



RESULTS FOR
DEVELOPMENT

Experimentation, Partnership and Learning:

Insights from a review of the first three years
of DFAT's innovationXchange



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Introduction

Australia's Department of Foreign Affairs and Trade (DFAT) created the innovationXchange (iXc) in 2015. The first three years of implementation (March 2015 – June 2018) were a period of growth and learning which focused on establishing the iXc, building partnerships, and sourcing and testing promising innovations. Over the course of 2018, Results for Development (R4D) carried out an analysis of the iXc with a focus on gathering lessons learned to inform the development and implementation of the DFAT Innovation Strategy for 2018-2021, which addresses many of the recommendations made in this review. The findings and reflections outlined below, which are structured around nine key themes, are based on data collected through desk research, document review, interviews and focus groups with different stakeholders within and external to DFAT. Throughout the report, references are made to examples of programs and projects supported by the iXc; brief background on each of these initiatives is provided for reference on the final page, along with links to further information.

1. Establishing and operating an innovation hub

The innovationXchange (iXc) was launched by former Foreign Minister Julie Bishop MP in March 2015. The vision was for the iXc to lead the innovation agenda across DFAT in order to address some of the most pressing development challenges affecting the Indo-Pacific region. Through facilitating greater experimentation, partnership building and learning across the department, the iXc ultimately aimed for Australia's aid program to become a global leader in innovation. In 2017/18, activities were framed around four key objectives::

- Support the trialling of innovations and building innovative capability at posts;
- Embrace new directions that complement existing program priorities;
- Encourage knowledge and resource transfer into the Indo-Pacific; and
- Test and support Australia's aid program to adopt innovative cross-cutting themes, approaches and tools.

The iXc was established at a time when there was a strong trend amongst development agencies and other public sector bodies to launch innovation hubs. A landscape mapping exercise carried out by the University of Melbourne on the emergence of public sector innovation units across Australia and New Zealand¹ identified 26 Government-based and 23 independent labs in Australia and New Zealand alone. Over 75% of those embedded in government bodies — including the iXc — had been established in the three years up to February 2018. Although the iXc was established with a slightly smaller full-time employee quotient (12 FTE versus a mean of 14.5 FTE as documented in the University of Melbourne analysis), its initial organizational structure and operating model were generally consistent with other labs in the regional innovation community in terms of: i) team composition being weighted towards those with public sector backgrounds; and ii) being funded through a 'sponsorship model' by a host department, rather than a cost-recovery or commercial model.

That the iXc team successfully launched the unit and met its spending requirements should not go unrecognized; these were significant achievements for a smaller than average team that was pioneering an unusual approach sitting outside of DFAT's policy and geographic divisions. However, as with many newly-established innovation labs, the iXc also faced a number of challenges during its first three years.

- **Staffing:** The iXc grew from a team of six FTE to 12 FTE by the end of 2017, and over the course of its first three years engaged a total of 40 people as either staff or contractors. While this was valuable in terms of bringing a variety of expertise into the iXc, staff turnover and rotation led to a lack of continuity at both the leadership and programmatic levels, which in turn undermined institutional learning and relationship development.
- **Relationships:** Establishing and maintaining relationships across DFAT and with staff at posts proved challenging, particularly given limited opportunities for iXc staff to travel to post locations and a lack of clarity among other DFAT teams around the purpose of and interface with the iXc.² Externally, the strong support of the former Foreign Minister was valuable in raising the lab's profile and generating interest in the private sector about the potential of working with DFAT on innovation.
- **Bureaucracy:** Bureaucratic challenges, for example DFAT paperwork requirements (which did not facilitate agile working) as well as delays and a lack of clarity around decision-making and reporting standards, meant that iXc staff felt it was difficult to secure DFAT buy-in for work and demonstrate that they were working in more agile and flexible ways.
- **Knowledge management:** At the outset, the iXc lacked comprehensive knowledge management and monitoring and evaluation systems. This limited their ability to document successes, challenges, and learning over time, although approaches were gradually put in place to remedy the situation towards the end of the review period.³

¹ Mcgann, Michael & Lewis, Jenny & Blomkamp, Emma (2018), Mapping Public Sector Innovation Units in Australia and New Zealand 2018 Survey Report, <https://researchgate.net/publication/324792370>.

² See Section 7 'Building Culture and Capability' for more detail.

Recommendations

The 2018 Innovation Strategy will be an important step in overcoming some of these challenges that have historically undermined impact. Going forward, the iXc should:

- 1A.** Focus on **improving integration with DFAT and country posts** as a priority for increasing sustainable impact. This should begin with soliciting feedback to help define a more detailed approach to improving engagement and coordination;
- 1B.** **Build its in-house expertise**, drawing on resources from beyond the development sector; and

- 1C.** Increase capacity in three key areas: **monitoring, evaluation and learning for innovation; gender and innovation; and cross-cutting competencies** such as systems thinking, technology and digital inclusion. While already integrated at the program level to varying degrees, dedicated resources would ensure that these areas are systematically embedded throughout design and implementation across the whole of the iXc portfolio, and that iXc staff are able to support others across DFAT to develop and use these skills.◆

2. Setting and communicating a clear vision and theory of change

The iXc's strategic direction was shaped through consultation with a variety of actors:

- An International Reference Group, chaired by former Foreign Minister Julie Bishop MP, and composed of global leaders in business, civil society, philanthropy and academia;
- DFAT Senior Leadership and DFAT's Innovation Champions;
- Other development agency innovation units through the iXc's membership of the [International Development Innovation Alliance \(IDIA\)](#);⁴ and
- A series of thirteen secondments between the iXc and external innovation actors (including individuals from Intel Corp, CSIRO, Geoscience Australia, GSMA, the European Union, and R4D) which supported direct learning and exchange around innovation approaches and priority thematic areas.

Through these activities, the iXc framed a vision which was for 'Australian Aid to be a recognised leader in innovation, delivering new and cost-effective solutions to pressing development challenges to improve the lives of people in the Indo-Pacific region'. Specific goals for the iXc's aid work were set out around three overarching themes: i) **Experiment** — Designing and demonstrating new models

for the global sourcing and testing of high impact innovations; ii) **Partner** — Exploring new collaborations to help design, finance and accelerate the scaling of high impact innovations; and iii) **Learn** — Strengthening our innovation mindset through understanding and building capabilities to embed innovation. In 2016, the iXc also became formally responsible for delivering the contemporaneous DFAT Innovation Strategy 2015⁵ which was focused on building innovation capability across the Department through encouraging, sharing, measuring and rewarding innovation, with activities including the first [DFAT Ideas Challenge](#). This led to the iXc being responsible for implementing two parallel, related strategies.

Despite efforts to clearly define and articulate the iXc's mission and vision, both internal and external partners that were interviewed as part of this analysis expressed that there was a lack of clarity around its function:

“Early on, there was confusion of what we were asking and what they could provide... We didn't really understand what they did either... I think now (after working together), I understand better what they do.”

— DFAT staff on partnering with the iXc

³ See Section 9 'Approaches to monitoring, evaluation and learning' for more detail.

