ThinkPlace

ThinkPlace's submission to the Independent Review of the Australian Public Service

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ThinkPlace creates public value through human-centred innovation and design.

We work with government, business and NGOs to create vibrant societies, strong economies, sustainable environments and trusted institutions.

What will 2030 look like?

John Body
Founder and Partner, ThinkPlace Australia
john.body@thinkplace.com.au

The 2030 will be very different from 2018, Just as 2018 is different from 2000. The megatrends that will shape the future are well documented and don't need to be expanded here. Suffice to say, economic, trade and people flows will change. Technology will be very different as it continues to evolve, with artificial intelligence being the key disruptor. And a cohort that lives longer will lift the average age of the population. At the same time we must address climate change and by 2030 this will be accepted rather than contested.

What will the Australian Public Service need to be like to operate in this context?

We cannot predict the future with any accuracy. But anyone who has been in the workforce for a reasonable period of time will attest to the changes that have occurred over recent decades in response to the changing environment. On a day-by-day basis, the APS changes slowly. But from decade to decade, the changes are immense. Think female participation in the workforce. Think technology in the workplace. Think digital engagement with the public. And changing work environments. And means of communication. And business processes. And…

The external environment suggests that these shifts will not only continue, but accelerate. So what they might look like? The APS will need to master change to outperform the norm. Change that will add more value for citizens, that represents impactful innovation. The APS will remaster public service so that it serves the public in its new form. With that we will see the mainstreaming of human centred design, augmented and triangulated with more sophisticated use of data, as a key method to design new policies, laws and services.

The APS of the 2030s will have the capability to design for the human while "zooming" to the bigger system, to ensure policy effectiveness and efficiency. This ability to hold concurrently the perspective of the whole system and the needs of the human will be increasingly important. As the APS designs, behaviours will be shaped less through force and more through encouragement. We are seeing behavioural insights and gamification gaining ground as legitimate tools of government to encourage the community to comply

But one thing will be enduring in the 2030s future. This one thing was the same in the 1920s, the 1970s and will be the same in the 2030s. The need to achieve outcomes - the social, economic and environmental outcomes of government. Techniques and technologies might come and go. But the need to achieve outcomes for Australia and Australians is enduring. It will not change and the APS of the future must never lose sight of its primary purpose - to work with the government of the day to achieve their outcomes for the people of Australia.

The balance of this submission is three short papers that examine three themes - the implications of an increasingly digital world, the centrality of innovation as the operating environment changes towards the 2030s and new possibilities for regulating in a 2030s world.

2030 will be a decade of digital abrasion

Darren Menachemson
Partner and Chief Digital Officer, ThinkPlace Australia
Darren.menachemson@thinkplace.com.au

By 2030, the Australian Government will have built sophisticated capability in what are currently considered to be emerging digital technologies. It will also have integrated and enlarged its data reserve substantially. Because of this, it will need to build a strong competency in navigating new dimensions of a challenge we term 'digital abrasion'.

Digital abrasion is the tension that emerges when what the government *can* do with digital and data comes into conflict with what the community deems acceptable. To put it another way, the public service will need to make difficult decisions about, and sometimes between, optimising collective good and aligning with collective expectations.

A familiar digital abrasion challenge that government faces today, for example, is the joining up of data to build cross-portfolio views of citizens. Unfettered, this carries enormous administrative benefits for the government and the community, but is in conflict with community expectations of privacy and self-agency.

In the future, digital capacity will see new forms of digital abrasion emerge for the Commonwealth, creating new tensions between what could be done and what should be done. For example:

Fully leveraging machine learning for administrative decision making

- Should the Government use advanced, specialised artificial intelligences to micro-target regulatory interventions or service offers, even where the nature of such intelligences makes it difficult to "explain" the basis for targeting?

Or

- Should the Government limit itself to transparent, "explicable" targeting, and in doing so, reduce its ability to reduce suffering or stop criminal/antisocial behaviour because it is not using available technology to its fullest potential?

Placing systematic trust in decentralised or "unregulated" assets

- Should the Government become participants in blockchain solutions that it isn't able to regulate or influence, if there is a strong net positive national outcome for issues such as fisheries management, biosecurity, environmental connectivity or pandemic resilience?

Or

- Should Governments stay within their "trusted" networks (such as those it or partner nations set up or contract)?

The characteristics of the challenge

Such questions will involve a number of troubling characteristics that will make navigating them difficult. These include:

- *Novelty* - They will have no or few precedents
- *Impact* - Deciding one way or the other involves material, scaled impact on the community
- *Momentum* - "No nothing" will not be an option
- *Heterogeneity* - Community expectation and social licence will not be homogenous, but instead fragmented across every grade of the spectrum of opinions
- *Sensory lag* - Results will not be perfectly predictable nor emerge quickly
- *Accumulation* - Each failure will make successive attempts more and more politically untenable, delaying benefits

The "new" new skills for 2030

In 2017, the OECD released a document called Core Skills for Public Sector Innovation, in which it identified 6 "core" skill sets that. According to the framework, in a 21st century public service, "all officials should have at least some level of awareness these six areas in order to support increased levels of innovation in the public sector." The 6 skills it lists are iteration, data literacy, user-centricity, curiosity, storytelling, and insurgency.

