt

A dedicated digitalisation strategy and strong support from the government

A clear mandate to advance digital development from the Government of South Korea signalled KOICA to prioritise the digital transformation of partner countries in their development projects. Leadership that communicates strategic support as well as devotes adequate resources to the innovation is essential to propel an organisation's adoption efforts.

The importance of partnerships and establishing boundaries for inhouse expertise

KOICA management realised that it is impossible to attract and retain top-notch digital experts in all sectors that KOICA covers in its development activities. The organisation invests in strengthening the capacities of development co-operation experts in general digitalisation knowledge and in bringing in specialised expertise when required. KOICA officers are charged with scanning the private sector and academia in South Korea for relevant expertise, to initiate collaboration and to formalise partnerships, strategically filling gaps that cannot realistically be covered with inhouse experts. Strong collaborations and partnerships are an important driver of adopting innovations.

Being a holistically informed user of the innovation

KOICA's prioritisation of digital mainstreaming in their development co-operation strategy was a carefully and deliberatively taken decision, based on experience and expertise. The decision to use this specific technology at an organisational level was accompanied by a thorough examination of whether the technology is required at local levels in their partner countries. KOICA's approach to investment in partner country projects was designed to inform and assess rather than directly implementing digital projects. The evaluation teams sent to see if the project fits in the local policy context and if the digitisation project is even required in the first place, is exemplar of making an informed decision of whether a specific

technology is suitable for the partner country. Thus, being a holistically informed user of the innovation entails examining the comparative advantage and utility of the innovation not just for the organisation, but also for partner countries where the innovation is being implemented.

Carving a niche in broad-ranging technologies or approaches

Although digital mainstreaming is the overarching strategy guiding KOICA's development co-operation efforts, it has built its niche in supporting digital information systems in partner countries. Identifying and establishing expertise in one specific area of a broad and technical field such as digitisation was helpful in advancing KOICA's adoption efforts. Moreover, the deep expertise brings with it greater opportunity to be an informed user of the innovation.

Structured guidance for staff and partners on when and how to leverage digital

KOICA invested in formal processes to mainstream digital as part of the project approval process and has produced guidance for management and field staff. However, there is scope to further enhance the provision of information and practical guidance on digital, for example in the formal onboarding processes for new staff.

5 United Kingdom's Foreign, Commonwealth and Development Office (FCDO)

The United Kingdom's Foreign, Commonwealth and Development Office (FCDO) acts as the "springboard for all our international efforts, integrating diplomacy and development to achieve greater impact" (FCDO, 2021[55]). It was launched in September 2020 as a merger between the Department for International Development (DFID) and the Foreign and Commonwealth Office (FCO) to consolidate the UK's international development and diplomacy efforts, thus ensuring a more coherent and holistic international presence. To achieve this goal, apart from building a "diverse range of global partnerships, with bilateral and multilateral partners, the private sector, civil society and beyond", the FCDO also aims to closely work with all of the UK's domestic government departments to "build the UK's influence on key international objectives," which include "supporting sustainable development" (FCDO, 2021[55]).

The FCDO Outcome Delivery Plan for 2021-2022 is rooted in four main strategic enablers: Workforce, Skills and Location; Innovation, Technology and Data; Delivery, Evaluation and Collaboration; and Sustainability. This delivery plan clearly states a strong intent to nurture the "culture of innovation and investing in the structures and staff" needed to realise viable solutions from novel ideas. This involves embedding evidence and analysis at the heart of their programming approach by "increasing the use of science, economic insights and data-led decision making" and strengthening "the use and quality of monitoring and evaluation so that the FCDO's interventions are more efficient sustainable and have greater impact" (FCDO, 2021[55]).

The FCDO's use of behavioural science and behavioural insights (BI) for improving programme design and implementation falls at this intersection of innovation and evaluation. According to the World Bank's *Mind, Society, and Behaviour* report from 2015, design and implementation of development policies and interventions can significantly be improved by this approach that is cognisant of "how humans think (the processes of mind) and how history and context shape thinking (the influence of society)" (World Bank Group, 2015[56]). A behavioural insights approach consists of two pillars: it combines findings from behavioural science as well as other fields such as neuroscience and sociology with findings from context-specific research on behavioural drivers and barriers, and it entails testing what works using experimental design and rigorous evaluation to facilitate change.

This approach enables development officials and policy makers to enhance their understanding of observable behaviours and provides them with an expanded set of tools and strategies for designing and implementing behaviourally informed programmes. To ensure greater efficiency and evidence-informed ways of working in improving development outcomes (World Bank Group, 2015[56]), this approach has already been applied across different FCDO programmes, and efforts for its institutionalisation are now underway. As such, advancing BI at the FCDO forms an interesting case study for the adoption of an innovative approach within an organisation. This case study focuses on the history of behavioural science in the DFID and then the FCDO. It does not discuss the emergence of behavioural science at the UK Foreign Office, prior to the merger in 2020.

Inception of the innovation

The inception of BI at the DFID (prior to the creation of the FCDO) was characterised by two main events taking place simultaneously, one within the United Kingdom and the other globally.

Domestically, inspired by the first BI unit within the US Government in 2009, the adoption of BI within the UK Government gained a great deal of momentum leading to the formation of the Behavioural Insights Team (BIT) in 2010 (Afif, 2017[57]). Given the positioning of BIT within the Cabinet Office, most applications of BI were focused on domestic policy. However, *"*there was sort of a drive to try out the use of the applications of behavioural insights in each department and permanent secretaries*"* (Ranger, 2022[58]), which was attributed to the conscious outreach efforts of the Chief Executive of BIT who initiated this exploration. This enormous encouragement for testing or experimenting with BI across the UK government allowed for resources (both time and money) to be invested in recruiting experts and conducting BI work. The FCDO's adoption of BI, to a large part, can be attributed to this effort by the central UK Government.

Globally, the publication of the World Bank's *Mind, Society and Behaviour* Report in 2015 and the internal launch of the report alongside a joint study on the biases of World Bank and DFID policy makers (Banuri, Dercon and Gauri, 2019[59]) by the Chief Economists of DFID, catalysed adoption by inspiring DFID officials to challenge traditional approaches to development. Specifically, the report prompted officials to recognise different biases in decision making within the development sector and to replace the agency's traditional waterfall approach, where appropriate, with a more sophisticated, evidence-based, iterative and adaptive approach to the *"*really complex systemic problems*"* (Ranger, 2022[58]) that incorporates human behaviour and decision making.

Hence, the UK's cross-governmental drive for BI adoption, along with the global nudge from the World Bank's *Mind, Society and Behaviour* report, not only created an enabling environment for the adoption of BI within the DFID, but also drove it to remain "aligned with what was happening across the civil service in the UK'' and "relevant to the development sector and what was happening at an international level*"* (Ranger, 2022[58]). Finally, this resulted in DFID's investment in the creation of a dedicated resource, specifically the creation of a post to support BI and behaviour change across programmes and help the organisation build institutional capabilities. This was followed by the commissioning of a rapid review (Carter, 2017[60]) and internal consultation exercise in 2017 aimed at identifying the value of applying BI to development challenges. By this time, about ten new programmes had been launched that comprised dedicated BI components.

The adoption journey

This case study briefly describes the journey of the organisation-wide adoption of behavioural science. It is structured along the following five organisational factors, an easy heuristic for analysing the intentional and organised mainstreaming of innovation in an organisation: clear mandate, culture of learning, context, collaboration, and capacity.

Clear mandate

Definition. Resources, both time and financial, are allocated for a team to lead or co-ordinate the adoption process, and incentives are in place to encourage others to collaborate. Senior leaders work to remove barriers to adoption.

Prior to 2017, several DFID programmes and projects already used BI in their design and implementation. However, the 2017 internal review exercise inspired a shared vision amongst DFID leadership from different departments to create a structured enabling environment that allows for the application of a behavioural lens to all programmes and projects, whenever appropriate. In 2014, the Director General of

Policy and the Permanent Under-Secretary of DFID had created a dedicated position specific to BI adoption, with the addition of a part-time post in 2018. At the time of the World Bank report in 2015, DFID created the Better Delivery Department (BDD) which, "has the specific aim of improving how DFID designs and delivers development programmes." (Ranger, 2022[58]) According to DFID's Programme Operating Framework, BDD "build[s] on and systematise[s] our existing programme capability to enable better delivery…This includes a focus on the skills we need to deliver adaptive and expeditionary programmes". This department provided an opportunity to "rewrite the rules" and opened a window for BI by focusing on methods, process and governance in the programme context. The staff members leading on BI and innovation together with BDD colleagues developed and led a series of capacity-building initiatives, including developing toolkits and case studies, running training sessions and webinars, organising forums, coaching randomised control trial methodology, and co-designing programmes with teams to develop overall "capability levels" on "priority issues" (Ranger, 2022[58]).