⁴ The International Development Innovation Alliance (IDIA) is a collaborative learning alliance of thirteen agencies with the goal of 'actively promoting and advancing innovation as a means to help achieve sustainable development'.

⁵ DFAT (2015), DFAT Innovation Strategy: A more innovative DFAT.

This is a common challenge faced by new innovation units, and was expressed at both the organizational level, as well as in the context of specific programs. For instance, in feedback collected from country posts on the Australian Development Accelerator (ADA), a common theme emerged around needing more clarity on the iXc's definition of innovation, the scope of the program, and the types of support it was able to offer.

Recommendations

Three key factors appear to have contributed to the uncertainty around the iXc's vision and strategy among the wider DFAT community. First, the iXc was given a broad mandate (i.e. without target sectors or types of innovation to focus on) and this led to difficulty in finding clear lines of engagement with DFAT sectoral teams. Second, there was a need for a single, unified vision underpinned by greater detail supporting what the strategy would look like in practice. Third, the iXc would have benefitted from an improved approach to communication.

In sharpening its vision and strategic focus, the iXc should consider:

- 2A. Setting a single strategy** that combines internal capability building and external engagement to deliver outcomes for DFAT through innovation. This includes clarifying an appropriate **balance between aid-oriented innovation programming and internal capacity-building initiatives** so that the iXc can respond to the strategic priority to embed innovation across DFAT, while also grounding innovation tools and approaches in the realities of partner country contexts;
- 2B. Drafting a Theory of Change** which articulates a clear relationship between the iXc's proposed activities

and outcomes and which includes specific progress metrics. The design of the Theory of Change should also take account of key risks/potential barriers in order to maximize the chances of achieving the desired outcomes; and

- 2C. Working alongside existing policy leads** as much as possible, in order to facilitate internal transfer (or 'hand off') of iXc initiatives to other areas of DFAT, acknowledging that this has previously proved challenging when working in new policy areas (such as future of work) for which there was no institutional home at the time.

In terms of communication, the iXc invested predominantly on externally-facing messaging for the Australian taxpayer and the global development community more broadly, through the [iXc website](#), blogs and challenge launch events for example. Going forward, the iXc should:

- 2D. Invest more resources in internal communications** targeting DFAT divisions and country posts. As a general principle, the iXc should generate more **targeted/tailed messaging in the early stages of engaging with partners** to ensure goal alignment. This should include establishing more **clarity around the iXc's vision and definition of innovation**, supported by examples from a range of programs (including those not directly managed by the iXc) to recognize and celebrate the existence of innovation and innovative approaches across DFAT, including country posts. In addition, communications should emphasize the **value of the iXc beyond direct funding for programs**, as partners and grantees also benefit from the team's expertise and its different network of external partners when compared to the existing aid program.⁶ ◆

⁶ See also Section 4 'Learning how to partner effectively with external organizations' and Section 5 'Encouraging innovation in non-aid areas of DFAT'.

3. Seeking new ideas from innovators outside DFAT

A key part of the iXc’s contribution to DFAT was its experimentation with various models for the sourcing and testing of innovations, primarily explored through different iterations of innovation challenge funds, with the iXc running 11 of these from 2015-2018. This led to the iXc supporting a diverse portfolio of over 100 projects operating in more than 50 countries.⁷ Through these investments, the iXc surfaced and supported innovations addressing a wide range of the 2030 Sustainable Development Goals (and many addressed more than one). An analysis of the portfolio in 2017-2018 indicated a strong emphasis on SDG 3 (Good Health & Wellbeing), SDG 4 (Quality Education) and SDG 2 (Zero Hunger).

In order to maximize its potential learning, the iXc’s approach to building an innovation portfolio was characterized by:

- **Sourcing innovations and supporting innovators through open challenge competitions.** Providing funding and networks to innovators was the primary approach used by the iXc, through programs such as [LAUNCH Food](#), the [Blue Economy Challenge](#) and [Scaling Frontier Innovation](#). Alternative approaches, such as co-creation (e.g. [MIKTA Challenge](#)), human-centred design (e.g. [World Mosquito Program](#)), crowdsourcing (e.g. ADA) and system mapping (e.g. [Aus4Water](#)) were also employed to a lesser extent.

- **A tendency towards designing challenges with broad scope.** Many of the iXc’s programs intentionally adopted a wide focus, inviting applications from and awarding funding to a diversity of actors and projects to deepen learning around different innovation models. As an example, under [LAUNCH Food](#), fourteen projects were supported, spanning nineteen countries; they ranged from innovations targeting value-added processing, to education, robotics, and mobile applications supporting communities and consumers. While this provided the opportunity to generate substantial learning across different technical areas, it also meant that the portfolio level impact of these challenges was more diffuse with fewer options for collaboration and knowledge sharing amongst the cohort. The iXc also explored more targeted challenges, including a partnership with [Atlassian and MIT Solve](#) focussed on preparing disadvantaged youth for the workforce of the future, and a call for Australia’s [MIKTA partners](#) (Mexico, Indonesia, Korea and Turkey) to surface innovative methods of educating children in emergencies.

- **A balanced approach to investment.** In terms of the number of grants awarded, the iXc supported a majority of innovations at the ‘Research and Development’ and ‘Proof of Concept’ stages – over 50 projects (around 57%) fell into these categories. The next largest group was the ‘Transition to Scale’ stage (around 35% of projects) while

