



“Change is the new black: the innovation journey of IP Australia”

An exploration of a public sector organisation seeking to integrate innovation as a core capability

A contemporary public sector organisation must innovate. Holding on to old ways of doing things when there are new technologies and capabilities (e.g. artificial intelligence) and new contexts (economic, social, environmental, health, etc.) will result in an organisation becoming mismatched to its setting and not meeting changing expectations. Keeping up with the times is no longer optional for the public sector – there is a democratic responsibility to engage with and act upon society’s evolving needs and demands.

Yet, the process and act of innovation – implementing something novel to context in order to achieve impact – is inherently challenging for any organisation, let alone a public sector one lacking the competitive pressures of a private firm and faced with a different set of constraints and obligations. The difficulty of undertaking innovative activity successfully relates to the tension between two fundamental issues :

- An organisation is characterised by established and shared structures, processes, beliefs, priorities and relationships
- The process of innovation necessitates questioning and challenging what is and what could be, in order to identify new ways of understanding and interacting with the world.

However, there are clearly times when organisations can thrive while innovating, as demonstrated by successful innovative firms and public sector organisations that have introduced novel practices. Individual organisations are often leaders and drivers of innovation, including within the public sector. How is it then that some organisations can manage to facilitate, foster and drive innovation while others fall behind? What distinguishes an organisation that is proficient in innovation from one that is not?

The following in-depth case study, drawing on interviews and desk-top research, seeks to explore this query and provide some initial insights garnered from interviews and research, and building upon lessons from OPSI’s work. It provides an examination of one particular public sector organisation which has consistently pursued a deliberate approach to innovation over a number of years. This case study is very much an investigatory piece, seeking to understand what is involved in the innovation journey of a public sector organisation, through the experience of one illustrative example. The case study is an attempt to capture the ‘story’ rather than being strictly analytical, as without further comparative cases it is not possible to identify which factors may be more crucial than others. Further research and investigation will be needed as the OECD’s Observatory of Public Sector Innovation continues to build the theoretical framework underlying public sector innovation, with no single case study being able to provide a universal model for others to follow.



Setting the scene: A little about IP Australia

IP Australia is a portfolio agency of the Department of Industry, Science, Energy and Resources within the Australian Government, with around 1100 staff. Established in 1904 as the Australian Patent Office, the agency is responsible for administering Australia's IP (intellectual property) rights system, specifically Patents, Trade Marks, Designs and Plant Breeder's Rights. It has a vision of creating a world-leading intellectual property system building prosperity for Australia, meaning that it has a strong day-to-day focus on ensuring the quality of intellectual property. With estimates that over 87% of a company's value is rooted in its intangible assets, including brands and trademarks (Stathis, 2015)¹, it is clear that the IP system (and the administration of it) plays an important role in today's economies, and thus so too does IP Australia. The agency is predominantly self-financing, with costs recouped by charging fees on its IP rights services. As a listed entity, the organisation largely operates independently of its portfolio Department on financial matters, and has a higher degree of autonomy on some other matters than many public sector entities within the Australian Public Service.

Why choose IP Australia as an innovation case study?

The senior leadership of IP Australia has consistently emphasized and prioritized innovation for more than six years. Over that time the organisation has demonstrated a consistent (though evolving) practice of innovation, with numerous innovative projects implemented (internally and externally) to deliver on agency objectives. While there is no universally agreed upon measurement for the level of innovation in a public sector organisation, there are a range of proxy measures including external sentiment about the organisation, success in innovation awards, staff sentiment about the organisation, and performance of the organisation that can be used. In these regards, IP Australia has demonstrated considerable progress in relation to its innovation performance. For instance:

- In 2019, IP Australia was a finalist in Institute of Public Administration Australia's (IPAA) Public Sector Innovation Awards for its Trade Mark Assist initiative²
- Also in 2019, IP Australia won three Canberra iAwards (Digital Canberra iAward, Public Sector & Government, Infrastructure and Platforms Innovation of the Year) for its Smart Trade Mark initiative³
- Again in 2019, IP Australia won the Australian Information Industry Association's (AIIA) Public Sector & Government Innovation of the Year for its Smart Trade Mark initiative⁴

¹ Stathis, K.L. (2015), "Ocean Tomo releases 2015 annual study of intangible asset market value", Insights Blog, 5 March 2015, www.oceantomo.com/blog/2015/03-05-ocean-tomo-2015-intangible-asset-market-value.

² <https://www.act.ipaa.org.au/innovation-finalists-2019>

³ <https://www.ipaustralia.gov.au/about-us/news-and-community/news/ip-australias-smart-trade-mark-sweeps-canberra-iawards>

⁴ <https://www.arnnet.com.au/mediareleases/35500/australias-intellectual-property-office-wins-aiia/>



- In 2018, Verona Burgess, a long-time respected observer of the Australian Public Service, wrote of the former Director General that “Patricia Kelly turned IP Australia from a bureaucratic backwater into one of the most forward-looking agencies in the APS.”⁵
- Also in 2018, IP Australia was a finalist in Institute of Public Administration Australia’s (IPAA) Public Sector Innovation Awards for ‘Alex’, the Australian Government’s first integrated virtual assistant with web-chat digital experience and advanced machine learning capability
- Again in 2018, IP Australia was the winner of National Archives of Australia’s Digital Excellence Awards (large agency category), also for ‘Alex’⁶
- 2018 also saw IP Australia winning a global business impact award from Pegasystems for its work updating its digital systems⁷
- The OECD’s Observatory of Public Sector Innovation singled out the Australian Trade Mark Search as an innovative case study in its *Embracing Innovation* (2018) trends report⁸
- In 2017, IP Australia won Silver in the Prime Minister’s Awards for Excellence in Public Sector Management for the RIO Search for Trade Marks (internal service) and Australian Trade Mark Search (external service)⁹
- In 2016, IP Australia was a finalist in Institute of Public Administration Australia’s (IPAA) Public Sector Innovation Awards for its Patent Analytics Hub
- The organisation has moved from 12% of its transactions with customers being done online in 2012, to over 99%, and became the first fully digital delivery agency in the Australian Public Service¹⁰
- While transforming a number of its internal processes and external services, IP Australia has first increased and then maintained customer satisfaction with the Agency (65.7% in 2012-13, 71% in 2013-14, 73% in 2014-15, 89% in 2015-16, 84% in 2016-17, 85% in 2017-18, 82% in 2018-19¹¹)
- In regards to staff engagement, in 2019 80% of the agency’s staff agreed with the statement “I believe strongly in the purpose and objectives of my agency”, and over half of staff agreed with the statement “my agency inspires me to come up with new or better ways of doing things”, a seven-percentage point

⁵ <https://www.themandarin.com.au/96881-farewell-to-the-mother-of-invention/>

⁶ <https://www.govtechreview.com.au/content/gov-digital/news/ip-australia-s-alex-tops-digital-awards-1351958179>

⁷ <https://www.canberratimes.com.au/story/6013104/global-award-for-ip-australia/>

⁸ <https://www.oecd.org/gov/innovative-government/Australia-case-study-UAE-report-2018.pdf>

⁹ <https://www.act.ipaa.org.au/pms%20awards-winners2017>

¹⁰ https://www.wipo.int/edocs/mdocs/globalinfra/en/wipo_ip_itai_ge_18/wipo_ip_itai_ge_18_p7.pdf

¹¹

<https://webarchive.nla.gov.au/wayback/20171113031153/https://industry.gov.au/AboutUs/CorporatePublications/AnnualReports/Pages/AnnualReport2012-13.aspx> (2012-13),

<https://webarchive.nla.gov.au/wayback/20171113030700/https://industry.gov.au/AboutUs/CorporatePublications/AnnualReports/Pages/Annual-Report-2013-2014.aspx> (2013-14),

https://www.industry.gov.au/sites/default/files/2019-02/annual-report-2014-15_0.pdf (2014-15),

<https://www.industry.gov.au/data-and-publications/annual-report-2015-16/part-c-ip-australia/ip-australia-report-on-performance> (2015-16), https://www.industry.gov.au/sites/default/files/2018-10/annual-report-2017-18.pdf?acsf_files_redirect (2017-18), <https://www.industry.gov.au/sites/default/files/2019-10/annual-report-2018-19.pdf> (2018-19)



improvement on 2018. However, only 45% agreed with the statement “My agency recognises and supports the notion that failure is a part of innovation”, though this was also an improvement of 9 per cent on 2018’s results. It also means that IP Australia was 7 percentage points above the Australian Public Service average.¹²

- Key innovative initiatives that have been introduced, such as Rights in One (RIO) search and Australian Trade Mark Search (ATMS) utilised collaborative design and development incorporating prototyping and user feedback, resulting in significant positive feedback from users of both systems.