Moreover, the recruitment of a new DFID Chief Economist played a further pivotal role in advancing the practice of BI within the organisation between the launch of the World Bank Report and the merger with the FCO. Notably the recruitment of the new Chief Economist in 2018 boosted practice and investments in behavioural research across DFID. The Chief Economist's office worked closely with the innovation staff responsible for advancing BI on nurturing an internal community-of-practice and on several internal staff development events.

The COVID-19 pandemic has catapulted behavioural science to the forefront of government decision making in the United Kingdom and around the world. The extensive and visible integration of behavioural science in the FCDO's response, along with the addition of a dedicated behavioural science position, have been a further significant catalyst in the adoption and evolution of behavioural science in the organisation since 2020.

Culture for learning

Definition. The culture of the development organisation supports adoption. This means collaboration – high levels of connectedness, trust, knowledge of others' work, and drive to collaborate between different teams or divisions – as well as processes and managers who support people and teams in taking risks, learning, and sharing lessons internally and externally.

In 2017, the DFID, the Overseas Development Institute (ODI) and the innovation consultancy firm Brink, created the internally focused programme, LearnAdapt, to explore how to better manage adaptive development programmes (Laws et al., 2021[61]). The programme was implemented between 2017 and 2020. During this period, DFID teams, notably BDD and EPIC (Emerging Policy, Innovation and Capabilities), worked with Brink to develop a systematic plan for strengthening the organisational culture of learning and experimentation, based on Brink's "Methods, Mechanisms and Mindsets (3M)" approach (Laws et al., 2021[61]; Proud, 2019[62]).

The 3M approach employs the three aspects of Methods: testing and institutionalising an ever-evolving set of approaches to work more adaptively, e.g. integrating a monitoring and evaluation approach to iterate programme design during implementation; Mechanisms: channels to facilitate peer learning, e.g. setting up the Adaptive Network and Innovation Network to share lessons; and Mindsets: creating safe spaces that encourage staff exchanges on both progress and setbacks, creating opportunities for greater trust-building among colleagues and other stakeholders.

Context

Definition. The context of the organisation enables adoption. This means alignment with priorities – in which the innovation supports key organisational priorities or is itself a clear priority – as well as an administrative environment in which it is possible to adjust or change rules and regulations.

Alignment of priorities. Within the international development co-operation context, the United Kingdom has been a progressive leader in its approach to results, evaluation and learning throughout the 2000s. Prior to the creation of the FCDO, many new aid-spending departments had drawn on DFID expertise to manage for results, evaluate their programmes and build their institutional learning through learning networks. DFID initiated a more tailored approach to managing for results that uses different tools to meet different objectives – communication, accountability, performance – with greater emphasis on adaptive management and longer-term change (OECD, 2020[63]). These approaches are still relevant after the merger and provide a strong basis for developing a harmonised approach to results and evaluation across government, supported by an accountability framework covering all government departments that manage official development assistance (ODA). As such, the iterative nature of BI programming which deviates from the traditional waterfall approach to development programming by enabling measurement (and corresponding adaptation) throughout every step of programme implementation, rather than solely at the end aligns well with the overall priorities for UK Aid and its approach to programming.

*"*Behavioural science gives you the opportunity to be more evidence based and to be able to show more impact*"* (Ranger, 2022[58]). Traditional Social and Behaviour Change Communication (SBCC) measures impact in terms of the reach of an agency's communication efforts (for instance, number of people reached by a campaign). Whereas a BI approach allows for measurement of more tangible outcomes of an agency's communication efforts (for instance, change in people's attitudes and behaviours due to the campaign), enabling the agency to show more concrete impact of their investment not only to the UK government for further funding, but to the developmental landscape at large. As outlined above and specified in FCDO's Outcome Delivery Plan for 2021-2022, this is perfectly in alignment with "increasing the use of science, economic insights and data-led decision making" and strengthening "the use and quality of monitoring and evaluation so that the FCDO's interventions are more efficient sustainable and have greater impact*"* (FCDO, 2021[55]).

Administrative environment. The FCDO not only invested in systematically building an organisational culture for learning and experimentation, but also readjusted and updated its internal rules, procedures and procurement processes such as requests for proposal (RFPs) to facilitate the adoption of BI and to "signal to the market*"* (Ranger, 2022[58]), the FCDO's prioritisation of adaptive management. It also strategically positioned funding for adoption of BI as a way to mitigate risk, by employing a "blended" funding approach which hedges the risk of failure between research-oriented behavioural science projects (aimed at generating new knowledge and novel solutions in the BI landscape) and impact-oriented programmes (aimed at improving programme effectiveness, and hence programme outputs and outcomes).

Moreover, it leveraged its large-scale investment in external BI-focused programmes as a commitment device for developing BI capacity internally and enabling its adoption. Some of these investments are targeted at developing BI capacity with external partners too, signalling the FCDO's commitment towards institutionalising BI. For example, the FCDO as the largest funder of the Global Innovation Fund has contributed to the establishment of Behavioural Insights Units in the governments of Indonesia, Guatemala and Bangladesh (Manning et al., 2020[64]).

Collaboration

Definition. External and internal networks allow for uptake and emergence of innovations. The organisation is well connected with relevant external partners. It also leverages internal networks to create awareness of the innovation's value and promotes its use across organisational silos.

Internal networks. The COVID-19 pandemic further exacerbated the need for a new way of working that enables not only generation of reliable information but also rapid adaptation to changes in the external environment. To help inform the organisation's response to the pandemic with evidence-based, behaviourally informed approaches, the FCDO's Innovation and Behaviour Change Advisor ran several

sessions for FCDO colleagues on how to integrate behavioural science into COVID-19 responses, particularly related to hygiene behaviour and then vaccine uptake. These supported and engaged with existing internal networks for example the health network and the innovation network to build awareness of and promote the support available for these approaches.

To further inform FCDO-led responses to the pandemic, experts from the FCDO's innovation team and the health and WASH policy teams collaborated to set up the C19 Behaviour Change Forum (FCDO COVID-19 Hygiene Hub, 2022[65]), a network enabling FCDO experts from headquarter locations as well as country offices, along with implementors, private sector partners (including Unilever) and academics (including the London School of Hygiene and Tropical Medicine) to exchange lessons on how to collect relevant data remotely, assess what constitutes responsible trade-offs on rigour and speed with regard to (behavioural) data-collection and how to test which policy options and messages are the best fit for each context when responding to the direct and indirect impacts of the COVID-19 pandemic.

This multi-disciplinary learning network, linked closely with the Hygiene Behaviour Change Coalition (HBCC2) programme and policy teams, still actively contribute to implementation and policy making in real time at all levels through webinars, forum calls, guidance products and learning journeys. The value of this safe space has become a fundamental part of the COVID-19 response.

External Networks. The FCDO has established partnerships with the World Bank and the United Nations Innovation Network to generate sector-wide support for behavioural science. COVID-19 brought the international development sector together and "has been a huge, high-profile way of integrating behavioural science into normal, mainstream development programming." The FCDO also partners with these networks and partners to "showcase evidence and examples of where behavioural science is being used and make behavioural science the norm." (Ranger, 2022[58])

The FCDO also works with other UK government networks in mainstreaming BI at a larger scale across all its departments and offices, including partnerships with the cross-government behavioural insights network and the Government Communication Service (UK GCS, n.d.[66]). These partnerships take the form of co-designing policy programmes to include BI.

Capacity

Definition. Innovation teams have relevant skills, experience and confidence. This includes sufficient experience of managing organisational change (a different skill set to innovation) as well as experience working in building internal alliances.

The FCDO has designed a framework of four capability levels which can help *"*build wider behavioural science and innovation skills and awareness across the whole organisation*"* (Ranger, 2022[58]), as well as measure the level of behavioural science mainstreaming within the organisation. These four capability levels are (Ranger, 2022[58]):

- **Awareness**. Staff with a basic level of "understanding and awareness of the role of behavioural change, methods and potential, that we want everyone to be able to have*".*
- **Foundation**. Staff "who may be intelligent consumers of behavioural science, so they're bringing that into their work and who are championing it*".*
- **Practitioner**. Staff who use "behavioural science daily in in their work".
- **Expert**. Staff "who are advising and supporting others and who are leading" BI mainstreaming.

The FCDO is aiming for all its employees to reach the awareness level by the end of 2023. An important factor that further catalyses the mainstreaming of BI is staff mobility between departments within the organisation, and the open collaboration and learning with partners and policy and programme teams.

Lessons learnt

Leverage current trends inside and outside the organisation

Capitalising on the local social and political climate plays a tremendous role during the inception stage of any innovation. Strategically identifying and taking advantage of windows of opportunities both inside and outside the organisation can act as a strong facilitator for internal mainstreaming of an innovation. Increased attention – veritable hypes – on specific innovations and technologies, can open windows of opportunities but they also can also jeopardise adoption efforts as attention from senior management moves to the "the next big thing". DFID colleagues from the start emphasised the need to not only invest in a range of behaviourally informed initiatives in partner countries, but also to invest in multi-year efforts that target internal change and capability-building.