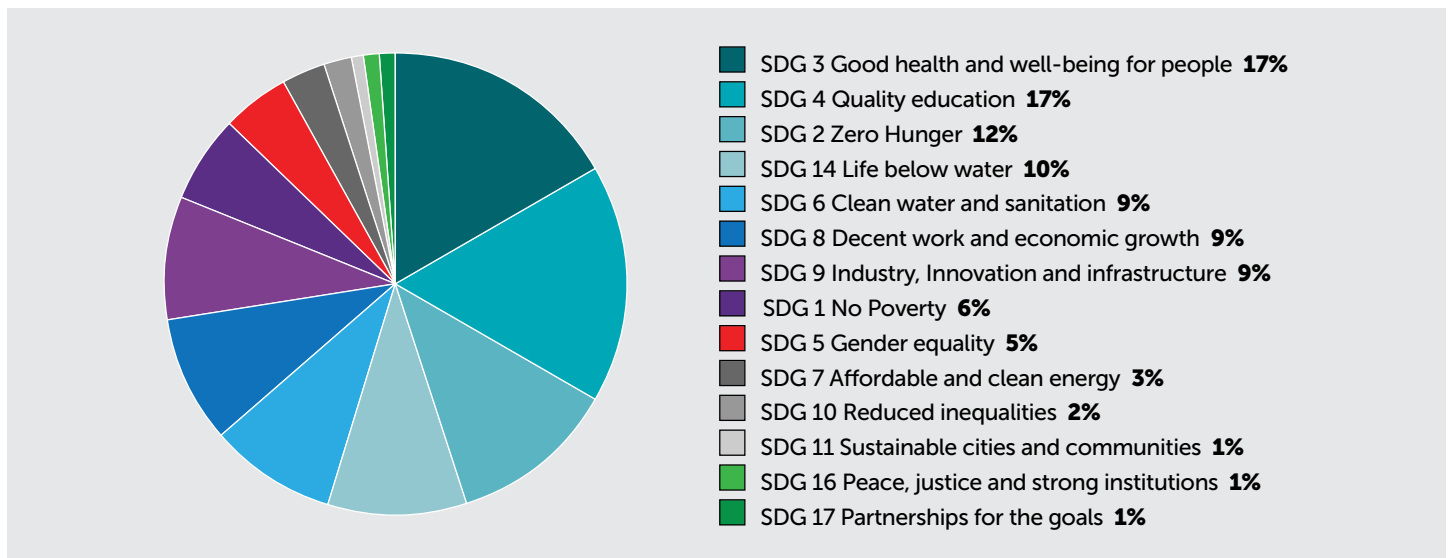


Figure 1: iXc projects according to the primary SDG that they are addressing

⁷ When mapped by region, the projects reflect an expected dominant focus on the Indo-Pacific (35%), South-East and East Asia (19%) and South and West Asia (14%).

7% of projects were operating within the 'Scaling' stage. In line with innovation literature, which advocates for greater investment through the latter half of the scaling pathway, when looking at the total value of grants awarded by the iXc, the greatest investment was at the 'Transition to Scale' and 'Scaling' stages, with around 30% of expenditure across these categories.⁸

■ **A low level of risk-tolerance.** Of the projects in the portfolio ascribed a risk rating, less than 5% were ranked high risk and this was consistent whether looking at the number of projects or their total value. This apparent orientation towards lower-risk investments is typical of many new innovation units – particularly those established within governments that are taxpayer-funded. The iXc may want to revisit the spread of risk across its portfolio going forward and leverage the learning and experience it has amassed over its first few years to increase its own appetite (and that of DFAT more broadly) for higher-level risk and experimentation across the department. This position was strongly articulated in interviews with country post staff in particular.⁹

■ **Experimentation in new or emerging policy areas for DFAT.** Through its programming the iXc explored themes such as social impact investing, workforce of the future, education in emergencies, digital technology for good, and innovation ecosystems. While the programs themselves may not have been deemed high-risk (as noted above), moving into these innovative spaces does demonstrate a healthy appetite for testing new approaches at the organizational level.

■ **A desire to address and support gender-sensitive programming.** While the iXc integrated gender into its portfolio to varying degrees (for example, including gender balance as a selection criterion in the [LAUNCH Food](#) challenge) gender considerations were not systematically integrated into program design, implementation and evaluation processes.

■ **An interest in technology as an enabler of innovation and development outcomes.** Many of the programs and partnerships that the iXc supported had a technological component either in the solutions that were surfaced or the organizations that were engaged, for example the [LAUNCH Legends](#) program piloted interactive storytelling techniques and emerging technology, including a

virtual reality experience and an interactive mobile game to combat non-communicable diseases. Overall, the various programs using technology generated a large amount of learning for the iXc and DFAT more broadly around the role and contribution of technologies to further development goals, summarized in a report 'Technology for Development, Indo-Pacific state of play'.¹⁰ However, there is a significant opportunity to consolidate this learning and inform a more intentional investment strategy for DFAT to leverage technology in development.

Recommendations

Looking ahead, the iXc should aim to:

- 3A. Sharpen its investment criteria and build a more consolidated portfolio** in which the programs and projects supported have greater potential for collaboration, learning and ultimately collective impact;
- 3B. Adopt a more holistic ecosystem model** for supporting change agents in challenging contexts, driving market- and policy-level change in addition to supporting specific innovations. There is some evidence of the iXc moving into this space, for example through the [GSMA Ecosystem Accelerator](#), [Scaling Frontier Innovation](#) (Frontier Incubators and Frontier Brokers components), and [Aus4Innovation](#), but the iXc should consider making innovation ecosystem-strengthening and market- and policy-level interventions a clearer component of its strategy in order to indirectly support more innovators to progress through the scaling pathway;
- 3C. Be more intentional about balancing the portfolio**, both in terms of risk and stage of innovation, given that the majority of its first investments focused on early stage innovations with a higher likelihood of failure. Improved monitoring, evaluation and learning processes to support the iXc in using program data to inform their ongoing strategy will also be important;¹¹
- 3D. Designing for sustainable impact** amongst clearly defined target populations (including ensuring that innovators are sufficiently focussed on the global poor); and
- 3E. Supporting partners to design for scale**, in order to enable the portfolio to support a larger number of later stage, high-impact innovations.¹² ◆

⁸ See Section 6 'Understanding and building pathways to scale' for more detail.

⁹ See Section 8 'Embedding innovation at post' for more detail.

¹⁰ DFAT (2018), Technology for Development, Indo-Pacific state of play, <https://ixc.dfat.gov.au/projects/technology-for-development-indo-pacific-state-of-play/>.

¹¹ See Section 9 'Approaches to monitoring and evaluation' for more detail.

¹² See Section 6 'Understanding and building pathways to scale' for more detail.

4. Learning how to partner effectively with external organizations

The iXc established several external partnerships from 2015-18, with various actors including private sector companies, global programs and philanthropic organizations, that were new partners for DFAT, bringing fresh knowledge and ideas. The iXc capitalized on the opportunity to help partners (particularly in the private sector) build their understanding of the development sector, with the aim of leveraging their business activities to contribute towards progress against the SDGs. These partnerships were largely initiated through networking (i.e. conferences and events) and previous DFAT relationships leading to further opportunities. Most external partners were co-leading programs with the iXc designed to benefit poor people in the developing world and the key drivers for establishing these alliances were generally co-funding or collaborative thought leadership. Some examples include:

- Collaborating with **Bloomberg Philanthropies** on the [Data for Health Initiative](#) which operates in 20 countries, including seven in the Indo-Pacific;
- Alongside the **Atlassian Foundation**, co-funding the [Youth, Skills & Workforce Challenge](#) through the MIT Solve platform, which aims to prepare 10 million disadvantaged youth for the workforce of the future;
- Partnering with **Monash University** on the [World Mosquito Program](#), which is pioneering the *Wolbachia* method to eliminate dengue and Zika in Sri Lanka, Fiji, Kiribati and Vanuatu; and
- Making the iXc's largest single investment in the [Global Innovation Fund](#) (GIF), as a result influencing the spread of GIF's portfolio to include support for more innovators in the Asia-Pacific region.

The typical iXc-partner engagement lasted around two years. Overall, the iXc was seen by external partners to be solutions-oriented, responsive and a strong thought partner, and iXc staff were typically enthusiastic about their objectives. They also noted that the iXc team was characterized by a good management style, ease of grant administration and a clear mandate from the Minister for Foreign Affairs.