IP Australia has continued to deliver services, provide policy advice, maintain user satisfaction and ensure relevance in a changing world. Key to this has been its engagement with the innovation process, and its implementation of innovative initiatives and projects.

IP Australia’s innovation journey

In many ways innovation has always been at the heart of IP Australia, a part of its organisational DNA. It is, after all, an organisation that is dedicated to understanding innovative ideas and proposals, of discerning whether innovations are sufficiently different from what has gone before to deserve intellectual property protection.

However, the agency’s own approach to innovation has traditionally tended to be process-driven and oriented, and thus biased towards the more incremental and iterative end of the spectrum, as opposed to the radical and disruptive. The nature of the patenting process encourages finding errors and mistakes/maintaining standards (is a proposed patent truly different to what has gone before? How does it differ?), a mindset that is not particularly conducive to trying new things which might fail. Combined with the legacy of a command and control culture, one typical of many public sector bureaucracies, innovative practice and experimentation was not widespread or consistent in the organisation. Innovation certainly occurred, and many of the relevant capabilities for a more sophisticated, strategic and deliberate approach to innovation existed, however there was a lack of an explicit vision, steer and organisational-wide understanding of why innovation might be important to the success and effectiveness of the organisation. There was (and continues to be) an understandable inertia to the organisation – one derived from its 100 year history, administering a system that is 200 years old – a gravitational pull of history that makes it hard for truly novel ideas to gain sustained momentum. (This is why change management is essential).

The approach taken to innovation as a practice within the agency began to change with national discussion in the late 2000s around Australia’s national innovation system. This conversation highlighted the idea of an interconnected system, and helped spur thinking within the organisation about the role that IP Australia played as part of that broader system – both in regards to the private sector and the wider APS. It kick-started thinking beyond focussing only on the tasks and processes at hand. This shift in perspective contributed to the organisation taking a number of important steps, including the hiring of a Chief Economist in 2012, the creation of an annual report on intellectual property elaborating on its contribution

¹² https://www.ipaustralia.gov.au/sites/default/files/australian_public_service_employee_census_2019.pdf

to the Australian economy in 2013, and a more open approach to access to the data holdings of the organisation, so that others could better use and learn from trends and developments in intellectual property protection in Australia. There were also 'bottom-up' efforts, with initiatives designed to engage staff from across the agency to put forward ideas and suggestions about how the organisation could do things differently, which developed into a formal ideas management system, supported by an innovation manager.

In late 2013, Patricia Kelly was appointed as the Director General of IP Australia, leaving her former role as Deputy Secretary at the Portfolio Department of Industry. Previously, Ms Kelly had, among other roles, served as an ex-officio member of the Expert Panel that undertook the 2008 Review of the National Innovation System and as Chair of the Steering Committee that produced *Empowering Change: Fostering Innovation in the Australian Public Service* for the Management Advisory Committee. Partly in recognition of her leadership on public sector innovation, in 2013 she was awarded an Australian Public Service Medal. From the perspective of the organisation taking a more sophisticated approach to innovation, this was an auspicious appointment given Ms Kelly's existing knowledge and experience of public sector innovation and her support for it as an essential means of ensuring the public sector could deliver better outcomes.

In 2014, a 'capability review' of the agency was published, as part of a series of such reviews commissioned by the government across major departments and agencies. IP Australia self nominated for the review in order to identify areas in which it could improve. While the review was complimentary of the agency on a number of fronts, it also identified a range of opportunities for improvement including:

- clarifying IP Australia's purpose and value proposition
- developing greater connection across the APS
- ensuring more transparent, consistent and engaging leadership
- developing more robust and transparent systems and processes.

Against a set of 10 areas of assessment covered by the capability review, IP Australia was rated as being well placed in half of them (including on 'innovative delivery'), while the other half were identified as being 'development areas'. This provided a clear signal that the organisation needed to improve on a range of fronts.

Relevant capability review observations and suggestions for the agency regarding the criteria of 'innovative delivery'¹³

The capability review made the following observations in regards to the agency's performance on innovation.

- IP Australia's innovative capability could be enhanced by recognising and celebrating its initiatives as innovative.

¹³ <https://www.apsc.gov.au/sites/default/files/IP-Aust-Capability-Review.pdf>

- Innovation in relation to business improvements has historically been driven top-down by the Executive. Greater bottom-up involvement from employees in the innovation process will bring access to a wider set of ideas and enhanced adoption of resulting changes. Innovation may be further encouraged by providing employees with feedback on their ideas, whether actioned or not, by providing a pool of funding to foster innovative proposals and by the leadership cohort being more accepting of risk associated with some ideas.
- IP Australia has an opportunity to capture ideas for business improvement from across the agency through a more systematic innovation framework, embedding intelligent innovation principles such as senior management commitment to innovation, knowledge sharing, crossfunctional teaming, freedom to pursue ideas, and incentives for innovation. This framework should ensure that innovation is not tied to an individual or select group and it should support the implementation of new ideas. With the alignment of the agency's innovation strategy and overall business strategy, development of a consistent set of innovation metrics could create transparency and drive ownership and accountability.
- Opportunities for greater process re-engineering and continuous improvement outcomes may be achieved by better integrating the Business Process Improvement section within the agency as a whole. It is clear from interviews undertaken by the review team that this section, currently in the Trade Marks and Designs Group, has limited traction across the agency.
- To further enhance IP Australia's innovation capability and bring innovation to life for all employees, the agency may consider greater sharing of new ideas raised in one area with other areas, ensuring that ideas link to the strategic plan and business outcomes and then communicating the benefits of innovations more clearly. This will help build a stronger sense among employees that they belong to an agency that truly values innovation.

This call for improvement, while not exactly a 'burning platform', did provide valuable impetus for a considered programme of organisational change. While the organisation was clearly equipped with smart and skilled people, there was a need for cultural change to tackle the embedded silos and to deal with the associated lack of organisational coherence when it came to thinking about future priorities. In response, a capability action plan was developed, combined with a deliberate approach from the top of the organisation of giving people the resources and support they needed in order to demonstrate that innovation was valued. The leadership consciously started trying to establish a supportive culture and environment for trying new things, one where people felt allowed to, and comfortable with, taking chances.

Innovation as a concept and term was not new however. There had already been an ongoing conversation in recent years about supporting public sector innovation, and senior leaders in IP Australia and elsewhere were known to be positive about the concept. Yet when it came to the nitty gritty and the practical side of innovation, this support rarely seemed to go further than rhetoric; being just words not backed by action or meaningful support. There had been ongoing attempts towards business improvement and red tape reduction, but this had proved insufficient to markedly shift performance.