Develop a realistic vision of adoption

Having a shared vision of institutionalising an innovation and utilising a well-established and evidence-based framework to intentionally guide this adoption process can be a key ingredient for success. Developing a detailed adoption vision, an outline of what a desired future state looks like, and successfully mobilising support for this vision among key senior managers was key for the innovation team. Integrating and framing innovative approaches like behavioural insights and behavioural science within wider and more broadly accepted visions and mandates for organisational change, such as adaptive management, was also beneficial.

Use behavioural science to enable the adoption of innovation

Treating the adoption of an innovation itself as a target behaviour for change and applying behavioural principles in influencing this behaviour change internally within the agency, can be an effective approach for enabling mainstreaming of innovation within organisations. The FCDO's strategy of using behavioural science for mainstreaming behavioural science, by employing the methods, mechanisms and mindsets approach, enabled its effective adoption across the agency.

Anticipate areas of risk aversion and address them upfront

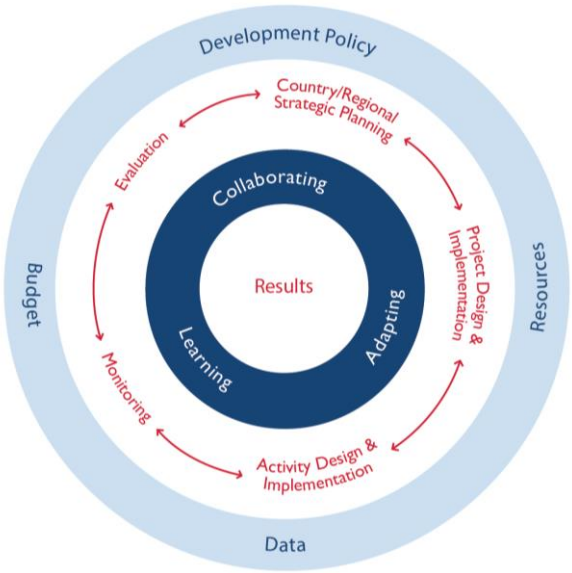
Positioning an innovation as a strategy for risk mitigation can play a key role in addressing an organisation's risk aversion. The FCDO leveraged the evidence-based and iterative nature of the behavioural science approach in framing behavioural science as a way to better manage programmatic risks and, to a degree, reputational risks.

It is extremely important for innovators to demonstrate the success of innovations to enable its wider adoption. At the early stages of adoption, there is strategic value in not only choosing easy-win initiatives for demonstrating successes, but also diversifying the innovation portfolio with both research-oriented as well as impact-oriented projects. The FCDO accomplished this through its blended approach which hedged programmatic risks between these two broad categories of projects.

6 United States Agency for International Development (USAID)

The United States Agency for International Development (USAID), in line with America's foreign policy, promotes the United States Government's vision of international development and disaster assistance and humanitarian efforts "through partnerships and investments that save lives, reduce poverty, strengthen democratic governance, and help people emerge from humanitarian crises and progress beyond assistance" (USAID, 2018[67]). USAID seeks to be a catalytic actor driving development results; its work "advances U.S. national security and economic prosperity, demonstrates American generosity, and promotes a path to recipient self-reliance and resilience." To help operationalise this mission, USAID and the Department of State drafted the Joint Strategic Plan FY 2018-22 (State Department and USAID, 2018[68]). A key element of this plan is USAID's Program Cycle (USAID, 2022[69]), which strives for "efficiency, effectiveness and meaningful results" through continuous evaluation, reflection, and adaptation (USAID, 2022[70]). The Program Cycle was designed by the Bureau of Policy, Planning and Learning (PPL) in 2011, as a framework for "USAID's operational model for planning, delivering, assessing, and adapting development programming in a given region or country to achieve more effective and sustainable results in order to advance U.S. foreign policy" (USAID, 2022[69]).

Figure 6.1. United States Agency for International Development's Program Cycle



Source: USAID Learning Lab (n.d.[71]) CLA Toolkit, https://usaidlearninglab.org/cla/cla-toolkit.

The Program Cycle integrates contextualised strategic planning, activity design, implementation, monitoring and evaluation, to ensure all programmes are "evidence-based, take innovative approaches, respond to local priorities, leverage local resources, and work through local actors to promote

sustainability" (USAID, 2022[70]). Systematic monitoring and evaluation are core components of the Program Cycle. To enable more adaptive ways of working, USAID has developed, tested, and adopted a set of practices that form the "Collaborating, Learning, and Adapting" (CLA) framework, now forming a core component of the Program Cycle (USAID Learning Lab, 2022[72]). This is the principal innovation of interest in this case study.

The Collaborating, Learning and Adapting (CLA) framework refers to a set of practices corresponding to strategic collaboration, continuous learning and adaptive management that links together all of the other components of the Program Cycle, and in turn enables the improvement of development effectiveness. USAID's Learning Lab stated in 2013 that, "learning has always been part of USAID's work, and most USAID missions and implementing partners are already practising CLA in some way. Our aim now is to make CLA more systematic and intentional throughout the Program Cycle, and to dedicate the resources necessary to make it happen" (USAID Learning Lab, 2022[73]). Over the last years, the teams advancing CLA within USAID have made further progress with institutionalising this framework and establishing CLA practices as ways of working across the agency and among implementing partners.

Inception of the innovation

Development progress is complex: solutions are usually not simple or obvious, those who would benefit often lack power, and political barriers are overlooked. The management configurations and mindsets in development co-operation organisations are generally designed to drive performance towards pre-defined objectives, often based on the assumption that results are achieved by following a linear pathway. The CLA framework emerged to address perceived shortcomings in the way USAID and partners tackle development challenges. It was designed to enhance strategic and systematic efficiency and effectiveness, particularly through a focus on continuous learning and adapting.

In the late 2000s and early 2010s, a small movement within USAID started addressing these issues systematically and the respective USAID officials noticed that various good practices already existed across the organisation and in different projects, but they were not labelled, systematically practised, or codified in policy. The USAID intrapreneurs, most of them working specifically on learning, set out to document good practice, test new practices, provide capacity strengthening support and eventually codify guidance to enable everyone in the organisation to work more adaptively. The intent was to develop a framework that outlines a systematic approach to addressing the efficiency and effectiveness gaps by providing "intentional planning and processes to help implementers become more nimble, knowledge-driven and responsive to the evolving root challenges that programs and projects face in achieving development objectives" (FHI 360, 2022[74]). This framework, however, needed to be adaptable to country contexts and provide flexible guidance.

In 2011, the creation of USAID's Policy Planning and Learning (PPL) office accelerated progress. In the early stages, the PPL team focused on identifying and codifying existing good practices across country contexts and thematic areas to infuse CLA into strategic planning. Subsequently, the PPL team supported project design. One example was the close collaboration with the USAID "Community Connector" project in Uganda (FHI 360, 2022[75]). The project aimed to improve household food security, income generation and nutrition through innovative and multi-sectoral approaches. Community Connector was among the first projects where the new CLA framework was integrated and tested in the design, implementation, and monitoring and evaluation of the project (FHI 360, 2022[74]). The CLA framework was applied in a bespoke way, focusing on the specific challenges and needs of involved stakeholders, and then refined based on the experiences of the early adopters throughout the implementation cycle of the project. Following this and other early trials, the USAID team identified more early adopters and invested in codifying an exhaustive list of good practices with corresponding tools and resources to encourage wide uptake of CLA in relevant USAID contexts.

The adoption journey

This case study briefly describes the journey of the adoption of CLA throughout USAID. It is structured along the five organisational factors: clear mandate, culture of learning, context, collaboration, and capacity.

Clear mandate

Definition. Resources, both time and financial, are allocated for a team to lead or co-ordinate the adoption process, and incentives are in place to encourage others to collaborate. Senior leaders work to remove barriers to adoption.

In the 2000s and 2010s, the adoption journey of CLA in USAID was mainly driven by dedicated staff on the ground. It was a journey characterised more by bottom-up engagement, rather than through a top-down mandate. According to USAID colleagues who played pivotal roles in advancing CLA in the agency, the quest of mainstreaming adaptive management approaches within USAID has gone through cycles of intense activity and dormancy. This was mainly influenced by the agency's overall role in foreign policy and corresponding strategic priorities as well as movement of key people involved in CLA activities. Prior to 2009, several policy roles related to country-level implementation, monitoring and evaluation had falled out of practice and/or were transferred from USAID to become part of the Department of State's scope of work. This provided additional challenges in advancing CLA within the Program Cycle and across the agency due to a lack of a clear mandate to lead on these aspects directly. In the year 2009, with the change in the US administration, these policy and programming functions were restored to USAID (Saltzman, 2011[76]) and the work of USAID intrapreneurs to identify, test and institutionalise more adaptive and systemic approaches to programme design and management gained traction again.