External partners rated the success of their partnerships with the iXc as 4 out of 5 (on a scale of 1 being least successful, to 5 being most successful)

A number of external partners interviewed reported increased strategic alignment with the iXc over time, and some noted that they had begun proactively factoring DFAT's priorities into their investment strategies and focus areas. At the same time, in terms of challenges, partners identified largely logistical issues when dealing with the iXc, noting: i) staff were stretched thin and not able to devote too much time to one partnership, ii) difficulty in managing time zones which often makes regular communication or travel difficult; and iii) difficulty in solidifying the commitments made in conversations with iXc team members.

The iXc clearly benefitted substantially from these external partnerships. Collaborations with large, multi-national companies proved particularly effective in raising the profile of innovation within DFAT and with other external funders and organizations. External partners believed their added value to the iXc lay in thought partnership and access to private sector experience and technical expertise, specifically around program management, investment strategies and monitoring and evaluation.

"I hope they felt they were able to start halfway around the track by standing on our shoulders and learning from our mistakes."

— External partner

These external partnerships provided channels for the iXc to engage in a range of different contexts and countries, and many were successful in catalyzing additional funding in support of programming goals. The iXc reports leveraging nearly \$60m in co-funding¹³ for the Asia-Pacific region, plus unquantifiable in-kind contributions of expertise and time (e.g. from Atlassian volunteer staff). Examples of funding leveraged that have contributed to this total include Bloomberg, [XPRIZE](#), and the Humanitarian, NGOs and Partnerships Division.

¹³ Headline co-funding figures must be caveated to consider the challenge of truly 'leveraging' additional funds. Leveraged funds should 'amplify' the initial investment, but funds raised from partners may have gone to the same initiative regardless and/or may have expanded the scope of the investment to geographies not initially part of the design.

Although beyond the scope of this analysis, it appears that these partnerships may have also been catalytic in advancing the sustainability of innovations. For example, the iXc’s support for the [World Mosquito Program](#) helped to ‘de-risk’ this initiative in the eyes of other funders, who subsequently invested over \$50m of additional funds. The iXc’s direct involvement in programs such as [LAUNCH Food](#) also assisted in raising the profile of innovators and enabled them to attract further support beyond that provided by the iXc.

Recommendations

External partnerships were one of the most successful aspects of the first three years of the iXc and should continue to be a key component of the Innovation Strategy. Key areas for continued strengthening include:

4A. Aligning goals early on; clearly defining the scope/focus

of the partnership in terms of development impact; and **allocating dedicated resources (individuals, budget and time) to manage the relationships**, which leads to greater effectiveness and is highly valued by private sector partners;

4B. Thinking creatively with partners on how to **overcome challenges of geography and time zones**; possibly through further secondments in strategic global locations; and

4C. Ensuring that there are **appropriate procurement mechanisms in place to enable collaboration with a range of actors**, including smaller scale and/or non-traditional partners such as private sector entrepreneurs, acknowledging that they may need additional support around the operational dimensions of working with a government body (e.g. accountability requirements).◆

5. Understanding and building pathways to scale

Innovation-supporting entities have access to a range of approaches to tracking an innovation’s progress toward scale. As part of its membership in the [International Development Innovation Alliance](#) (IDIA), the iXc collaborated with experts from across the global community to develop a shared understanding of and high-level architecture for scaling innovation. This detailed framework was presented in the June 2017 IDIA publication ‘Insights on Scaling Innovation’¹⁴ and outlines six key stages, shown below.

The iXc has had some success in helping innovators progress along this pathway to scale, using support mechanisms such as bootcamps, acceleration models and technical advice. For instance, as part of the open innovation challenge run by Australia’s [MIKTA](#) partners, OpenIDEO and the Global Knowledge Initiative ran a bootcamp for the seven challenge winners to refine their innovation models. This had a transformative impact on one grantee in particular, [MeWe International](#), who changed their delivery model from direct

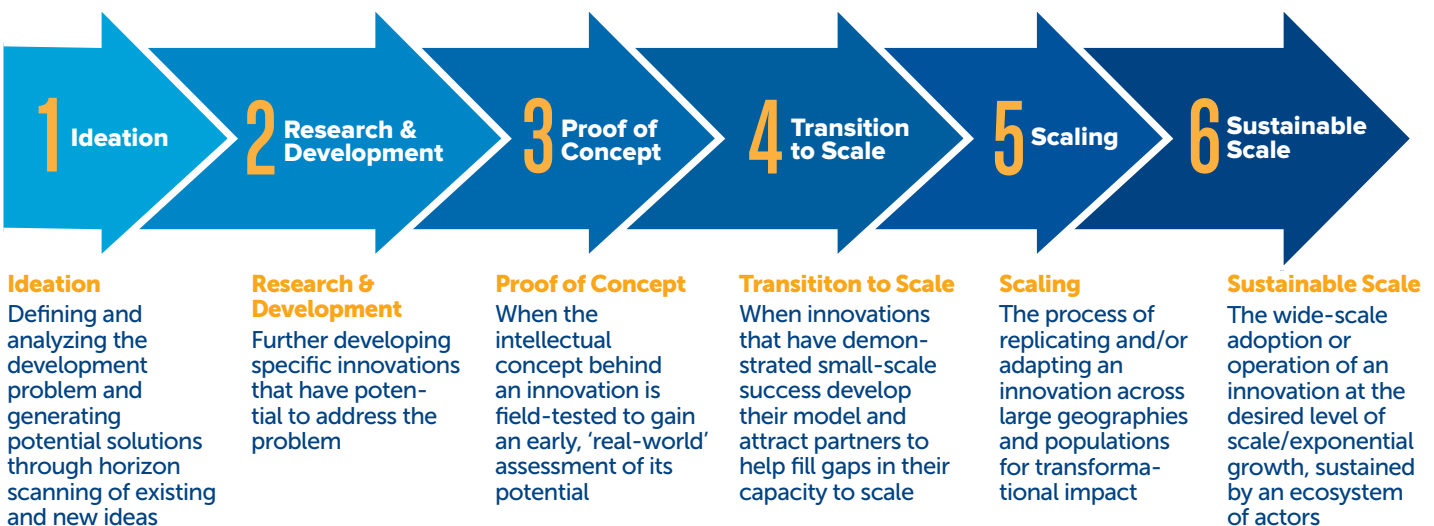


Figure 2: Six stages of the scaling pathway as defined by IDIA

¹⁴ IDIA (2017) ‘Insights on Scaling Innovation’ <https://static1.squarespace.com/static/5b156e3bf2e6b10bb0788609/t/5b1717eb8a922da5042cd0bc/1528240110897/Insights+on+Scaling+Innovation.pdf>.

service provision to a train the trainer approach that enabled them to reach many more of their target population of Syrian youths.

For those programs where data exists both at early engagement with the iXc and after a year, 26% of programs had advanced at least one stage on the pathway to scale. For example, in 2017-18 the [World Mosquito Program](#) transitioned from 'proof of concept' to 'transition to scale', while the [Data for Health](#) and [EnerGaia](#) initiatives both progressed from 'proof of concept' to 'scaling'. There are fewer examples of the iXc's direct support helping an innovation to reach the 'scaling' or indeed 'sustainable scale' stages, with the notable exception of the ADA-funded [Tupaia](#) program, which moved from 'transition to scale' to 'scaling'. This is to be expected given the focus on supporting early stage innovations and the fact that the majority of programs were added to the iXc's portfolio in 2017-18, while more time is typically required to see impact.