This context called for ongoing and consistent messaging from the executive to demonstrate that this focus on innovation was indeed sincere. Director General Kelly became known within the agency for using the phrase "Change is the new black" in relation to how change and innovation were the new normal. Effective

messaging required a shared and substantive picture and understanding of why innovation was important, what it meant to the organisation, and what it meant in practical terms (e.g. resources, capital expenditure, prioritisation, etc.). It also required integrating innovation into the structures and processes of the organisation – something that could only be effectively done when there was a common vision for the organisation and its ambitions (and how innovation would be instrumental in achieving those).

A key step in developing such a shared vision was the adoption of a [Three Horizons approach](#), involving the consideration of Horizon 1 (near term opportunities building on existing strengths), Horizon 2 (emerging issues and opportunities where new skills and capabilities might need to be developed and extended), and Horizon 3 (areas likely requiring completely new competencies and capabilities). This was not a quick or easy process, and was informed by environment and horizon scanning, and looking at technology and trends (including consideration of mega-trends and what they might mean for the agency and its context). The Horizons were mapped to 3 timeframes (at the time of first development, these were until 2022, 2026, 2030) and helped to clarify the core competencies of the organisation – where the ‘bread and butter’ of the organisation was – as well as where value could be added or built upon that. It enabled and encouraged a more explicit conversation amongst the leadership cadre about the value proposition of the organisation, what role it played, and what role it should play.

IP Australia’s 3 Horizons as at the time of its 2019-20 Corporate Plan¹⁴

The Plan identifies three planning horizons:

- Horizon 1: 2018-2022: Invest and Innovate
- Horizon 2: 2022-2026: Develop and Deliver
- Horizon 3: 2026-2030: Lead and Influence

Each Horizon identifies aims under the following categories.

- Operational Excellence (High performing core business and internal operations):
 - * Quality and Productivity
 - * Workforce
 - * Revenue and Investment
- Service Excellence (High performing customer services that support our core business):
 - * Technology and Business Process
- Value Add (Our expertise is leveraged to deliver value to the IP system, stakeholders and the broader economy):
 - * Stakeholder Services
 - * Data
 - * Policy and International

This framework has proven to be important in helping steer the organisation, and serving as the basis for a range of strategic decisions including around investment, workforce planning, and project prioritisation.

¹⁴ <https://www.ipaustralia.gov.au/corporate-plan-2019-20>



However, getting agreement and consensus on the framework also took considerable effort and time, involving as it did the linking of siloed areas of the organisation, making explicit core beliefs and desires about the future, and extensive thought about where the organisation could and should add value and concentrate its efforts. Such work sometimes involves difficult conversations, even for the most cohesive of leadership teams.

Another component in changing the culture and in integrating innovation was a focus on the actual practice of innovation within the organisation – to demonstrate and realise its value to the operations of the organisation. A particularly noteworthy element of this was the adoption of agile methodology and working methods, starting with the IT area of the agency. The introduction of agile methodology helped the organisation to approach IT projects in a new way, something that was sorely needed in an organisation with around 80 legacy IT systems, and, as of 2012, only 12% of services being transacted by customers of the agency online. Agile allowed a more iterative and testing approach to projects – rather than traditional projects with locked-in milestones, the projects could learn and readjust as the project delivery taught more about what was needed, what was possible, and what should be prioritised. Over time, the agile approach started to influence other parts of the organisation outside of only IT projects.

Another valuable element of the organisation's strengthening of innovation practice was the creation of a structural element, with the introduction of a parallel system for IT projects where one stream could be dedicated towards focusing on newer initiatives. Over time, as the potential of machine learning to change aspects of the business of IP Australia was identified, this new business activity was formalised as the 'Cognitive Futures' area. The Cognitive Futures structure was overseen by a dedicated Senior Director for Innovation, a new position that was also used to highlight and reinforce the importance and necessity of innovation within the organisation.

Another important step taken by senior leadership to strengthen the innovation practice of the organisation was the decision to explicitly allocate about 1% of the agency's annual expenditure to funding innovation and trialling. This helped to create impetus for new things rather than inevitably going towards fixing or maintaining existing systems that may no longer be appropriate or best suited.

As it became more established, the Cognitive Futures team began to experiment with different opportunities – for instance by trialling IBM's AI platform, 'Watson'. This experimentation helped to give the team a richer sense of the possibilities of machine learning, and to consider where it would help the operations of the agency sooner rather than later. Over time this has led to a growing array of projects informed by new technologies, using new methods (e.g. Agile and service design) and with a heavy focus on the user (both internal and external) and their needs. Engaging with new technologies has also been aided by taking a wider look at potential partners, including working with start-ups and others who could bring new thinking and new approaches.

These approaches allowed the organisation to make some significant strides and achieve, through innovations such as the virtual assistant 'Alex', a range of efficiencies and savings (while maintaining or improving service standards) that, in turn, provided the evidence and freed up the resources needed to invest in other projects. Over time, the more traditional parts of the IT operations of the organisation were

included under the Cognitive Futures structure, and a range of initiatives has begun to change internal processes and operations and external service offerings. Digital service transactions soon reached a level over 99%, making the organisation the first fully digital agency within the APS. The number of legacy IT systems was reduced dramatically. Work was undertaken to engage the patent examiners in understanding where new tools and approaches would best help them with their work, deliver benefits, and maximise the chance of success for these new initiatives.

Another big component of helping to equip the organisation to work in new ways was the move to 'Activity based working'. The movement to ABW was a part of the organisation's 'Future Way of Working' programme, which encouraged a more collaborative style of working across the organisation, including a different physical lay-out. It demonstrated, in a very tangible way, that IP Australia was a different place to what it had been, and that its orientation and culture had changed.

While there were a number of innovations occurring within the organisation, both technology/digital-oriented and others less so, there was also an element of 'cultural cringe', where the organisation did not celebrate these projects or achievements. To help change this, the Director General encouraged an active strategy of applying for external awards, to help demonstrate that these innovations were valued by senior leadership and that they were indeed regarded as innovative by those external to the organisation, thereby helping emphasise that the organisation itself was 'innovative' and doing leading edge work. Over the last five years the organisation has, as a result of this approach, won, or been recognised by, a range of national and international awards.

Initiatives undertaken at IP Australia to support innovation or that are innovative

The following provides details of a number of the specific initiatives that have been undertaken by or within IP Australia in order to either help foster a more innovative culture and practice (in order to better meet emerging and evolving needs and priorities) or to deliver better outcomes in the administration of the IP system.

Activity based working (2016-ongoing)

The activity based working (ABW) initiative was undertaken in order to help the organisation change its physical environment to one more suited to working in contemporary ways, with different arrangements according to different work contexts and needs. "As we move to have a more mobile workforce, to have more tele workers, more part-time workers, we need to look at having physical arrangements that suit those different methods of working and also that suit the different sorts of work that various areas of the organisation undertake. It's about finding new ways of working together."¹⁵ This change has involved considerable elements of co-design with staff, in an attempt to make the adjustment process one as functional and practical as possible.

¹⁵ <https://www.ipaustralia.gov.au/tools-resources/video/ip-australia-flexible-working-environment-pilot>

Ideas Garden and Innovation Manager (2015)

In 2015, IP Australia established a formal internal ideas management system, called the 'Ideas Garden'. This platform provided a structured process by which staff could share ideas, show support for the ideas of others, and have ideas with sufficient backing considered by management. This provided one mechanism by which staff could be engaged with the agency's pursuit of better outcomes through innovative approaches. This was supported by the introduction of a dedicated innovation manager role, created to help engage different areas of the agency in contributing innovative ideas and helping share lessons and experiences across the agency (and with other agencies across the Australian Public Service). The Ideas Garden is now being evaluated and different approaches are being considered and will be tested with staff.