The change in the agency's strategic priorities and the re-establishment of the Program Cycle reignited dedication and focus among a critical mass of USAID staff to infuse more focused learning and adaptive approaches throughout the reconstituted Program Cycle. Over the following years, more and more programmes incorporated and used one or more components of strategic collaboration, continuous learning, and adaptive management. The PPL team was founded in 2011 with a clear mandate to advance organisational learning, and improve practices related to implementation, learning, and adapting. The PPL team provided support and invested in codifying an exhaustive list of good practices with corresponding tools and resources. The team set out to develop a standardised but customisable procedure and methodology so that adaptive ways of working can be taken up whenever appropriate and by everyone in USAID and with implementing partners. This included codifying practices on incorporating CLA across all stages of the Program Cycle; such as official guidance documents that provide recommendations for integrating CLA into activity design and implementation (USAID, 2021[77]), procurement processes (USAID, 2021[78]) and drafting solicitations (USAID, 2021[79]), as well as examples, and technical assistance to innovate new CLA practices.

Throughout the adoption journey, the individuals and teams advancing CLA focused on aligning their work to organisational priorities and USAID's overall mandate. The PPL team referred to documents such as USAID's risk management policies and the 2018 USAID Risk Management Statement (USAID, 2018[80]) to underscore the mandate for CLA in the wider development co-operation and organisational context.

Resources and leadership. Flexible but robust sources of funding are crucial to widespread and sustainable adoption. To test adaptive management approaches and design a bespoke framework that is customisable and ever evolving, dedicated resources are vital. In 2015, senior leaders approved a support contract dedicated entirely to CLA, which allocated approximately USD 5 million per year from PPL and remained open for contributions from other parts of the agency. The magnitude of funding and its design and management had a strong multiplier effect in unlocking the potential for CLA to grow, as these resources funded the staff positions and selected activities, for example, annual case competitions, training

on innovation and hiring additional personnel (e.g. CLA/ Learning Advisors). Organisations that commit to adaptive management need to secure relevant staff time, resources, and financial support.

Culture of learning and collaboration

Definition. The culture of the development organisation supports adoption. This means collaboration – high levels of connectedness, trust, knowledge of others' work, and drive to collaborate between different teams or divisions – as well as processes and managers who support people and teams in taking risks, learning, and sharing lessons internally and externally.

Culture of learning. When learning and collaboration are prioritised in an organisation, an overall enabling environment is created to innovate seriously and strategically, and this in turn favours adoption. The CLA framework at its very heart upholds the principles of collaboration, learning and adaptation which are also reflected in the organisation's culture. The culture can support and strengthen CLA procedures, while CLA principles can serve as the foundation for a positive organisational culture.

CLA takes into account programmatic learning and shifts generated by the activity (outward generating) as well as through internal or external learning sources. USAID's CLA team for example, realised that the traffic light scores that some country missions employed to mark programme progress at annual programme reviews were not conducive to learning. Yellow or red marks overall induced a sense of fear and defensiveness in staff, and inhibited open conversations about progress, changes in the external environment, and how things could be adapted differently by USAID and partners. Accordingly, the team advocated decommissioning this traffic-light scoring system and replacing it with open narratives and a mandatory discussion around the topic "What have we learned that suggests adaptation?".

An example of how internal sources of learning feed into programmatic learning is evident through the establishment of the Learning Lab website. The PPL team had the explicit mandate to advise country missions on learning and adapting and to create peer-learning mechanisms across the organisation. To continuously strengthen its culture of learning, it the PPL team established the USAID Learning Lab, which is now the central hub for advancing CLA across the organisation. The Learning Lab launched and facilitated an organisation-wide Community of Practice to exchange lessons and inspiration on adaptive management as well as curated the CLA Toolkit (USAID Learning Lab, n.d.[71]), developed several learning podcast series, published a collection of good practice case studies, conducted annual case competitions (USAID, n.d.[81]) and more. The CLA Toolkit enables staff to understand CLA, make the use of it systematic and deliberate, and guarantee that the required resources are available to support it. It directs practitioners in identifying learning questions, taking into account prospective collaborators and co-operation opportunities, understanding how data and knowledge affect decision making, knowing when to adapt, and how to assist others in doing the same.

"Pause and Reflect", an integral part of the CLA Toolkit, has the objective of reflection and learning as its cornerstone (USAID Learning Lab, n.d.[82]). This is incorporated not only in programme cycles, or in programme After-Action-Reviews; to identify, capture, and act upon lessons learnt in technical, cross-cutting, and management activities; but also in business-as-usual organisational activities, such as "Designing and Facilitating Learning-Focused Meetings" (USAID, 2018[83]). Thus the culture of learning is spread across operational, programmatic and other divisions of USAID.

Culture of collaboration. Cross-sector collaboration and learning across geographical and thematic organisational units has happened throughout the history of the agency and has been actively promoted by senior management. The overall culture of USAID can be characterised as collaborative across organisational boundaries, including between headquarter locations and country missions. In this context, the teams advancing CLA were able to leverage existing mechanisms such as internal networks and communities of practice. As teams across thematic and geographical areas all used the Program Cycle,

the work on adopting CLA practices and improving programme design, implementation, monitoring, learning, and evaluation was well set up to build further cross-organisational learning mechanisms.

An essential component of the CLA framework is the "Learning Agenda" which places a strong emphasis on collaboration as being critical to filling knowledge gaps, generating evidence and adapting projects (USAID Learning Lab, n.d.[71]). Promoting a culture of collaboration with peers and external stakeholders, especially local knowledge sources, to ensure continuous learning within USAID has led to the creation of an enabling environment for the adoption of CLA.

USAID's development funding stream also supports the adoption of CLA by facilitating team-building activities, staff bonding events, and other efforts to enhance professional culture and climate. Connectedness among staff, trust, and decision-making discretion are essential facilitators to the adoption of innovation. A recent study by USAID also found that employees who reported higher levels of using CLA, also reported higher levels of empowerment, engagement, satisfaction, and perceived organisational effectiveness (Salib and Shapiro, 2017[84]). Moreover, this relationship was reported as strong, positive, and statistically significant.

Context

Definition. The context of the organisation enables adoption. This means alignment with priorities – in which the innovation supports key organisational priorities or is itself a clear priority – as well as an administrative environment in which it is possible to adjust or change rules and regulations.

Alignment with priorities. In 2016, the Office of Management and Budget (OMB) introduced a new requirement for Federal Departments and Agencies to integrate Enterprise Risk Management (ERM) within their internal control systems (USAID, 2018[80]). The ERM approach emphasises addressing the full spectrum of risks across operating units and managing their combined impact as an interrelated risk portfolio, rather than examining risks in silos, which can occasionally provide distorted or misleading views with respect to their ultimate impact. ERM also recognises that managing risk isn't just about minimising or controlling risk; it's about taking advantage of opportunities to maximise the likelihood of achieving our overall mission while mitigating threats. The cornerstone of USAID's ERM programme is the "Risk Profile" in which each operating unit identifies the most significant risks to achieving its objectives and determines a plan for managing them (Obester, 2019[85]).

Influenced by the ERM approach to improve procedures, USAID invests in formalising and standardising CLA guidance, while encouraging its staff and partners to customise and adapt approaches, depending on the specific needs and challenges of each context. ERM and CLA thus have similar underlying principles: a) both emphasise continuous learning and adapting (building risk profiles in ERM and mission's plans in CLA), b) both approaches value diverse perspectives and hold collaboration as crucial to identifying and managing uncertainty, and c) both approaches focus on course-correcting to achieve their overall objectives (Obester, 2019[85]).

The OMB also states that "an agency's objectives and the context in which it operates should inform its risk appetite." At USAID, where the main goal and role in supporting US foreign policy and national security objectives necessitates operating in a range of high-threat scenarios and fragile contexts achieving effective ERM is especially crucial (USAID, 2018[80]). The need for development and humanitarian aid is usually greatest in environments marked by high risks. Because of this, USAID frequently accepts a higher level of overall risk to seize opportunities while putting in place improved procedures to reduce the threat of not meeting their goals. There is rarely just one way to achieve development goals, and providing foreign aid requires constantly making a variety of cross-disciplinary, risk-informed judgments. This practice of assessing and responding to risk embeds the informed and adaptive decision-making approach, which itself is aligned with the organisational emphasis placed on prioritising local contexts.

Administrative environment. Adoption is also contingent on the design of the guidance being adaptable to each country's context, albeit this is not an entirely sufficient condition for adoption. Given the complexity of development challenges CLA seeks to address, USAID learned that dedicated staff are required to work on two related challenges: a) to support USAID teams, especially country missions, by leveraging CLA methods, and b) to work on adoption at an organisational level. This includes securing senior management support, creating, and facilitating an organisation-wide community of practice, launching annual case competitions, working with headquarter staff on procurement, partnership, and other rules and embedding CLA in staff onboarding processes.