The extent to which scaling was built into the iXc's broader strategy and program-level objectives varied. Where early-stage innovations were the focus (in programs such as the [Pacific Humanitarian Challenge](#) and the [MIKTA Challenge](#)), the potential to demonstrate scaling was inevitably relatively low. In some cases, scale was built into program design, but the way in which scaling was proactively supported through implementation was more ambiguous. For instance, in the case of the ADA, while innovation sustainability was one of the criteria for selection, the ADA's role in supporting innovations post-award was unclear and innovators expressed interest in being connected to further funding support or related scaling expertise. On the other hand, programs such as [Frontier Innovators](#) appeared to

be more successful in this regard, specifically targeting later stage innovations that had already been launched in the market and had demonstrated significant progress along the scaling pathway.

Recommendations

In continuing to support innovators to reach sustainable scale, the iXc should:

- 5A.** Seek to **articulate a clearer agenda around scaling**, both in terms of the prominence/priority it is afforded in the overall strategy, as well as the mechanisms through which the iXc is able to support it. This could include consideration of the extent to which the iXc will focus on referrals and facilitating links to external scaling partners versus supporting innovators directly;
- 5B.** **Focus on scaling development impact, rather than building capacity of innovators** when supporting the scaling of 'retail' (commercial product) innovations. The iXc should encourage a sharper focus amongst innovators on benefiting the iXc's target populations, particularly where those innovators have less knowledge or experience of development contexts;
- 5C.** Consider the extent to which the iXc should maintain its focus on scaling specific innovations, versus contributing to the **development of a supportive ecosystem** which can, in turn, indirectly support a wider cohort of innovators to achieve scale; and
- 5D.** **Formally adopt the IDIA scaling framework** to enable consistent internal tracking and reporting of innovations. ♦

6. Encouraging innovation across DFAT's aid program

The programs managed by the iXc were developed with extensive engagement from relevant divisions and posts in DFAT to ensure work brought relevant new thinking and knowledge to DFAT's policies and programs. This approach also involved sectoral teams during implementation with a view to scaling the most successful ideas through contributions from the non-iXc DFAT aid budget. Examples include:

- Finding complementarities and connections between iXc programs, such as creating learning opportunities for DFAT to improve its performance in nutrition by

bringing together representatives from [LAUNCH Food](#) and [Hamutuk](#), a program aiming to reduce stunting in children under two years of age;

- Acting as a convener across internal divisions, such as working with DFAT's Development Policy Division and Investment and Economic Division on the [MIKTA Challenge](#);
- Seeking feedback from posts across the Indo-Pacific on potential finalists for the [Frontier Innovators](#) challenge; and

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- Encouraging posts to engage in implementation during in-country innovation trials. For example, the Philippines program has elected to evaluate OXFAM's IAFFORD program, sourced via the [Google Impact Challenge](#).

In addition to collaboration through programming, the iXc used various other mechanisms to generate and share learning, encouraging innovation within DFAT and the broader Australian Public Service (APS). For example, arranging secondments from other divisions, developing and maintaining a website including an interactive map to showcase programs and key lessons, holding staff briefings and presentations, participating in core DFAT committees, and engaging with the department using social media. Some examples of these activities are:

- Running three internal ideas challenges in [2015](#), [2016](#) and 2017 to engage staff and generate innovative ideas for the department to implement;
- Development of a video, shared internally, to inform and encourage innovation across the APS and featuring outcomes from the first two DFAT Ideas challenges;
- Partnership with other divisions on DFAT strategies, for example, the iXc contributed to the development of Australia's first [International Cyber Engagement Strategy](#) with the Ambassador for Cyber Security;
- Leading policy coordination and debate around topics such as ICT collaboration tools, blockchain, and big data;
- Use of the iXc's location for DFAT staff and external experts to collaborate through workshops, design thinking, hackathons, videoconferencing and seminars; and
- Conducting consultations with staff to feed into the development of the 2018 Innovation Strategy.

This engagement led to over 80% of Australia's aid programs reporting using innovation, based on an analysis of FY 2017 Aid Quality Checks (AQC) completed for DFAT's aid investments over \$3m. Earlier AQC data from 2016, responding to a differently worded question, showed that 63% of aid projects reported using innovative programming. These changes were positively associated with other scores for program quality including effectiveness, gender equality and relevance.

This is encouraging in demonstrating broad engagement with the concept of innovation across the department. Examples also emerged of areas adopting innovative methods without recourse to the iXc, such as DFAT's Australian Safeguards and Nuclear Office, which conducted a [robotics challenge](#) to source new automated inspection robots for high-risk facilities in partnership with CSIRO's Data61.

DFAT sections that had worked in partnership with the iXc rated their partnership as moderately successful. Interview respondents identified i) good personal relationships, ii) partnership in designing programs and iii) networking with external partners as key strengths of their engagement with the iXc. It is also significant that DFAT staff believed both the culture around innovative practice and capability to implement innovative programming had strengthened in the three years since the iXc was established.¹⁵

DFAT sections rated the success of their partnerships with the iXc as 3.5 out of 5 (on a scale of 1, least successful, to 5, most successful)

For internal partners, the iXc's appeal lay with its innovation expertise, co-funding, and greater risk appetite relative to other departments. All of the interview respondents noted that the most important element of their collaboration with the iXc was the innovation skillset and tools the iXc offered. Several respondents highlighted the value of the iXc's [Innovation Resource Facility](#) in providing specific and deep expertise through connections and outside experts in areas including finance, impact investing, and monitoring, evaluation and learning. In addition to innovation expertise, co-funding for programs emerged as a key incentive for iXc partnership, with 50% of those interviewed noting co-funding from the iXc to support their programs was the reason for pursuing a partnership.

"I would reach out to [the iXc] when you think something is innovative – my understanding is that there is room to take risk and do something a little different."

— Internal partner

¹⁵ See Section 7 'Building culture and capability'.

The iXc also aimed to encourage DFAT programs to take up successful ideas piloted and supported through other innovation funds it invested in, most notably the [Global Innovation Fund](#) and the [Water Innovation Engine](#). However, at the time of review, there was not yet evidence of the successful transfer of an innovation developed by either program into DFAT, highlighting a broader problem with the visibility and transferability of innovations from different contexts. For example, although the iXc invested alongside other partners in the [Global Innovation Exchange](#) (a platform to help innovators find investors), this platform was not widely known or used by staff in DFAT to identify innovations they could test in their programs.