Patent Analytics Hub (Introduced in 2015)

The Hub provides a service to government agencies, universities and publicly funded research organisations (PFROs) to help them leverage their inventions and provide strategic information for decision making, on a fee-for-service basis.¹⁶ The Hub is uniquely positioned, with access to more than 100 million patent records across 250, 000 separate technology classifications worldwide, and in-house expertise of 400 patent specialists across all technology areas, ensuring that the analytics reports are relevant and meaningful. The customised analytics reports have been used to help customers make decisions on policy, research direction, commercialisation, intellectual property protection, business strategy, marketing, collaboration and licencing.¹⁷

Source IP (Introduced in 2015)

Source IP is an online tool designed to facilitate connections between business and public sector researchers. It is aimed specifically at making it easier for Australian businesses, including small and medium-sized enterprises, to access public-sector innovation and technology. It focuses on boosting collaboration between business and researchers by providing a single site to showcase the expertise of individual Australian research organisations and facilitating easy, one-click contact.¹⁸

Virtual Assistant 'Alex' (Introduced in May 2016)

Alex, a virtual assistant, helps customers 24 hours a day, 7 days a week with trade marks, patents, designs, plant breeder's rights.¹⁹ It takes over 40% of the organisation's active customer interactions, and provides an active support for the agency's call centre, helping with having reduced the number of calls to the centre

¹⁶ <https://www.aph.gov.au/DocumentStore.ashx?id=79c0dd43-6615-4a30-9056-2bc607d8fbcc&subId=612460>

¹⁷ <https://www.ipaustralia.gov.au/tools-resources/patent-analytics-hub>

¹⁸ <https://www.industry.gov.au/data-and-publications/annual-report-2015-16/part-c-ip-australia/ip-australia-report-on-performance>

¹⁹ <https://www.ipaustralia.gov.au/beta/virtual-assistant>

over time from 12,000 per month to less than 5,000.²⁰ Alex was adapted from an offering from the Australian Taxation Office.

Australian Trade Mark Search (Introduced in February 2017)

This system leverages revolutionary combined image searching and machine-learning technology to drastically simplify trademark searching and break down barriers for users. Instead of using text descriptions to search for brand identities, users can upload a logo and instantaneously search IP Australia's database of 400 000 images, which then returns trademark results based on visual similarity through image recognition. This reduces the chance that applications will be rejected, saves time for businesses, and provides an easier experience. In developing and implementing the system, IP Australia collaborated closely with private sector partners and an Australian start-up and used agile and design processes to deliver a better result. The system utilised collaborative design and development incorporating prototyping and user feedback. This has had lots of positive feedback from users and highlights the importance of collaboration and engagement in innovation. In the period after the introduction of the new tool, IP Australia saw a 54% reduction in calls related to trademark searching, demonstrating greater ability on the part of businesses to meet their own information needs, and saving Australian businesses time and money.²¹

IP Policy Register (Introduced in September 2017)

The policy issue register is a published list of issues that IP Australia is considering or working on for policy action or legislative amendment, and aims to enhance public participation in government decision making. Stakeholders are also able to submit issues for consideration by the agency and possible inclusion on the register.²²

Trade Mark Assist (Introduced in May 2018)

A service introduced to assist people in exploring their proposed trade mark, identifying the classes of goods or services they wish to protect, searching existing trade marks and beginning their application. The tool uses leading edge artificial intelligence technology to provide information, reduce complexity and common applicant errors, thereby helping to improve the quality of potential trade mark applications.²³ This service was also designed in a collaborative manner with service users. Trade Mark Assist has helped educate customers before filing, reducing common issues and ultimately increasing the likelihood of acceptance of their proposal.

²⁰ <https://www.zdnet.com/article/ip-australias-alex-is-more-than-just-a-chatbot/>

²¹ <https://www.oecd.org/gov/innovative-government/embracing-innovation-in-government-2018.pdf>

²² <https://www.ipaustralia.gov.au/policy-register>

²³ <https://www.ipaustralia.gov.au/about-us/news-and-community/news/trade-mark-assist-learn-search-apply>

Automated Decision Making (2018)

IP Australia has implemented legislative changes and a governance framework which enables automated decision-making in intellectual property (IP) rights administration. Advanced computer technology, leveraging artificial intelligence (AI) and machine learning (ML), now support decision-making processes, realising benefits for customers, the office and staff alike.

Legislative amendments were made in 2018 to modernise IP rights Acts. They allow a computer to enact decisions, exercise powers or comply with IP administration requests. The legislation also includes safeguards so computer-made decisions can be reviewed and appealed, as necessary, and is supported by an Automated Decision Governance Framework and Policy, which provides guidance on the design and use of automated decision-making systems at IP Australia.

The changes provide for more efficient and consistent decisions for IP Australia's customers, and IP Australia realises benefits, noting that the use of AI and ML replaces tasks rather than jobs, and releases the time and brain power of experienced people to focus on more complex and subjective issues.

Intellectual Property Data Platform (Introduced in April 2019)

This data platform enables researchers and policy makers to investigate and interrogate data in a powerful cloud-based analytical environment, and helps to make decisions and to create economic and policy insights involving IP rights, trade and innovation. It contains Australian IP data and international data on patents and trade marks. Researchers can compare data within and across these data collections and add their own to generate deeper economic insights and help improve data-driven decisions.²⁴ The platform currently contains a lab environment where expert users can interrogate data in a range of programming languages. The lab has attracted international interests with 232 registered users, from a range of offices and professions. IP Australia is considering the future development of the platform as an environment to encourage data sharing and international collaboration.

Rights in One (RIO) Program (Introduced in April 2016 for Designs and November 2018 for Trade Marks)

A new case management system to replace the previous trade marks administrative systems, with plans to extend it to support the management of patents IP Rights. RIO introduced modern technologies, machine learning and automation capabilities to transform examination, research and administration systems from dated mainframe systems to a responsive, agile and modern platform. The benefits of the project have included decommissioning 35 legacy systems and migrating 500 million records. RIO allows 'straight through' processing and augmented decision-making and has delivered world-leading public search facilities. RIO has established an IT platform that supports fast, low-risk, cost-effective change that can be released with minimal interruption.²⁵

²⁴ <https://www.ipaustralia.gov.au/about-us/news-and-community/news/new-analytics-platform-now-available>

²⁵ <https://www.industry.gov.au/sites/default/files/2019-10/annual-report-2018-19.pdf>

Establishment of Innovation Team, including Business Transformation and Cognitive Futures Cognitive Futures team and creation of position of Senior Director for Innovation

The team's vision is to continuously develop, drive and implement innovative business focussed solutions to our internal and external customers. The current set of ambitions include:

- “We will embrace transformational and innovative technologies, embody a customer centric collaborative and agile culture to deliver smart solutions and new approaches that significantly improve both our internal and external stakeholder experiences.
- To support IP Australia in becoming the lead agency in digital and technological solutions across the APS and Internationally.
- To consistently challenge and re-evaluate the status quo through proactive business process re-engineering.
- To augment and enhance manual processes with technological solutions.
- To leverage the power of internal and external data products in the delivery of intelligent solutions to niche problems. To deliver and explore smart solutions in a constantly evolving International IP ecosystem.”

Creation of a ‘research and development’ criterion in capital allocations

A component of the agency's capital budget is allocated with consideration to R&D. This allows for trialling and innovation, in conjunction with the establishment of the Cognitive Futures function.