Having CLA advisors assigned to in-country programmes or in proximity to the development activity and external partners has proven to be of value for successful CLA application. Given that existing missions are challenged by competing priorities such as meeting yearly strategic objectives, effective integration of CLA can become an afterthought. This implementation challenge was managed by one of the USAID's mission by hiring a dedicated Learning Advisor, "somebody whose full-time job is to advance CLA in the mission, and somebody who has the right skillset for that" (Young and Simpkins Pollack, 2022[86]). This example proved highly effective in institutionalising CLA in that Mission, and thus generated innovations in CLA adoption that were then scaled across the agency, as well as providing an example that some other Missions followed. The importance of having a Learning Advisor as an important structural characteristic of a mission comes from the fact that American staff involved in missions change relatively frequently as programmes start or end and new people enter the field. In this relatively frequent transition and flux, a key function of the Learning Advisor is to mitigate institutional memory loss. As the missions are important sources of feedback for stimulating iterative improvement, it is vital not to lose the observations of American personnel on the ground if they leave, and to value and leverage the knowledge of the local staff. A dedicated Learning Advisor can keep track of these observations and lessons drawn from the practical implementation of CLA. Dedicated resources are necessary to test adaptive management approaches and design a bespoke framework that is customisable and ever evolving.

Collaboration

Definition. External and internal networks allow for uptake and emergence of innovations. The organisation is well connected with relevant external partners. It also leverages internal networks to create awareness of the innovation's value and promotes its use across organisational silos.

Internal networks. Proactive integration of CLA within the agency requires "leadership to really fully step into the role they could play in advancing CLA and other knowledge and learning efforts at the agency" (Young and Simpkins Pollack, 2022[86]). This involved substantial internal networking, professional manoeuvring and upward advocacy as key principles of change management by early pioneers of the CLA approach. Support of senior management in the promotion of mission-specific adaptive management added credibility and increased the appeal of adopting CLA among different country and project leaders. Evidence and compelling case studies, as well as growing demand from USAID staff to work adaptively are important elements to secure continuous top-down support.

USAID also employs formalised mechanisms of internal engagement to ensure uptake and use of innovative change processes, such as an internal Community of Practice where individuals within the agency form relationships and networks to voluntarily learn from each other.

External networks. External partners are a crucial source of input for the enhancement of CLA. The organisational structure of the CLA team should promote easy feedback loops and iterations of the innovation. From CLA's inception the team has worked with external partners to bring in evidence from other organisations and to help influence USAID decision makers. Numerous key insights on how CLA operates are disseminated through informal relationships illustrating the adaptability and inclusiveness of the agency's culture. An important facet of USAID's external collaborations has been prioritising the dynamic of a partnership which strengthens local systems, development, and community actors. An

development integration experiment with Malawi which placed primary importance on co-ordination and collaboration across technical teams within USAID as well as local implementing partners found that "partners want to be engaged in a collaborative and meaningful manner, in which they feel respected and dealt with as contributors to the mission's greater objectives" (Menard, n.d.[87]).

Evidence collected from several missions reveals the significant positive benefits to both the agency and the local partners resulting from embracing CLA practices. "If partners are provided with a logical structure to follow and are engaged as a larger USAID 'family', they are willing to do what needs to be done to affect better development results." (Menard, n.d.[87]).

Capacity

Definition. Innovation teams have relevant skills, experience and confidence. This includes sufficient experience of managing organisational change (a different skill set to innovation) as well as experience working in building internal alliances.

A barrier encountered to CLA adoption was institutional memory loss. CLA, by definition, is meant to adapt to its environment. A substantial level of information and local understanding is required to implement CLA effectively. High turnover in the teams using CLA meant that some were leaving USAID with valuable information. To address this challenge, USAID employs several operational codes and procedures that ensure adequate retention of institutional learning through formal onboarding and training of new recruits as well as institutionalising the CLA framework in formal engagements with partners, as outlined in "Managing Staff Transitions Through Collaborating, Learning and Adapting" guide (USAID, 2019[88]). "We have been trying to cultivate change from within the agency and also equipping our partners to carry these same messages so that the staff in the field, who are incredibly busy and overstretched, hear these things more than once, and they hear them from us in a certain context" (Young and Simpkins Pollack, 2022[86]).

The Learning Advisors previously mentioned that were assigned to certain USAID missions had specific skills that made them effective adopters and facilitators of CLA. These included: active listening; appreciative inquiry; lateral thinking; collaborating across teams, units and sectors; advanced communication ability to engage with and persuade leadership; expertise in packaging complex information in a digestible and accessible way, and strategic change management. However, given the elusive nature of the skillset, there is the possibility of these skills and roles getting lost in the job descriptions as well as recruitment screening and evaluations. "This makes it harder for us to find those people and it makes it less obvious for people with those skills to come to us" (Young and Simpkins Pollack, 2022[86]). Stringent administrative, resource and political limits on the number of people that can be part of mission teams, could result in restricted capacity for having a dedicated Learning Advisor. One way that the agency supports existing staff in building greater capacity in adaptive management is by providing access to several training courses via USAID University. This includes not only online and in-person training on CLA and building adaptive competencies, but also access to resources via the CLA Community of Practice (USAID, 2019[88]). Proactively making time for staff to pursue learning and reflection opportunities also ensures that staff can build relevant skills to manage complexity and organisational change.

Lessons learnt

This case study highlighted a few important barriers and several good practices on the adoption of innovation.

It is essential to measure and communicate the comparative advantage of the innovation

A challenge to adopting innovation is the difficulty in measuring its impact and comparative advantage. Throughout the adoption journey of CLA, the practitioners and teams who worked on institutionalising CLA put a concerted effort into research, analysis and communication, particularly internal advocacy. Research on the effects of adaptive management in the international development sector is comparatively scant, dispersed and somewhat inconsistent with regard to its findings.

However, in the case of CLA, the team invested in a library of case studies and an evolving repository of evidence. For example, two studies, Zambia's Community-Led Total Sanitation Program, (USAID Learning Lab, 2019[89]) and Global Communities' Ebola Response in Liberia, (Lindell and Shapiro, 2018[90]) offered compelling evidence of CLA's contribution to better development outcomes.

Adoption efforts require dedicated functions and resources

In USAID's case, it was and is essential to have a team dedicated to the innovation in question. The organisational structure of this team should manage feedback loops and iterations of the innovation. This is an enabler of another good practice, which is external partner engagement and feedback. From the inception of the innovation, the CLA team worked with external partners to bring in evidence from other organisations and to help influence USAID decision makers. The team overseeing the innovation should have proximity to local actors who can provide insights from the field and shape the innovation into the most appropriate form for their context.

To test adaptive management approaches and design a framework bespoke to the organisation that is customisable and ever evolving, it is essential to have dedicated resources. These resources fund the staff positions and selected activities such as the annual case competitions. Organisations that commit to adaptive management need to secure relevant staff time, resources and financial support.

Combining bottom-up and top-down dynamics is crucial to integrating CLA

Perhaps one of the most important enabling factors in the adoption of innovation is ensuring the active support of senior management. Key activities that engage senior management include the participation of selected senior managers in initiatives such as launching and announcing the winners of the annual case competition and sharing emerging new evidence on CLA's comparative advantage with key decision makers bilaterally and at other appropriate occasions.

The combination of a top-down, bottom-up approach has helped the agency to adopt CLA. The CLA team works continuously on securing and maintaining support from senior management (who rotate with some frequency), persuading them with evidence on results and comparative advantage. In parallel, it invests in nurturing a network of entrepreneurial staff eager to work in more politically informed, adaptive ways, with the internal Community of Practice being a key vehicle. At almost every stage of the adoption process – whether it was internal promotion of CLA, finding funding, or formalising CLA within the organisation, senior management were essential.

7 France: Agence Française de Développement (AFD)

The mission of France's development agency, the *Agence Française de Développement* ("AFD") is to "contribute to the economic, social, and environmental progress of low and middle-income countries" (AFD, 2022[91]). The AFD provides financial and technical assistance to countries, local authorities, companies, foundations and NGOs in areas related to climate change, gender equality, biodiversity, peace, education, and health. The organisation supports more than 4 000 projects in 115 countries and French overseas departments. In 2020, the agency's commitments amounted to EUR 12.1 billion for 996 new development projects, with 46%, or EUR 4.9 billion of AFD's financing and 73% of its grants and loan subsidies directed to the African continent (AFD, 2022[91]).