Recommendations

Going forward, the iXc should focus on:

6A. Improving communication internally to increase awareness of the work of the iXc and its partners, how collaboration with the iXc can help change culture and

mindsets, its strategy and the impact of its programming. This will help other departments to better identify how the iXc can help accomplish their objectives and, by focusing on impact, is likely to generate DFAT staff buy-in to partnership;

6B. Delivering more direct marketing or pitches within DFAT. Many internal partnerships were initiated by other departments reaching out to the iXc, whereas the team should look to capitalize on the clear demand for iXc support and endeavour to align their activities and offerings with the objectives and needs of other sections; and

6C. Clarifying a position on how and what work within DFAT is considered to be ‘innovative’, as well as improved tracking of innovative initiatives happening more widely across DFAT — this would assist the iXc in forging stronger connections with other sections more quickly. ♦

7. Building culture and capability

The iXc engaged in activities to support dialogue and learning about innovation within DFAT, its country posts around the world, and the broader APS. Several promising examples of innovation being taken up within DFAT emerged, including:

- The development of a steady pipeline of direct requests to the iXc for innovation support, particularly through the [Innovation Resource Facility](#); approximately 50 requests were received in 2017;
- Following the DFAT Humanitarian, NGOs and Partnerships Division’s involvement in the iXc’s [Pacific Humanitarian Challenge](#), the division decided to fund their own innovation work, the [Humanitarian Supplies Challenge](#);
- DFAT’s Australian Safeguards and Nuclear Office, in partnership with CSIRO’s Data61, conducted a [robotics challenge](#) to source new automated inspection robots for high-risk facilities; and

- Engagement with Whole of Government activities on innovation, under the aegis of the [National Innovation and Science Agenda](#), and specifically engagement on the Global Innovation Strategy 2017.

“I think the presence of the iXc, commitment to do things differently, finding ways to do things more efficiently, and to maximize the impact that we have is worthwhile - and it is seeping across the department.”

— Internal partner

When asked to consider the three years since the iXc had been established, DFAT staff that had worked with the iXc noted improvements in both the culture of DFAT around innovative practice and the capability of DFAT staff to implement innovative programming.

	Pre-iXc Rating (1 = Low, 5 = High)	2018 Rating (1 = Low, 5 = High)	Proportion of respondents attributing change to the iXc
Culture of innovation	2.4	3.3	60%
Capability to innovate	2.5	3.3	44%

Figure 3: Average survey responses on culture and capability changes within DFAT

While the majority of respondents attributed the culture change to the iXc, other respondents pointed toward attitude changes within leadership and specifically, the mandate from the Minister for Foreign Affairs.

In terms of capability, there was less evidence that the iXc had had a transformative impact across DFAT in its first three years of operation, with some interviewees highlighting that more could be done to support teams to understand how to apply innovative approaches in a policy sphere, as well as improve awareness of and access to innovation funds such as the ADA.

“Innovation still remains a buzzword within the department. It’s quite difficult within the day-to-day to apply innovation. Everyone knows we should do innovation, but what does innovation in policy look like?”

— iXc staff

Embedding behaviour change may have been slowed by other factors too. The iXc was designed to ‘look and feel’ different from other DFAT sections, with its own branding, housed in an open-plan office space apart from DFAT’s main building, and with explicit Ministerial endorsement. It is possible that these distinctive features might have slowed replication by other parts of DFAT established in more traditional ways. In addition, many staff were initially sceptical of the changes that the iXc was advocating, and while identifying internal champions of innovation across the department is a helpful mechanism for disseminating

information and encouraging change, frequent staff turnover and relocation presented challenges in this regard.

Recommendations:

- 7A.** The iXc would benefit from **prioritising activities to embed innovation culture and capability within DFAT and its posts** going forward. Considering the emphasis on building capability through programming and direct partnership with aid teams during the first phase of iXc work, opportunities remain for the iXc to adopt alternative approaches to capability building (including training courses and mentorship) and to significantly increase engagement with non-aid areas of DFAT. This could begin with surveying DFAT staff on innovation to understand where the biggest capacity, incentive and resourcing gaps/opportunities are, to inform the design of appropriate solutions;
- 7B.** There is clear appetite across DFAT for advice and capability building on innovation tools and skillsets, so it is important that the iXc responds to this need while continuing to grow demand through **improved communication of successes and learning**; and
- 7C.** **Innovation should be built into core operational processes**, such as aid development tests, quality assurance tools and reporting. This would help to emphasize innovation as a core funding and evaluation criteria and could then also be used by the iXc to identify and direct support towards those areas which require greater support to embed innovation into their activities.◆

8. Supporting innovation at country posts

A key indicator of success against the iXc’s goal of building innovation capacity throughout DFAT is the uptake, experimentation and implementation of innovation programs within country posts. By mid-2018, 13 countries¹⁶ across the Indo-Pacific region were operating at least five iXc-funded programs, including those delivered through the [Global Innovation Fund](#).

Building capacity at post was a key objective of the Australian Development Accelerator (ADA), around which R4D conducted a separate analysis. The ADA operated through two platforms from inception in January 2017: the Pilot and Test Fund, which aimed to empower posts to source

and support locally-driven innovations, and the Innovative Practice Fund, which assisted DFAT development teams to pilot innovative internal practices. Applications were received through open enrolment from January 2017 throughout 2018.

Feedback from country post staff, gathered through interviews and an online survey conducted by R4D, indicated that posts were primarily drawn to the ADA by the prospects of developing new partnerships, attracting additional funding, and generating support for innovative work that lacked resourcing under existing mechanisms. Posts expressed lower levels of interest in capacity building, although responses suggested that the ADA did help posts

¹⁶ Bangladesh, Cambodia, Fiji, Myanmar, Nepal, Pakistan, Papua New Guinea, the Philippines, Samoa, Solomon Islands, Timor-Leste, Vanuatu, Vietnam.

to landscape emerging solutions and taught staff the unique process requirements of supporting innovation, including building in generous timeframes and ongoing communication mechanisms with partners. Posts also expressed comfort with co-managing ADA-funded innovators.

Some of the key challenges that emerged from this analysis were: i) communication and information barriers around the program as a whole (with some posts unaware it was being run), the funding available and the eligibility criteria; ii) the low readiness of posts to co-fund innovators due to limited budgets, resources or complicated process requirements; and iii) a propensity for posts to support existing innovators rather than catalyse the design of new initiatives.

Of 25 respondents to an online survey (about 25% of all DFAT posts), only nine had heard of the ADA.



In addition to engagement through the ADA, posts were engaged strategically on other iXc-funded programs to varying degrees. For instance, for the [Frontier Innovators](#) program, posts were engaged in reviewing submissions from some of the 732 applicants, as part of a collaborative selection process. On the [Aus4Innovation](#) program, a

partnership which aims to support the development of a stronger innovation ecosystem in Vietnam, the country post is leading on implementation, with support from the iXc only at the strategic level.