IPO Collab (Introduced in May 2019)

A world first platform for IP Offices to collaborate, converse, plan, meet and do work together. IPOcollab allows intellectual property offices from anywhere in the world to work together on projects, share knowledge and expertise and collaborate to a greater extent in real time at any time. The platform has integrated applications available to support meetings, conversation, project management and even data analytics.²⁶ In late 2019 the platform was being trialled with 15 IP agencies around the world.²⁷

IP GAIN (Global Artificial Intelligence Network) (Introduced in September 2019)

A secure and scalable platform providing the capability for global access to cutting edge Artificial Intelligence (AI) and Machine Learning (ML) tools and services. The platform is like an app store for digital capabilities including AI/ML offerings to be made available. The platform aims to reduce duplicated effort through increased collaboration and co-developed services. This will support improved capability of

²⁶ <https://www.ipaustralia.gov.au/beta/ipocollab>

²⁷ <https://news.microsoft.com/en-au/features/ip-australia-pioneers-global-collaboration-platform-fosters-international-ip-links/>

domestic and international partners, and enhanced quality through common and consistent use of global AI practices.²⁸

In 2018 a new Director General, Michael Schwager, was appointed after the retirement of Ms Kelly. Like Ms Kelly, Mr Schwager came from the portfolio department and had a firm understanding of innovation from his previous work there. With his commencement in the role, the Executive team of the agency has continued along the innovation journey, most recently by looking at a more explicit theory of change²⁹ for the organisation, and is starting to incorporate innovation portfolio thinking (drawing on OPSI's innovation facets framework).

As of early 2020, the organisation is starting to give greater thought to what the IP office of the future might look like, and what steps might need to be taken now to help be ready for the opportunities of the future. It is also exploring more deeply how machine learning might transform all parts of the organisation and its operating environment, e.g. how might it integrate with the agency's risk framework when machine learning leads to more automated decision making? What might it mean for audit and transparency?

In summary, the organisation has made considerable strides over the last few years in integrating innovation as a core element of its operations. For instance, it has:

- redeveloped its approach to IT and technology more broadly, including adopting new methods (e.g. Agile and service design) and placing a much stronger focus on the end user (either customer or internal staff), thinking that has gradually permeated the rest of the organisation
- made available resources for innovation and trialling, rather than novel ideas and proposals having to always fight for resources against default settings and legacy investments
- engaged in new and more open ways with the outside world, including by opening up and equipping stakeholders with tools to understand and use its data, become more consultative, engaged with different partners and suppliers (including start-ups), and engaged with international peers in collaborative ways
- enmeshed innovation and futures thinking deeply into its strategic planning and prioritisation
- created roles and positions for people to be responsible for driving innovation (to balance out the important but default focus on business-as-usual), with oversight by the head of the agency.

“If you want to change things, it takes more time and effort than you expect” – A journey of ups and downs

None of this is to say that the innovation journey has been straightforward or easy. Innovation is an inherently uncertain process, and thus it brings surprises and unexpected developments. It also is

²⁸<https://www.ipaustralia.gov.au/about-us/news-and-community/news/global-artificial-intelligence-platform-launched>

²⁹https://en.wikipedia.org/wiki/Theory_of_change

challenging in that it can sometimes fit uncomfortably with existing beliefs and perspectives about how things 'should be'.

For instance, in introducing machine learning and its promise of automation, there was initially scepticism and apprehension from some staff about what it might mean – were their jobs going to be automated? In some instances (e.g. internal administration, where there have been tasks that could be automated), this has meant there has been a need for very good workforce planning, to avoid the potential of forced layoffs. In other areas (e.g. the introduction of new processes), it has demonstrated the need for co-creation, and bringing the affected staff along on the journey. In this vein, an active engagement strategy has been undertaken with the staff in the Patent Examiner group to get their thoughts on where automation/machine learning would best help them and what the priorities should be, so that the technology is serving the needs of the business rather than being led simply by what is possible. This approach resulted in planning for a Smart Patent Toolkit, which demonstrated how the technology could help staff do their work, rather than be a threat to them and their roles.

There is also often a strong tendency in the public sector for people, when confronted by a new idea, to ask “who has already done this?”, seeking reassurance that this has been done somewhere else and that it is a manageable risk/acceptable practice. For instance, who has experimented with machine learning? Who has introduced a virtual assistant? Such questions, while understandable in terms of ensuring appropriate risk management, reflect an attitude that can be toxic to experimentation, with its need for a willingness to try and give things a go. To respond effectively to the underlying concern of risk, it is necessary to translate the vision or concept of an idea into something tangible that can be reckoned with. However, it can be very difficult to make something tangible while the idea is still usually being developed and fleshed out. In this respect, things have become easier in the agency in some regards as the technology environment has become more sophisticated and thus better able to ‘show the thing’ and develop a proof of concept. It has also been very important to engage those who might be affected as early as possible. This helps with change management associated with innovation, but equally important is that it helps shared understanding of the environment where innovation is being considered, including identification of areas for potential pitfalls or blockage.

In other ways, the change process from innovation has been about rethinking some of the relationships the agency has had with external stakeholders. While changing the work of the agency has often had benefits for customers (e.g. better services), in others it has been important to ensure that the agency does not get too far in front of its stakeholders. For instance, when the agency was proposing some legislative changes, it wanted to include the ability for formal decision-making powers to be delegated to a computer (i.e. some decision-making would be automated). Initially there was some justifiable, hesitation from external actors – this was a big shift. The agency worked carefully to help communicate the changes, what they would mean, the limits to the changes, transparency around the decision-making, and how appeals to decisions that were automated could occur. It was important to ensure that there was comfort and confidence about the process for stakeholders, if they were going to buy-in to it.

At the leadership level, it has taken considerable effort over an extended period of time to get to the point of a shared vision with the necessary commitment and buy-in. Regular meetings are required to reflect

upon the vision, what might have changed, and how things are proceeding. A key issue for leadership is about ensuring that the organisation is on the one journey, as different parts of the organisation are naturally moving at different speeds. Innovation often occurs at the edge of an organisation, but for it to be truly effective and to have real effect, then it needs to be integrated into the core of the organisation. Therefore, an important role for leadership has been to try and ensure that the rate of change is not too fast to lose parts of the organisation, but not too slow to risk missing out on opportunities or falling behind changing expectations. This has not always been an easy balance to manage.

The innovation journey has not been straightforward, and has necessitated the ability to hold on to a high level vision but be flexible along the way.

Lessons and observations gained along the journey

The following are some lessons and observations from those within the agency about the experience of the organisation's innovation journey, reflecting the differing tensions and issues that are faced. These are captured as insights reflecting the organisation's overall individual journey, but which may be relevant to others on their own respective journeys:

- **Good change management matters:** Change management and innovation are not the same, but nonetheless a good innovation process is aided by good change management: e.g. strong leadership, demonstrating the desired behaviours, bringing people along, getting input early, collaborating where possible to the extent possible, communicating, admitting when things have not gone to plan, and having a clear narrative.
- **Framing matters:** What is the change for? What is the intent? For instance, if machine learning technology is being introduced, is it to help staff? Or might it be about cost savings (and replacing staff)? If it is about efficiency gains, are those in order to ensure quality/service or just cost-savings? The language used, and the associated conversations that occur, play a big part in shaping whether staff feel a part of the process or a subject of the process.
- **Early Engagement:** Early engagement across an organisation has great benefits to the eventual outcomes of innovation. This allows for vastly differing skill sets and knowledge to come together to drive shared innovation.
- **Communicate, communicate, communicate:** Continual communication about innovation is vital, as it takes time and consistent messaging for a new vision and culture to permeate an organisation and to counteract default and long-standing assumptions and perspectives. Ensuring that the message is heard (and believed) takes time, effort and persistence, and active involvement from all senior management. The readiness of the audience also matters – are they familiar with innovation? If not, then it can be easy to confuse people. However, it is also very challenging in a large organisation to tailor different messages to different parts of the organisation or to cater to the differing levels of familiarity or understanding of an issue that exist.
- **Providing a stable vision, yet with space for change:** A coherent vision is vital, to help make sense of things and to help the organisation prioritise and invest. At the same time, the vision cannot act as a static creation. It is important to balance a stable vision, one that can be used as a strategic

guide over time, but that allows for lots of change underneath, as new things are learnt and new initiatives are trialled and tested. There needs to be an identified path, with clear high level milestones.