The AFD centres innovation and research in the "action matrix" of its 2018-2022 strategy (AFD, 2018[92]). Composed of three dimensions, the action matrix brings together regional geographic strategies, a thematic strategy that addresses issues such as digital transformation and social transition, and an overall and complementary research and innovation strategy. Intended to reinvigorate AFD through a focus on sparking new innovations and facilitating knowledge sharing, this innovation and research axis intends to chart a new path toward sustainable development. This approach is outlined in their current working document on innovation, the Research, Innovation and Knowledge Strategy 2019-2022 (AFD, 2019[93]). In this document, AFD outlines four central changes to its approach to innovation and research: partnerships with local researchers, a research focus on France's development priorities, improved self-assessment and learning, and increased support for innovation and experimentation. This last pillar is the principal interest of this case study, as it explores AFD's "new organisational modes, tools, methods, and decision processes adapted to complex development issues" (AFD, 2019[93]).

This case study examines AFD's intrapreneurship programme, which AFD's innovation unit oversees as part of its Innovation Lab (OECD, 2022[94]). Specifically, the innovation unit sits within the Innovation, Strategy and Research Division of the organisation as one of four central divisions alongside Operations; Mobilisation, Partnerships and Communication; and Finance.

The AFD envisions the intrapreneurship programme to be a "space where people can be comfortable with uncertainty, with doubt" and where employees have "the right to fail, the right to experiment" (Dadi, 2022[95]). Since the inception of the intrapreneurship programme in 2018, the innovation unit has updated its modus operandi and the selection criteria for the annual internal call for proposals each year. Teams from AFD country office locations and those based in headquarters are eligible to submit a testable and scalable idea. The selected teams receive financial resources, and methodological support to further develop and test their initiatives. The methodological training for chosen intrapreneurs includes approaches such as user-centred design, agile management, and organisational change methods. Selected intrapreneurs commit to allocating between 5% and 15% of their time to set up a project, which usually takes two to three years. Within each project, there are typically four to six staff members. The initial phase for a project includes submission of a proposal in response to the call for proposals, followed by an ideation phase that tests the solidity of the idea. After this has been ensured, the innovation unit and its executive committee conduct several rounds of refinement and review to decide upon appropriate financing.

The programme seeks to test the appropriateness and comparative advantages of this approach, compared to traditional ways of working. Mainstreaming the intrapreneurship programme seeks to add new methods and approaches to the organisation's toolbox. Additionally, as a somewhat more intangible intended outcome, it aims to instill a more creative mindset among the agency's personnel, in pursuit of AFD's efficacy in addressing complex, multidimensional development challenges.

Inception of the innovation

In September 2015, the Addis Ababa Summit highlighted new challenges for development financing. This was followed by the United Nations' adoption of the 17 Sustainable Development Goals (SDGs) (AFD, 2022[96]), which outlined clear goals, targets and indicators which provided a roadmap to every nation for eradicating poverty, preserving the environment and the climate, and supporting good governance and prosperity. In December 2015, the Paris Agreement on the climate was signed. "Its implementation became one of the core missions of AFD" (AFD, 2022[91]). This catalysed the French Government into increasing its budget for development assistance by an "additional 4 billion euros up to 2020, including 2 billion for the climate" (AFD, 2022[91]).

The need to accelerate action to meet the SDGs by 2030 and additional funding towards development assistance prompted AFD leadership to invest in change management (OECD, 2018[97]) – developing AFD's 2018-2022 strategic orientation plan towards its mission of "finance[ing], support[ing], and accelerat[ing] the transition to a fairer and more sustainable world" (AFD, 2018[92]), and restructuring the organisation for increasing its functions in alignment with this plan. Given the strong focus of the plan on the third axis of the action matrix outlined above, i.e. the research and innovation axis, the nucleus of its change management efforts prioritised development of a culture of Kaizen (i.e. continuous improvement). AFD leadership realised the need for *"ameliorage-en-continue", i.e.* "continuous improvement", not only for the purpose of positioning AFD at the cutting-edge of international development co-operation, but also to ensure AFD's survival in this volatile, uncertain, complex and ambiguous world (Bennett and Lemoine, 2014[98]). This emphasised the potential of the intrapreneurship programme to test new and better ways for the organisation to address complex development challenges.

In addition, the rise of a global intrapreneurship movement, particularly in the private sector, influenced the programme's inception. To effectuate this spirit of *l'amélioration continue*, or continuous improvement (Dadi, 2022[95]), the Chief Executive Officer of AFD supported the launch of the intrapreneurship programme in 2018. A key objective of the intrapreneurship programme is to cultivate participants' creative and experimental mindset, and positively influence and eventually change the culture of the agency as whole. The programme is currently in its fourth year, having evolved from focusing on change management and internal improvement strategies to its current iteration in which it emphasises innovations and partnerships with external actors.

The adoption journey

This case study describes the journey of AFD's organisation-wide adoption of experimental methods and mind-sets through the intrapreneurship programme. It is structured around five factors that shape the intentional mainstreaming of a specific innovation in an organisation: clear mandate, culture of learning, context, collaboration, and capacity.

Clear mandate

Definition. Resources, both time and financial, are allocated for a team to lead or co-ordinate the adoption process, and incentives are in place to encourage others to collaborate. Senior leaders work to remove barriers to adoption.

The AFD's 2018 – 2022 Strategic Orientation Plan displays a clear intention for the adoption of innovation: "AFD Group adds a third dimension to this matrix with a cross-cutting axis that operationalizes research and innovation… AFD Group will place innovation at the centre of its practice… it will reorganize its workplace to foster knowledge-sharing and leverage collective intelligence while also creating spaces and cultures dedicated to innovation*"* (AFD, 2018[92]). The intrapreneurship programme acts as a new approach to enabling and leveraging this collective intelligence internally by promoting the "right to initiative" principle, which "helps to create an entrepreneurial thrust that fosters innovation and the renewal of an entrepreneurship culture*"* (AFD, 2019[93]).

The adoption journey of the intrapreneurship programme is a dynamic interplay between top-down directives and bottom-up engagement. AFD's leadership played a crucial role in its inception and promotion throughout the organisation. Successful adoption requires top-down support and securing this requires context-fit approaches. There is no blueprint for securing senior leadership support. In the case of AFD, one main reason facilitated the support of leadership:

Alignment to organisational priorities. The organisation's new strategic plan called for a "system-restructuring" and thus provided a clear mandate for change management efforts. The plan outlined the ambition of pivoting from task-oriented work to people-oriented ways of working – i.e. AFD's new human-centred organisational management puts its staff at the heart of strategic decision making. The strategy specifically targeted changing the overall culture of the organisation and sought to incite experimental methods.

AFD senior leadership realised early on that the organisational change ambitions would put further pressure on its work force, particularly on middle management. A growing number of staff were already testing new ideas and approaches when the new organisational strategy was launched. Top management support was secured, and the focus was now on obtaining buy-in from middle management. Staff in this category usually experience time and resource constraints and face multiple pressures in meeting their programme and project outcomes and objectives. These pressures and dominant incentives created a bias for using "tried and tested" solutions versus "trying and testing" novel solutions and being seen as risk-taking. Hence, such initiatives require sponsorship from top management to enable them to take balanced and calculated risks.

To secure continuous support from senior management, AFD instituted an executive committee dedicated purely to innovation and intrapreneurship. This committee meets four times a year to discuss the strategic direction and review progress. The executive committee, in collaboration with the innovation unit, serves a dual purpose: conveying top management support for the intrapreneurship programme to the organisation, particularly to middle management, and tracking its progress, quantifying its added value and showcasing successes and lessons to the rest of the organisation.

Culture for learning

Definition. The culture of the development organisation supports adoption. This means collaboration – high levels of connectedness, trust, knowledge of others' work, and drive to collaborate between different teams or divisions – as well as processes and managers who support people and teams in taking risks, learning, and sharing lessons internally and externally.

The intrapreneurship programme aims to further enhance AFD's culture of collaboration across thematic, functional and geographical business units. Since the expansion of AFD's mandate by the French Ministry

of Europe and Foreign Affairs and its larger scope of sectoral and geographical fields of intervention, the organisation has invested in horizontal collaboration mechanisms. The AFD's 2019-2022 Research, Innovation and Knowledge Strategy refers to an already existing culture of collaboration and learning, and seeks to further enhance teamwork and knowledge sharing within the organisation and with external partners (AFD, 2019[93]). The intrapreneurship programme has helped establish networks of internal and external champions dedicated to advancing projects. It has created new connections between intrapreneurs and immersed them in the innovation ecosystem.

The managers of the intrapreneurship programme and its supporters in the executive committee are committed to moving it from being an experiment in project management to being a managerial practice in itself. In its first three years, a total of 86 applications were submitted. In total, 24 projects were selected and financially and technically supported in its development and test phases. Out of these 24 projects, 6 (i.e. 25%) have already gone through all stages of testing and transitioning to scale. This is significantly higher than the industry average of 15%, according to the data from the Intrapreneurship Institute on projects started as part of such initiatives. Furthermore, apart from featuring 57% women intrapreneurs and involving all generations, it has also ensured collaboration between teams from different departments (i.e. from the first three seasons, 68% of the teams had members from more than three different executive departments). The innovation officers responsible for this programme leveraged their long-standing institutional knowledge and experience of working at AFD to devise a piece-by-piece funding strategy, wherein selected ideas and projects of the intrapreneurship programme did not demand funding to be earmarked for all stages of its lifecycle; rather, it requested just enough financial assistance required by the winning team to reach the next milestone, following which additional funding for the following milestone was requested based on demonstrated success of achieving the first milestone. This piece-by-piece success demonstration and funding proposal approach played a significant role in building the executive committee's confidence in the programme.