Recommendations

- 8A.** A common thread in feedback from country post staff was the need for **increased communication** with the iXc, and it was noted that this should include in-person meetings;
- 8B.** There is also opportunity for **improved alignment of funding with posts' strategies**, which should include integrating innovative approaches into existing or pipeline programs rather than creating parallel programs;
- 8C.** The iXc needs to carefully consider how to wrap up pilots and provide **support throughout the handoff** to posts to ensure sustainability; and
- 8D.** iXc should aim to capitalize on the significant appetite among posts for more information about opportunities to work on innovation. 82% of survey respondents wanted to hear more about innovation and identified **numerous sectors where innovation might be a good fit**:
 - **Aid**, including food security, behaviour change, plastic pollution in the pacific, development outcomes of innovation projects, and social enterprise;
 - **Management**, including development of client-focused platforms and improving efficiency; and
 - **Fragile states**, including innovative approaches to conflict, innovation in foreign policy, and leveraging innovative practices in microstates. ◆

9. Approaches to monitoring, evaluation and learning

The iXc has invested a lot of time in considering how best to monitor and evaluate its work, acknowledging that methods and indicators typically used in development programming may not be suitable for the innovation context, which lends itself to a greater emphasis on adaptive learning and forecasting impact.

The iXc has been refining its evaluation approach to better match evaluation tools with the rigour of analysis required at different stages across their portfolio, in line with the diagram (right).¹⁷

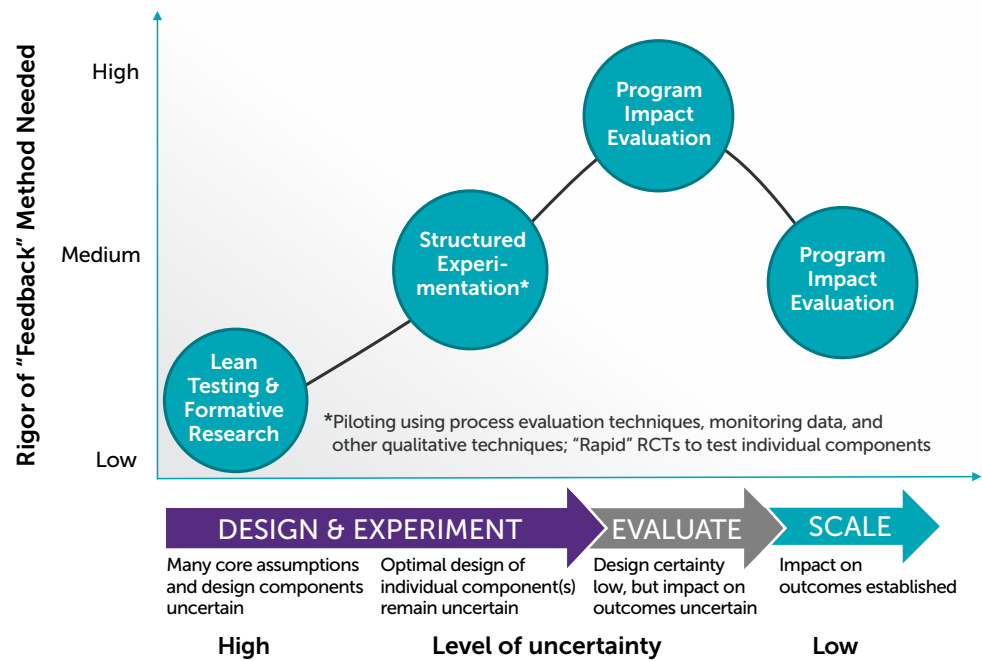


Figure 4: Evaluation approaches, mapping the level of quantitative rigor to the amount of uncertainty

In the early days of the iXc, an set of 'Headline indicators' were developed as part of a results framework to monitor targets in the areas of experimentation, partnering, and learning. However, informed by its growing experience and associated learning in this space, the iXc began to reflect on some of the ways in which these initial indicators needed adjustment to more effectively capture the nature of the iXc's contribution (see table below).

Headline indicator	Reflections and recommendations
<p>Experiment: The number of beneficiary lives saved and improved through innovations that DFAT and iXc have supported.</p>	<ul style="list-style-type: none"> As a large number of innovations supported by the iXc were early stage programs or pilots, they were not able to provide impact-level evidence even within a three-year timeframe. While early monitoring of these programs shows promise, the iXc should consider focusing analyses at the output and outcome levels for early stage innovations to develop a deeper understanding of progress appropriate to the stage of the scaling pathway. For many innovations, such as Tupaia, there is a "long" Theory of Change between the activities being implemented (e.g. creating a digital map) and lives saved. Greater clarity around attribution is required at the impact level.
<p>Partner: The funding from DFAT and other external parties that the iXc has attracted to support scaling innovations or innovative aid practices.</p>	<ul style="list-style-type: none"> Headline co-funding figures must be caveated to consider the challenge of truly 'leveraging' additional funds. Leveraged funds should 'amplify' the initial investment, but funds raised from partners may have gone to the same initiative regardless and/or may have expanded the scope of the investment to geographies not initially part of the design. DFAT should look beyond investment figures and aim to develop more a more nuanced approach to measuring the effectiveness of partnerships, including qualitative indicators.
<p>Learn: The take-up and replication of iXc-promoted innovative practices within the Australian aid program.</p>	<ul style="list-style-type: none"> While a significant number of activities have been undertaken (particularly on sensitizing DFAT to innovation culture and practices), it has been a challenge to track exactly what work within DFAT is determined as 'innovative', and for the iXc to engage with those initiatives early on. It was suggested that a new system be introduced for the annual self-assessment process which would facilitate the iXc engaging with innovative programs at their outset, and which would support easier tracking towards this indicator.

Figure 5: 2017 Results Framework – headline indicators

¹⁷ This diagram was developed by R4D.

This is just a small part of the significant learning that has been generated around results measurement in the iXc's first three years of operation. The iXc has trialled a number of approaches to implementing evaluation activities, including asking partners to self-report impact metrics, conducting portfolio analyses, and learning from new approaches to measuring the impact potential of innovations, such as the Practical Impact Assessment tool being developed by GIF. The team has also demonstrated a strong commitment to measuring success in a more structured way moving forward, drawing on – and indeed contributing to – a growing body of knowledge and experience from similarly situated innovation groups, such as the [Australian Public Sector Innovation Network](#), the [International Development Innovation Alliance](#) (IDIA), and the [Aspen Network of Development Entrepreneurs](#) (ANDE).

Recommendations

9A. More fitting monitoring and evaluation approaches will enable the iXc to be more strategic, **using data to drive iterative, adaptive approaches and make informed decisions** about balancing their portfolio. A good

example to draw on is [LAUNCH Food](#), in which the iXc opted not to conduct an impact evaluation of this early stage program, but funded an adaptive evaluation focused on generating evidence to help implementers. The adaptive evaluation created space for the project team to reflect on the network support they provided to innovation challenge winners based on concrete evidence;

9B. **Reporting systems should be standardized and more rigorous**, so the team has a clearer understanding of the effect of their investments on grantees' program implementation, and greater ability to compare programs across the portfolio. The iXc also has an important role in identifying which programs are not suitable candidates for further DFAT funding and should make information available as program and portfolio reviews are completed; and

9C. There is appetite amongst staff for a more **systematic approach to knowledge management**, to document reflection and learning; this work could build on that already underway across the broader APS. ♦

Concluding thoughts

The findings and recommendations presented in this report were a collaborative effort between learning partners at R4D, the iXc team, and the iXc's partners. Initial findings were workshopped in late August 2018 and this report has benefited from subsequent input from the iXc team. The report team wishes to thank all of those respondents, workshop participants and data locators for their time and support. It is our hope that the collaborative nature of this work increases the likelihood that the discussion and recommendations are relevant and put to good use. ♦

Program & Project Summaries

The following programs and projects were referred to in this report. This is not an exhaustive list of all iXc investments. For more information on the full portfolio, please visit <https://ixc.dfat.gov.au>.