- **Leadership really matters, both good and bad:** Strong (and consistent) leadership has been extremely important for the innovation journey of IP Australia. Important positive traits for leaders are those who are willing to ‘walk the talk’, provide support, resources and space for those trying something new and taking (informed) risks, and who recognise that innovation is a learning process and thus things will get better over time as more is learnt. As important as good leaders are, it also important to acknowledge that poor leadership will also have a significant impact upon the organisation.
- **Avoid defaulting to a consensus approach:** Particularly in the public sector, consensus will likely only be gotten for the lowest common denominator. It is important for everyone (both those arguing for more change, and those for less) to feel a little uncomfortable.
- **Recognising your limits:** A factor that is equally as important as active leadership is that of leaders recognising their limitations. For instance, those in senior leadership positions in the public sector may not always be well placed to make decisions regarding cutting-edge technology, and therefore need to feel both prepared and comfortable with delegating such matters to those with more technical skills. Additionally, while senior leaders may need to ‘sell’ the organisation and spruik its successes in order to gain the necessary support and buy-in, it is equally crucial for them to temper the ‘hype’, and to recognise that there is always more to learn and for an organisation to be open to what it does not know. Leaders need to expose themselves (and others) to new thinking and new possibilities.
- **Innovation should be seen from a holistic perspective:** Innovation should be seen from a holistic perspective rather than a project-by-project basis, or as a discrete activity. An illustration of this is the adoption of machine learning as an enabling technology – to truly take advantage of it and make the most of it, machine learning has to be considered through the lenses of technology, of governance, of culture, of processes. It is about transformation, not simply a straightforward change management process, as it will be filled with learning and the revelation of new possibilities (and the removal of others), meaning that there will be considerable uncertainty.
- **Multiple interventions:** Innovation is not something that can be acclaimed in a strategy and then left to itself. Effective innovation will only occur if there is a comprehensive and connected approach across the organisation, involving multiple interventions in structures, processes and systems. Otherwise, there is a strong likelihood that much of the work that has been supported by active leadership will reset to the organisational defaults, and harm the innovation process as the ‘business-as-usual’ work and a focus on existing, well-understood deliverables reasserts itself.
- **Skills:** To make the most of new opportunities/technologies, there needs to be the relevant skills available. However, these skills will often be different to what already exists within the organisation. Particularly with newer technologies (e.g. machine learning), it can be hard to get access to the skills needed to make use of them properly.
- **Silos and rewarding collective performance:** Silos are especially pernicious when it comes to innovation as they make organisation-wide change especially hard. Innovative activities, being new, will often cut across previously defined and understood divisions (structural and otherwise).

This necessitates a shift from rewarding individual on individual targets, to more collective goals and performance – however this can in and of itself be difficult, requiring significant competencies in risk management, workforce planning and many other elements besides.

- **Avoidance of ‘blame culture’:** A culture where learning through doing is punished is one where innovation will not occur. It is important for people to be able to be up-front and transparent about when something has not gone to plan, otherwise they will rarely be brave enough to try something new.
- **Risk and the challenge of overcoming legacy patterns of behaviour:** It is very easy in the public sector for people to continue doing things because those things have always been done, rather than revisiting whether those things are the best things to be doing given changed or changing circumstances. It is also easy for the risk of doing something innovative to be used as an excuse to not try something, but it is also important to remember that “Nothing works right the first time”. Over time attitudes to risk can change, but it takes ongoing active intervention, especially in a public sector context where the risk of acting tend to be institutionally reinforced and highlighted (e.g. through accountability measures).
- **Change fatigue:** Change fatigue seems to be more of an issue for those who are least engaged with the change/innovation/transformation efforts, and thus may feel most removed from shaping its direction or contributing to it, instead feeling more subject to it. It is important to try and bring everyone along, though recognising that some are likely to be dissatisfied with the changed approach regardless of what is done or said.
- **Innovation is difficult, but an effective organisation cannot sit still:** There are significant challenges for any public sector organisation in adopting a more explicit, deliberate and sophisticated approach to innovation. At the same time, if the innovation process is not given sufficient attention and support, then the organisation is likely to start to become less relevant to its context and risk not playing an effective and meaningful role. It can be a choice between whether the agency is disrupted or whether it is a part of the disruption.
- **Success is a powerful enabler for innovation:** Demonstration of the potential and the value of innovation will often be much better at changing mindsets and attitudes about what is possible than a business case or a detailed proposal. Success in innovative projects not only provides some momentum for innovative efforts, by showing results and getting support and backing from stakeholders and others, but it also helps the organisation learn more about the process of innovating and also helps identify new opportunities. A number of the projects in IP Australia can be traced back to earlier successes, which only occurred because there was a willingness to try new things. If an organisation can demonstrate it is successful at its core responsibilities, it will have a lot more freedom to innovate in other areas.
- **Trying something new does not have to be expensive:** Trying something new does not have to cost a lot of money. Small experiments can provide a lot of intelligence. Over time, as more is learnt and the more promising efforts are scaled, often innovation will save money, which can create the space and provide the resources needed for further innovation.
- **Innovation is not always ‘sexy’ or glamorous:** Effective innovation – innovation that helps the organisation be better placed for current and future priorities and needs – will not always involve ‘bright and shiny’ or easily understandable and accessible projects. Often there will be complex

and messy efforts, enormous change projects that involve a mix of innovation and more old-fashioned change management, that will not necessarily win any plaudits but which are essential. Often there can be a lot of preparatory work that has to take place before the shiny projects can really succeed. Rather than being an excuse to not try however, this reality makes it imperative for an organisation to start, knowing that sometimes things are ambiguous and it is necessary to just work through them day-to-day to get to a result.

- **Being at the edge can be exciting and sometimes overwhelming:** Being at the ‘edge’ can be exciting, but it can sometimes also be a little overwhelming. The challenge for leaders can be to ensure that the organisation is continually moving along at an appropriate pace – more than plodding along, but not too fast so that it loses organisational coherence leaving the slower moving parts of the organisation feeling left behind.
- **Believe in people, particularly people who believe:** Innovation requires having faith in people and their ability to do new things. While there will often be resistance (sometimes quite justified), part of the innovation journey is believing that people can and will rise to the challenge, particularly if they are given support and opportunity. At the same time, sometimes some people will no longer be comfortable with the new journey being undertaken by the organisation. In such cases, it is important to encourage those who are optimistic about what can be done and achieved, and who are willing to engage with risk and innovation in a way that is different from what occurred in the past.
- **One part of the whole:** An organisation cannot pretend to be ‘masters of the universe’ with complete influence over how people interact with government. To really make a difference, an organisation must see beyond its own borders, and recognise that it is only one part of a citizen’s or user’s experience with government.
- **Respect your ecosystem:** An outwards perspective and engagement with external stakeholders (partners, suppliers, clients, etc.) is very helpful for exposing the organisation (and those within it) to new thinking, different approaches and different uses of technology.
- **The public sector has constraints (but not as many as sometimes thought):** “In the public service there are the things that you have to do and the things that you cannot do. In between is about 90% of public service life.” While there are difficulties in innovating within the public sector, there are also a lot of natural innovators there who will do a lot if given the chance.
- **Leverage complementary agendas:** The appetite and opportunity for innovating in the public sector will vary over time, as government agendas shift and priorities evolve. Given this, and a typical lack of *consistent* pressure for the public sector to innovate, it is important for an organisation to tap into supporting or complementary agendas when they do arise. Sometimes the environment for innovation is going to be better than others, so the organisation should make the most of it.
- **The public sector can learn fast because it does not have to compete with itself:** One of the strengths of the public sector is that it does not have to compete with itself. There is significant opportunity for public sector agencies – whether within the same jurisdiction or across national governments – to collaborate instead of competing, to share lessons and tools, and helping agencies in other governments along their respective journey, and in turn, being helped by them.