Context

Definition. The context of the organisation enables adoption. This means alignment with priorities – in which the innovation supports key organisational priorities or is itself a clear priority – as well as an administrative environment in which it is possible to adjust or change rules and regulations.

Alignment of priorities. As outlined above, the need to accelerate action for meeting the SDGs by 2030 and the corresponding increase in funding towards development assistance by the French government, which prompted AFD leadership to invest in change management, played a significant role in the inception of the intrapreneurship programme and its adoption ambitions. Furthermore, this programme perfectly aligned with AFD's priorities, outlined in its 2018–2022 Strategic Orientation Plan: "Operationalising research and innovation will enable the Group to start thinking about future development today by constantly disseminating new thinking and approaches throughout its ranks", enabling it to achieve its 5P mission more effectively: "Planet earth, the well-being of Populations, Peace, shared Prosperity, and global Partnerships" (AFD, 2018[92]).

Administrative environment. Two main components of the administrative environment of this programme facilitated the adoption journey:

1. **The design of the intrapreneurship programme**. The innovation officers responsible for this programme intentionally and thoughtfully took into consideration the agency's current administration environment and culture during its preliminary design stage. In the first year, this team of innovation officers decided to keep the programme open to anyone and everyone in the organisation by not focusing on any specific thematic areas or geographies. This was intended to ensure a baseline level of comfort and openness within project applications that would encourage novel ideas and engage as many employees as possible. Once employees had been introduced to the intrapreneurship programme in the first year, the innovation team, in the second year,

introduced the theme of “driving internal change” and invited submissions with a focus on AFD's operations and other internal aspects. This approach of targeting “quick wins” enabled the programme’s adoption within the organisation. In its third year, the call for proposals sourced novel ideas that pursue SDG implementation.

2. **Intention of reorganising the agency to strengthen the overall culture of learning, experimentation and collaboration**. In its 2019-2022 Research, Innovation and Knowledge Strategy, the AFD committed to taking the following steps for designing an administrative environment conducive and enabling of research and innovation (AFD, 2019[93]):
    - organising meetings and conferences on innovation, centred on flagship regions and themes and which dovetail innovative approaches or fields with sustainable development challenges
    - offering to its partners and staff a diversified range of training courses dedicated to inducing creativity and innovation-oriented thinking
    - providing project support and incubation schemes implemented by AFD Group agents and which are of formative importance, to encourage agents to become involved in the innovation process
    - developing proposals for meetings, workshops and learning expeditions to foster an open-mindedness vis-à-vis new areas and new practices.

Collaboration

Definition. External and internal networks allow for uptake and emergence of innovations. The organisation is well connected with relevant external partners. It also leverages internal networks to create awareness of the innovation's value and promotes its use across organisational silos.

The AFD’s 2018-22 Strategy strongly reinforces its new methodology of programming (both innovation-focused and otherwise) through partnerships. It commits to systematically favouring partnerships and multi-actor coalitions for both financial and technical assistance. AFD pledges to adopt a “partnership reflex” for all of its aid operations, i.e. it will “contribute to any partnership or coalition where joint action can add operational value – financing, expertise, analyses, and/or office network and contacts – and whenever the organisation can capitalize on its experience and work towards innovative solutions…By entrusting project leadership and implementation to these partners, AFD will create opportunities for innovation and knowledge-sharing between peers.” Furthermore, it also commits to “connect its new innovation space to counterparts and actors in the Global North and South, collaboration with Caisse des Dépôts et Consignations (CDC) and with ADEME, the French environment and energy management agency” (AFD, 2018[92]).

Internal networks. Based on legislation passed by the French parliament on 4 August, 2021, Expertise France, France’s international technical co-operation agency (which was a separate entity and worked with AFD and Proparco as partners) merged with the AFD Group. As a result, the AFD Group (now consisting of AFD, Proparco and Expertise France) seeks to provide a collaborative and unified operational platform “combining financial and technical dimensions, and possessing a unique range of sustainable development tools for supporting our clients” (AFD, 2022[99]). This merger created a new challenge to bring together expertise, informal networks and cultures from different entities. To enable research and innovation in the organisation, AFD “will also create, manage, process and share knowledge through models, research, evaluations, and expert networks (in particular through its blog, “Ideas for Development”), thus adding value to its aid operations” (AFD, 2018[92]). The blog plays an important role in socialising innovative work within the organisation and has led to cross-fertilisation of ideas. The executive committee has played a significant role in assisting the innovation unit in promoting the blog as well as the intrapreneurship programme as a vehicle for horizontal collaboration (AFD, 2022[100]).

External networks. Innovation is sparked by new ideas, with inspiration often coming from social entrepreneurs and frugal innovators from low and middle-income countries, from startups and other private sector players and sometimes from other development organisations. AFD has emphasised its commitment to partnerships and is investing in horizon scanning to identify new, promising partners. For example, in March 2022, the AFD Group launched the IA-Biodiv Challenge in collaboration with France's National Research Agency, the French Foundation for Biodiversity Research, the National Biodiversity Centre, the National Metrology and Testing Laboratory, and technological experts in AI from the private sector. This initiative brings together development professionals, academics, scientists, and technologists from the private sector. It is the result of discussions at an informal meeting following a biodiversity event, where motivated individuals exchanged notes privately about potential opportunities for collaboration. The intrapreneurship programme leverages such types of informal meetings, in an attempt to gradually incentivise it formally within the organisation, so that this approach to relationship-building around innovation becomes part of AFD's institutional memory. This approach has contributed to new or strengthened partnerships with research institutions such as the French Agricultural Research Centre for International Development (CIRAD), *Agence Nationale de la Recherche* (ANR), Airbus and the European Space Agency and companies such as Earthworms, Veolia, Microsoft Lab and others.

Capacity

Definition. Innovation teams have relevant skills, experience and confidence. This includes sufficient experience of managing organisational change (a different skill set to innovation) as well as experience working in building internal alliances.

Staff capacity for the innovation. The AFD innovation unit supports intrapreneurs with methodological support in approaches and fields such as agile management, human-centered design and data analytics. As such, it is made up of a combination of individuals with specific expertise such as in data science along with persons who bring experience from the private sector and those who know the organisation, its culture and modes of operation very well. The innovation unit has successfully approached and engaged the Executive Director of Human Resources to help recruit the best individuals for the unit (Lackéus, 2015[101]).

Organisational change capacity. Supporting intrapreneurs in developing, testing and scaling novel responses to development challenges requires specific expertise. This is distinct from expertise needed to drive successful change management and help institutionalise experimental ways of working. Several members of the innovation unit and others within AFD bring extensive experience in change management. Furthermore, the strong support of senior managers creates relevant capacity. The innovation unit is strategic in linking the intrapreneurship programme and its larger objectives to the ongoing organisational change processes. "Innovation regenerates organisations*"* (Dadi, 2022[95]). The Innovation Unit considers that the success of the programme has a key role in ensuring AFD's survival.

Lessons learnt

Diversifying and formalising top-down support

Top-down support is crucial to institutionalising a new way of working and to building capabilities in a specific technology. What worked in the case of AFD was first to diversify the support base among senior management. Members of the innovation unit were strategic in approaching a range of senior individuals to secure their support. Given staff turnover rates, the unit decided to invest in securing support from at least four individuals.

Secondly, the formalisation of support plays an important role in conducive top-down support. The design and launch of the Executive Committee on Innovation and Entrepreneurship proved to be a conducive

vehicle to engage senior management in designing strategies and overseeing the progress of their implementation.

Leveraging intrinsic and extrinsic motivational factors

The intrapreneurship programme and more broadly, the introduction and adoption of experimental methods was framed from the beginning as a way to support AFD staff with strong intrinsic motivation to strive for better processes and results. Furthermore, the narrative built on the larger goal of change management and appealed to extrinsic motivational factors, namely the need to innovate to remain relevant. In this context, it not only meant pitching the innovation as having the potential to result in more efficient and effective processes and greater impact at scale, but it also meant presenting the innovation as essential for the survival of the organisation.

Creating low barriers for entry

AFD's innovation unit deliberately designed the intrapreneurship programme in a manner that was accessible to most if not all staff members, across functions. This was done by intentionally formulating a broad invitation for proposals in the first year, issued by senior management and linked to organisational priorities. The unit chose not to focus on specific thematic areas or geographies, hence, ensured a baseline level of comfort and openness amongst all staff members to collaborate and apply.