<u>Australian Development Accelerator</u>	The ADA is an AUD \$12m facility designed by the iXc to support the development of innovation at post through equipping DFAT staff with additional resources in the form of flexible funding, mentoring and technical advisory services.
<u>Aus4Innovation</u>	Aus4Innovation is an AUD \$11m partnership between the Australian and Vietnamese Governments and CSIRO with the objective of strengthening Vietnam's innovation ecosystem and preparedness for the Fourth Industrial Revolution.
<u>Aus4Water</u>	Aus4Water is an AUD \$22.5m partnership between the Australian and Vietnamese Governments looking to identify innovative approaches to increase private sector engagement in rural water supply, to replicate successful models across Vietnam, and to increase economic opportunities for women.
<u>Blue Economy Challenge</u>	Australia's AUD \$3m Blue Economy Aquaculture Challenge called for innovators, entrepreneurs, designers, NGOs and academics to rethink advances in aquaculture to provide solutions that ensure both sustainable development and environmental sustainability. 220 ideas were submitted from 40 countries, with ten winners selected.
<u>IAEA Robotics Challenge</u>	DFAT's Australian Safeguards and Nuclear Office, in partnership with the International Atomic Energy Agency (IAEA) and CSIRO's Data61, conducted a robotics challenge to source new automated inspection robots for high-risk facilities.
<u>Data for Health Initiative</u>	This initiative, which aims to make better information available to governments to allow them to run their health systems more effectively, operates in 20 countries, including seven in the Indo-Pacific. It is funded by DFAT (total contribution AUD \$24m) in collaboration with Bloomberg Philanthropies and other partners.
<u>DFAT Ideas Challenge</u>	DFAT ran three annual challenges in <u>2015</u> , <u>2016</u> and 2017 in which staff were invited to share and discuss new ideas and take responsibility for helping the Department better achieve its objectives.
<u>EnerGaia</u>	EnerGaia was a winner in the Blue Economy Challenge with its innovative model for farming Spirulina, a nutritious algae super-food. EnerGaia received an AUD \$500,000 investment and grew from a small start-up based in Bangkok, expanding its operations to Bangladesh, Phuket and the Solomon Islands.
<u>Global Innovation Fund</u>	DFAT has committed over AUD \$30m to GIF, a non-profit fund that invests in the development, rigorous testing, and scaling of innovations targeted at improving the lives of the world's poorest people.
<u>Google Impact Challenge</u>	The DFAT Technology Against Poverty Prize is an AUD \$500,000 grant provided by the iXc as part of the 2016 Google Impact Challenge. Four grants were awarded.
<u>GSMA Ecosystem Accelerator</u>	The GSMA Ecosystem Accelerator, funded by DFAT, the UK Department for International Development and GSMA, works to bridge the gap between operators and innovators, enabling strong partnerships that encourage the growth of commercially sustainable mobile products and services. DFAT is contributing AUD \$5.6m over four years, with a focus on supporting mobile solutions for development in the Indo-Pacific.

<u>Hamutuk</u>	Hamutuk is a project funded through the Australia Timor-Leste Partnership for Human Development (DFAT funding of AUD \$3m over four years). It works to reduce stunting in children under two years of age by increasing collaboration and coordination between partners in fields relevant to nutrition, improving family nutrition practices at the household level, and working alongside the government to sustain improvements.
<u>Innovation Resource Facility</u>	The iXc established the IRF to provide Australian Aid with efficient access to high quality technical advisory services. The IRF has been designed to provide access to non-aid-related innovation skills to enhance DFAT and other Commonwealth Government departments' innovation capabilities.
<u>Frontier Innovators</u>	This program, led by the iXc, identified 14 innovative impact-oriented businesses from the Indo-Pacific that align with the Sustainable Development Goals, providing them with up to AUD \$100,000 and customized support to grow their impact and promote positive change in their communities. It is one of four interventions within the Scaling Frontier Innovation initiative.
<u>LAUNCH Food</u>	DFAT (via the iXc) has committed up to AUD \$4m in support of this challenge to accelerate a portfolio of solutions that address the availability of and access to affordable, nutritious, desirable and sustainable food, and solutions that promote people's selection and consumption of more nutritious food in the Indo-Pacific.
<u>LAUNCH Legends</u>	This AUD \$1.07m iXc initiative is aimed at promoting healthy eating and better nutrition in the Pacific region through the use of emerging, interactive and storytelling technologies, including VR/AR.
<u>MeWe International</u>	MeWe International was a winner in the MIKTA Challenge with its innovative storytelling program for changemakers, which aims to enhance internal, interpersonal, and community communication as essential components in sustainable peace and development. MeWe International received an investment of AUD \$180,690.
<u>MIKTA Challenge</u>	Through this AUD \$2m program, Australia's MIKTA partners (Mexico, Indonesia, Korea and Turkey) surfaced innovative methods of educating children in emergency or crisis situations, particularly for girls.
<u>Pacific Humanitarian Challenge</u>	The iXc's Pacific Humanitarian Challenge provided AUD \$2m of funding to innovators, entrepreneurs, designers, NGOs, and academics to pilot innovative solutions which support humanitarian response and disaster resilience.
<u>Scaling Frontier Innovation</u>	This AUD \$15m program is supporting social enterprises to reach scale. There are four interconnected components of the program: Frontier Innovators, Frontier Incubators, Frontier Brokers, and Frontier Capital.
<u>Tupaia</u>	Tupaia is an ADA-funded project which received AUD \$2m to support its work strengthening supply chain management systems for essential medical supplies in the Pacific and Timor Leste.
<u>World Mosquito Program</u>	The iXc is partnering with Monash University on this program which is pioneering the Wolbachia method to eliminate dengue, chikungunya and Zika in Sri Lanka, Fiji, Kiribati and Vanuatu. Through the iXc, DFAT is investing up to AUD \$17.97m over four years.
<u>XPRIZE</u>	The iXc contributed AUD \$2.3m towards the Water Abundance XPRIZE open challenge to use technology to improve affordable access to clean water in high humidity areas where water is currently unavailable or inaccessible.
<u>Youth, Skills & Workforce Challenge</u>	The <u>MIT Solve</u> challenge — an AUD \$4.1m iXc investment — was run in partnership with the Atlassian Foundation. It focussed on preparing disadvantaged youth in the Indo-Pacific for the workforce of the future, with an emphasis on addressing the needs of women, girls, and people with a disability.

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