Initial insights from OPSI derived from IP Australia's innovation journey

The following preliminary insights are drawn from the case study, however before these can be used as the basis for more general advice or guidance, these insights will need to be tested. Additional case studies, of other public sector organisations that are also advanced in their respective innovation journeys, will be needed to create more rigorous, refined and standardised guidance (with the caveat that innovation is always contextual, and thus how it occurs and what shapes it will also be somewhat contextual).

Embedding innovation requires moving beyond a focus on individuals and short-term organisational priorities

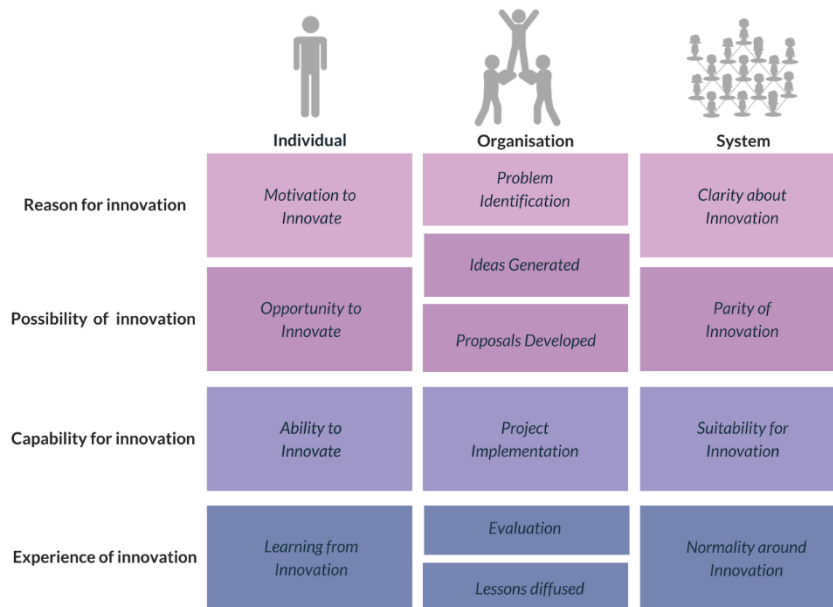
If innovative activity is to be consistent, deliberate and strategic, then it must move beyond being led by individuals (positional leaders or otherwise) and beyond immediate organisational priorities. The case supports the classification of the determinants of public sector innovation from an individual, organisational and systemic lens. An innovation perspective must be linked to and integrated with a range of processes, structures and systems, or otherwise be precariously dependent upon individual leaders or organisational priorities that might change, sometimes at any moment.

This case provides an illustration of how the senior leadership of an organisation, in conjunction with active provocation from other levels of staff, can help shift the focus of innovation from the individual (e.g. "what do I think should happen?") to the organisational (e.g. "what are the things that require us as an organisation to change what we are doing?") and to the systemic (i.e. "how are we part of the broader ecosystem? How does our user's experience with the organisation fit as one part of the whole?").

However, it is less clear as to whether or to what extent this journey can be 'short-cut' by systemic interventions (e.g. introducing requirements at the system level that in some way force the organisation to be innovative). While the practice of the private sector and the market would suggest this is likely to have a meaningful effect (i.e. competition is often a crucial driver for innovative behaviour at the firm level), it also suggests that individual capabilities and organisational contexts will matter greatly (i.e. not every firm innovates in response to competitive pressures).

This supports the use of a framework, such as OPSI's Innovation Determinants Model, to help consider the differing levels of issues, and where interventions may be needed – e.g. an organisation may do all it can, but without system-level support it will fail to make the necessary impact; equally a conducive system will not necessarily lead to success if the organisation has not the right structures and processes in place.

OPSI's Innovation Determinants Model



Even when the context is right, innovation is difficult in the absence of structural drivers for innovation

There are a number of particular factors at play in the case of the IP Australia example. These include:

- As a cost-recovery operation, IP Australia is effectively almost entirely a self-funding entity, and thus the organisation has a degree of fiscal autonomy that many other public sector organisations do not, making it somewhat easier to set a dedicated innovation/R&D budget and allocate resources for experimentation and trialling novel technologies. At the same time, being a cost recovery agency means these experiments need a clear pay-off in financial terms, and the focus of the executive continues to be on trials that deliver for the customers and the agency with returns on investment.
- The agency, while providing policy advice and working on an area that is certainly not insignificant, is somewhat removed from the political 'spotlight', providing a degree of stability and independence that is not always possible (or even desirable) in other parts of the public sector.
- The work of the agency is also a, relatively, apolitical domain, in that it is very process-oriented rather than having seen large political debates about what the agency does or how it should do it.
- The organisation employs a large number of highly skilled technical experts whose area of interest is innovation (intellectual property being about the protection of distinctly novel ideas).

- IP offices globally, while not strictly ‘competing’, are an area where ‘customers’ do get exposure to differing standards of service for the same offerings (e.g. protecting their IP rights in different countries). This means that the organisation is somewhat exposed to what is happening in other countries, and variation in service standards can provide some pressure for innovation.
- The organisation has been successively led by two experienced leaders with a deep professional and personal understanding of (public sector) innovation, contributing to a relatively continuous and sustained innovation journey. These leaders in turn have been supported by a number of other senior managers who have been willing and able to accompany along the journey (or in some cases actively pushing for the agency to go faster along the journey). When senior leadership empowers others, great strides can be made; however care needs to be taken to ensure that it remains a collective journey.

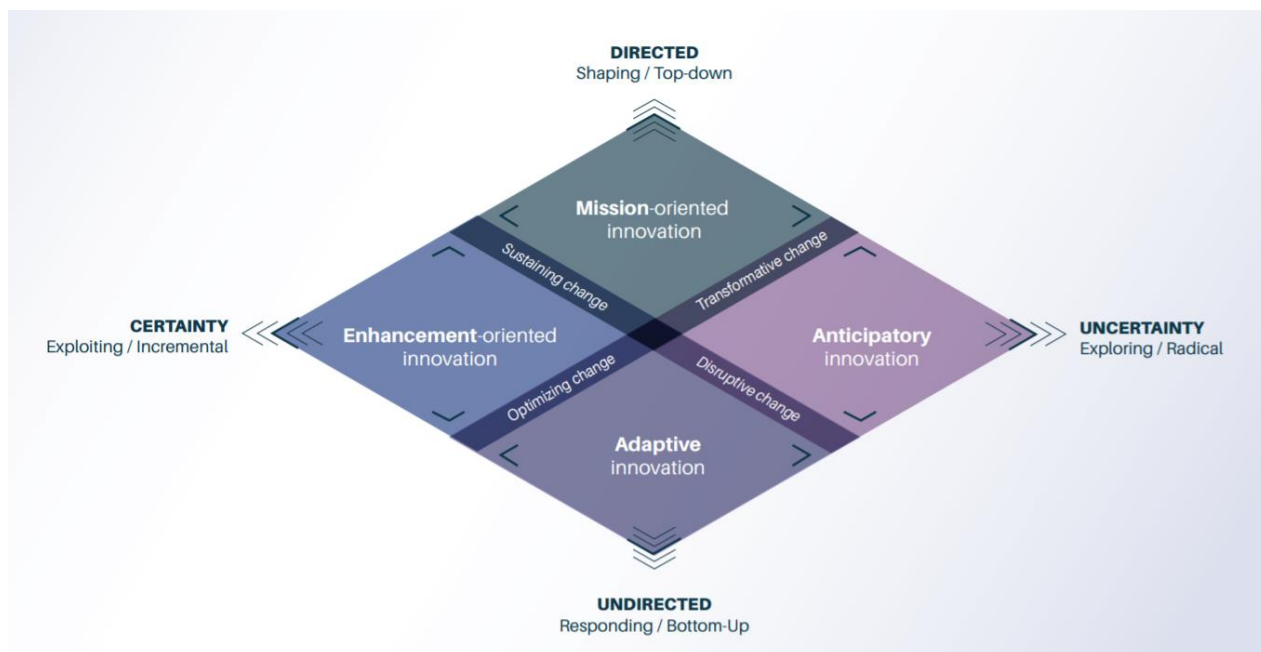
In a number of ways then, IP Australia has had a number of the ideal preconditions with a good mix of the necessary resources, skills, leadership, opportunity and freedoms – and yet the journey has still been challenging. This highlights that while it is very possible for a public sector organisation to become proficient in innovation, it is far from straightforward or easy to realise this in practice. The implication of this is that, in the absence of relatively ideal preconditions, there will be a need for additional interventions to assist most public sector organisations along their innovation journeys. Relying on good intentions and a desire for innovation will, in most cases, be insufficient to achieve organisational proficiency or sophistication at actually delivering innovative initiatives in support of better outcomes.