Attention to observability, evidence and story telling

Despite the innovation unit's low barriers for entry to the intrapreneurship programme it puts a premium on creating evidence early-on. The main mechanism to ensure this is through a stage gate method of funding. Selected teams receive a first tranche of financial support right away and then follow-up financial support when milestones are achieved as part of their work. This is structured in sprints, following agile management principles. This ensures that the intrapreneurship programme owners and selected teams agree on the appropriate metrics and monitoring mechanisms for each venture. Accordingly, evidence is created which is used to create stories on the intrapreneurship programme internally. These are shared mainly on the aforementioned blog and serve to inform, share lessons and as a learning mechanism for ventures as developing blog posts requires pausing, analysis and reflection.

8 Conclusions and recommendations

Towards the systematic adoption of innovation

The research undertaken for this paper found that innovation teams that strategically considered specific criteria related to the innovation they wished to bring to adoption had a significantly higher degree of success compared to teams that focused on responding to demand for country-level innovation support from across the organisation. Other success criteria identified are engaging staff having a stake in organisational development in innovation efforts, and assessing the effects of the various organisational factors on adoption efforts early on.

Examples of this include the French Development Agency (Chapter 7), the United States Agency for International Development (USAID) and their institutionalisation of adaptive management (see Chapter 6), the United Kingdom's Foreign, Commonwealth and Development Office (FCDO) and their adoption of behavioural insights (Chapter 5), Germany's Development Agency (GIZ) and its informed support of blockchain technologies (Chapter 3) and Korea's International Co-operation Agency (KOICA) and its work on digital technologies (Chapter 4). The intrapreneurs who pursued adoption all had the intent to move what was once novel out of the innovation space and make it part of the toolbox of their organisation.

In some cases, the novel method or technology was neither part of an innovation strategy, nor led by an innovation team. In other cases, it was a deliberate action by the innovation team to move a specific way of working or technology out of the innovation space and make it part of the normal way of working for an organisation. However, all organisations that successfully institutionalised the innovation were mindful of investing in the journey of adoption. This includes reflection on and validation of certain innovation criteria; articulating a clear vision; and identifying and working towards organisational factors that enable adoption.

Lessons for development co-operation organisations

Establish clarity on when, where and how the innovation adds value

Teams that work on strengthening the institutional capability for a specific approach or technology are well advised to assess the role of the innovation in the larger scheme of an organisation's priorities and ways of working. It is crucial to communicate to staff and partners which specific approach or technology is suitable for a specific challenge and when. For example, staff of the Blockchain Lab at GIZ learnt quickly that most project ideas featured a weak problem-solution match between the identified problem and the proposed blockchain solution. There is no such thing as a silver bullet in international development and innovation teams are well advised to communicate clearly when a specific approach or technology might be appropriate and of value-add, and when it is not.

Develop a realistic vision of adoption

Having a shared future state vision of the organisation and how staff and partners will use a technology or approach is a key ingredient for success. For example, teams working on behavioural science in the UK's FCDO developed a detailed vision of adoption, an outline of what a desired future state would look like,

and successfully mobilised support for this vision among key senior managers. Integrating and framing innovative approaches such as behavioural insights and behavioural science within a wider and more broadly accepted vision and mandate for organisational change, such as adaptive management, was also beneficial.

Measure and communicate the comparative advantage of the innovation

A challenge for all adoption processes is measuring and demonstrating the impact and the comparative advantage of a technology or approach. USAID's team put a concerted effort into research, analysis, communication and particularly internal advocacy, throughout its CLA adoption journey. The team has developed a library of case studies and an evolving repository of evidence.

Anticipate risk aversion and address it upfront

Positioning an innovation as a strategy for mitigating risk can play a key role in addressing an organisation's risk aversion. The FCDO, for example, leveraged the evidence-based and iterative nature of its behavioural science approach by framing it as a better way to manage programmatic risks and, to a degree, reputational risks.

Combine bottom-up and top-down dynamics

Both USAID and France's AFD worked on combining a top-down and bottom-up approach when advancing their adoption efforts. USAID, when working on the adoption of their CLA approach, set up and managed a network of entrepreneurial staff to work in more informed, adaptive ways. They also worked on securing continuous support from senior management by regularly providing evidence on results and comparative advantage. AFD diversified their support base among senior management and formalised top-down support by setting up the Executive Committee on Innovation and Entrepreneurship to engage senior management and to design strategies and oversee their implementation. Through a competitive in-house intrapreneur programme, AFD is nurturing bottom-up interest from staff.

Establish boundaries regarding in-house capacities and invest in partnerships

Public institutions have limitations regarding the talent and the capacities they can attract and retain. It is important to identify which areas related to a technology or approach are out of scope for the specific development co-operation organisation, and to then formulate boundaries and invest in partnerships with organisations that can stay on the cutting-edge. For example, KOICA realised that it is impossible to attract and retain top-notch digital experts in all its areas of development co-operation. The organisation invests in strengthening the capacities of development co-operation experts in general digitalisation knowledge while scanning the private sector and academia in South Korea for relevant expertise to create partnerships and strategically fill gaps that cannot be covered with in-house experts.

Democratise use by designing structured guidance for staff and partners

Often, specific approaches or technologies are used by "islands of excellence", small teams that seek to enhance their work and development outcomes while preferring to stay under the radar. A challenge for adoption is to enable each member of staff to use the approach or technology when appropriate. For example, KOICA established formal processes to mainstream digital as part of project approval processes and has produced guidance for headquarters and field staff. Next steps are providing additional information and practical guidance on digital, for example, in the formal onboarding procedures for new staff.

Recruit a diverse team to facilitate learning

A success factor for GIZ's team in its efforts to strengthen its institutional capabilities was to combine expertise on a) blockchain and digital solutions, b) development co-operation generally, c) consultancy skills, and d) institutional change. The latter is relevant in the context of adoption and is often overlooked in innovation teams that are pursuing the exploration of a specific technology or approach. Success for the Blockchain Lab was not just due to the individual projects and their impact in partner countries, but also to the degree to which the organisation as a whole acts as informed user and supporter of blockchain.

In many of the case studies examined the process did not unfold in a linear manner. Rather, the typical adoption of innovation is characterised by iterations, setbacks or at times acceleration, due to departing or newly incoming technical staff, changes in leadership and the external environment.

Recommendations

The recommendations below, underpinned by the research, provide a set of practices related to innovation management in general and the adoption of innovation in particular. They are aimed primarily at decision makers in bilateral development co-operation organisations, and more widely at all those working in development co-operation.

Increase focus on innovation management, and develop explicit goals related to capability building and the adoption of innovation

- Development and humanitarian organisations should position innovation efforts as having a two-fold benefit: as a means for furthering the sustainable development agenda – leaving no one behind, as well as a contribution to the overall development of their organisation.
- Bilateral agencies and other development organisations should assess their specific comparative advantages and unique strengths, and use this analysis to inform their vision for the adoption of innovation. Such a vision needs to reflect realistic ambitions, including defining boundaries for the scope of their innovation and institutional capability-building potential. A development organisation will not be able to develop world-leading capacities in emerging technologies and novel approaches. It should clearly define what can be achieved through in-house expertise, and which areas of work will be covered by partners.

Champion investment and leadership support for the adoption of innovation

- Investing in innovation projects or initiatives that target country-level impact is different from investing in adoption efforts. The latter refers more specifically to organisational capability building and change efforts. Unlocking funding for efforts targeting low and middle-income countries is usually easier than securing finances and senior management support for internal change processes. To emphasise the link between the two types of investment, it is necessary to highlight the need to expand the use of proven innovations across the entire organisation.
- Leadership support for change is needed. Many innovators in development organisations prefer to operate to some degree "under the radar" as they test new ways of working. To help incentivise innovators to contribute to changes at an organisational level, senior management should lead and explicitly task relevant teams to spot promising technologies and approaches, design, manage and assess a portfolio of proof-of-concept trials, communicate the evidence and formulate a realistic, appropriate future vision.

Strengthen innovation processes and evidence base

- Frameworks and process heuristics already used by several innovators and management in DAC member countries and across private sector companies need to be adapted and used to develop guidance that is relevant specifically for development co-operation organisations.
- The field of innovation management needs to be further explored and established in the international development sector. This includes improvements in monitoring, evaluation, learning and the documentation of innovation adoption efforts, with a particular focus on contributions from innovators based in low and middle-income countries.

In summary: this research shows that the teams that led adoption processes were aware of not overselling the potential of the novel approach or the emerging technology. They recognised the importance of aligning their work to core business processes.

This reflects a nuanced view on the potential of innovation, including new ways of working and technology. None of them are ever "the" solution to social and environmental challenges (Seelos and Mair, 2012[32]). Some innovations have their merit and development organisations should quickly assess comparative advantages and how these fit in with the support and delivery modes of their organisation. This highlights the need to frame innovation as an ongoing process and not as a quick fix to entrenched social problems.

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