The importance of a varied innovation portfolio

IP Australia has not shied from engaging with new technology and exploring possibilities that are far from certain. It has cultivated a somewhat diverse innovation portfolio, ensuring a focus on improving existing measures and practices of the organisation, but also looking at how to engage with future developments and needs. It has provided a high level vision, but also attempted to encourage and allow for bottom-up discoveries and insights that might shape innovation activity in unforeseen ways.

More recently, the agency has begun to engage with OPSI’s Innovation Facets model, to help guide its mix of innovative projects. As its sophistication in the innovation process grows, it is engaging with a range of methods, tools, frameworks and mindsets to help it take a more explicit, managed and deliberate process to its innovative activity.

OPSI Innovation Facets Model



Moving at different speeds contributes to measurement challenges

Innovation is an inherently difficult thing to measure, as measurement is about what has happened, and innovation is about what is new to the context. Measuring things that have not happened before is thus challenging. Additionally, as indicated by the IP Australia case, while an organisation could be considered as ‘innovative’, there will always be those who will disagree, either in absolute terms or in matters of degree. For instance, the statistics from the most recent State of the Service survey for the agency found that only 45% agreed with the statement “My agency recognises and supports the notion that failure is part of innovation” (despite an explicit universal attitude from the Executive team of the organisation that they do, in fact, recognise and support the notion that failure is part of innovation). Equally, over half of staff agreed with the statement “My agency inspires me to come up with new or better ways of doing things” – meaning that nearly half the organisation did not.

The exact meaning of these statistics cannot easily be discerned without further investigation beyond the scope of this case study, however it does suggest that the organisation’s journey will be experienced differently by different people and different parts of the organisation. Messages from leadership may not be believed, or may be interpreted differently by different layers of management, so that for some the message received is very different from the one transmitted. There may be the belief that some parts of the organisation are allowed to do things that other parts of the organisation are not. Or there could be any number of other interpretations.



Observatory of Public Sector Innovation

Regardless of the true cause, the implication is that organisational measurement of innovation is complex and results may often need to be interpreted with care. One person's innovation is another person's old news, and one person's excitement at the new may be another's fear of what it might mean. An organisation needs to have regard to the different perceptions and interpretations of what is occurring, and somehow navigate a path that is nonetheless not too slow and not too fast. Otherwise there is a risk of jeopardising the core operations and the commitment of those supporting them, or losing the learning (and passion) of those at the edge of the new.

Appendix A: Background/contextual information

This material was drafted by the OECD Observatory of Public Sector Innovation based on research and interviews with past and present employees of IP Australia. This material is a research product and not an official publication of the OECD.

Timeline of key milestones/developments

- 2019 – IPAA Public Sector Innovation Award finalist for Trade Mark Assist³⁰
- 2019 – Introduction of role of senior innovation manager
- 2019 – won the Australian Information Industry Association’s (AIIA) Public Sector & Government Innovation of the Year for Smart Trade Mark³¹
- 2019 – won 3 Canberra iAwards (Digital Canberra iAward, Public Sector & Government, Infrastructure and Platforms Innovation of the Year) for Smart Trade Mark³²
- 2018 – amendment of IP rights legislation allowing delegation of decisions to machine
- 2018 – Michael Schwager becomes Director General
- 2018 – IPAA Public Sector Innovation Award finalist for ‘Alex’, the Australian Government’s first integrated virtual assistant with web-chat digital experience and advanced machine learning capability
- 2018 – 3 Horizons Strategy established
- 2018 – winner (large agency category) of National Archives of Australia’s Digital Excellence Awards for ‘Alex’³³
- 2018 – won a global business impact award from Pegasystems for its work updating its digital systems³⁴
- 2018 – Australian Trade Mark Search recognised in the OECD’s *Embracing Innovation* trends report as an innovative case study³⁵
- 2017 – won Silver in the Prime Minister’s Awards for Excellence in Public Sector Management for the RIO Search for Trade Marks (internal) and Australian Trade Mark Search (external)³⁶
- 2016 – IPAA Public Sector Innovation Award finalist for Patent Analytics Hub
- 2016 – introduction of Alex, a virtual assistant
- 2015 – Idea Garden ideas management system established
- 2015 – Capability Action Plan published
- 2015 – initial investigation of machine learning, trialling IBM’s Watson

³⁰ <https://www.act.ipaa.org.au/innovation-finalists-2019>

³¹ <https://www.arnnet.com.au/mediareleases/35500/australias-intellectual-property-office-wins-aiaa/>

³² <https://www.ipaustralia.gov.au/about-us/news-and-community/news/ip-australias-smart-trade-mark-sweeps-canberra-iawards>

³³ <https://www.govtechreview.com.au/content/gov-digital/news/ip-australia-s-alex-tops-digital-awards-1351958179>

³⁴ <https://www.canberratimes.com.au/story/6013104/global-award-for-ip-australia/>

³⁵ <https://www.oecd.org/gov/innovative-government/Australia-case-study-UAE-report-2018.pdf>

³⁶ <https://www.act.ipaa.org.au/pms%20awards-winners2017>



- 2014/15 – establishment of ideas management system within organisation
- 2014/2015 – establishment of innovation management role
- 2014 – IP Australia Capability Review published³⁷
- 2013 – Patricia Kelly becomes Director General
- 2013 – 1st annual Australian Intellectual Property Report published
- 2012 – appointment of a Chief Economist to boost data and evidence capabilities
- 1904 – Establishment of the Australian Patent Office and filing of first patent.

Interviewees

- Michael Schwager, Director General, IP Australia
- Patricia Kelly, previous Director General, IP Australia
- Frances Roden, Deputy Director General, IP Rights Division, IP Australia
- Ben Mitra-Kahn, Chief Economist, IP Australia
- Rob Bollard, CIO, IP Australia
- Matthew Forno, Assistant General Manager, Policy and Governance Group, IP Australia
- Michael Burn, Senior Director Innovation, IP Australia
- Simon Gilmore, previous IP Australia employee with an innovation management role
- Paulette Paterson, previous IP Australia employee with an innovation management role.

³⁷ <https://www.apsc.gov.au/sites/default/files/IP-Aust-Capability-Review.pdf>