We believe that these skills will be essential for effectively operating in the decade of digital abrasion, and create a relevant framework for the Australian Government to consider. However, we also believe that there are two gaps that are as essential to responsible public governance, and that these are at the heart of navigating a digitally abrasive future. These two additional skills are:

Care – diligent, empathetic exploration of the ethical dimensions of a problem, using formal ethical frameworks, sophisticated understanding of the policy and strategic technology dimensions of abrasive digital opportunities, and active engagement with those that will be affected or their intermediaries. Care:

- Actively explores unintended harms
- Engages with complex ethical dilemmas
- Has a strong grasp of social, environmental, economic and technological dimensions
- Favours long-term thinking

Care is and must be a transdisciplinary skill. It will ensure that decisions about abrasive digital opportunities are made, simultaneously, in the collective interest and within an acceptable locus of community and individual social license.

Zoom - looking beyond the immediate problem space and see things from a wider perspective – a systems perspective – to identify benefits, opportunities and risks to pursue or address beyond the immediate horizon, rather than explicitly or tacitly "hoping everything will be ok". Zoom:

- Considers the search for non-obvious risks, benefits and opportunities as an imperative
- Considers the individual, the community and society as a whole
- Favours holistic, systems-level thinking and sensing

The 10 year journey to 2030

Around 2000, the Australian Tax Office, under the leadership of Commissioner Michael Carmody made the decision to become a human-centred organisation with differentiated treatment at the heart of its compliance strategy. The transition saw the development of new skills, culture and capabilities at every level of the agency – senior governance, middle management and individual practitionership. It acted as a catalyst for the broader public service, energising other agencies and stimulating an ecosystem of people, training and thinking that would ultimately underpin a movement towards design thinking for public good.

From the start, the Tax Office acknowledged that this shift would require a deliberate journey over a ten-year period, as it progressively created the expertise, culture, methods and proof points that would change human centred design from being an "outside infection" to becoming part of the agency's DNA. This prediction was broadly accurate, and resulted in major improvements to the administration of tax in Australia, and in the ATO becoming a noted leader amongst its peer agencies in the OECD.

The lesson is that to effect a sustained change with mindset, cultural, methodological and capability dimensions, agencies cannot plan in 12 month timeframes, or in 3 year timeframes. They must lay the groundwork with strong intent for a 10-year journey that will likely outlast the tenure of its original sponsors.

The seeds of the change towards the 2030 paradigm of government have been planted; now they require immunity and time. Some examples among may are:

- The establishment of the DTA in the Prime Ministers' portfolio and its active implementation of a digital service standard
- The creation of a Digital Leadership Program under the APSC and with support and sponsorship from the DTA, to prepare the APS's senior executive cohort for the "new world" they will be facing
- The broad uptake of more adaptive styles of leadership in major service delivery and regulatory agencies, in many ways aligned with Dr Peter Shergold's recommendations in the Learning from Failure Report (2015).

A deliberate program of capability build for a digital future

However, we believe that the creation of cross-cutting skillsets of *care* (future-competent ethics) and zoom (design as engagement with complex systems) must be actively and explicitly pursued. This is true particularly in senior executive cohort but ultimately in all cohorts with a policy or program design role, and with an expectation that this is a journey that will take a decade to embed into the public sector DNA.

It is a journey that, if completed by 2030, will create a platform for the next iteration of public governance.

To prepare in a timely for 2030, the Government should consider:

1. Broad digital ethics capability build to prepare the future APS for the challenges of a digitally founded future

2. Continuing and accelerating the shift to a strong user research and co-design posture as a "norm" and base expectation for all agencies, not just service agencies

3. Building the argument for greater exploitation of technology with strong safeguards to the community, to support an informed shift in social license

4. Setting up a *Model of the Edge* – experiments under a consistent, well-defined framework where technology, human centred design and social good imperatives come together to provide proof points in designing the future capability.

2030 will be shaped by many forces, but digital government is not only inevitable, but a positive *force majure* in informing policy design and shaping the design of regulatory and service administrative models.

We need to take care that the new digital foundation of government work for society and are shaped deliberately and collaboratively, even while we are working out what, precisely, it is.

Compliance and regulation in 2030

John Body
Founder and Partner, ThinkPlace Australia
john.body@thinkplace.com.au

Empowering the system to reduce government intervention

A key role of government, especially the Federal government, is to curb the behaviours of some in the interests of the whole. These functions include regulating behaviours of individuals and entities, as well as ensuring compliance with the law and responding to non compliance. These are expensive functions to administer and represent a significant cost to government today. The cost comes from the need to check what people are doing and respond accordingly.

As the population grows and the economy grows, trade expands and the flow of money increases, as risks become more complex then new models of regulation will be needed into the 2030s. We have seen big advances over recent decades in regulation from old techniques requiring 100% inspection or random sampling to much more effective targeted and responsive approaches. We have seen this across government - from treating everyone the same to finding the highest risks and treating these hard, while helping others to comply.

So where are the next frontiers?

From regulation and compliance as an overlay to being part of the natural system. With people doing business on technology platforms then the data generated by these platforms can be used to monitor compliance in real time rather than having after the fact follow up. For example, banks hold extensive data while governments have access to global intelligence. What if you could combine the intelligence from law enforcement with the data richness of the banks. This would simultaneously harden the banks against crime whilst escalating the ability of law enforcement agencies to prevent and disrupt crime.

From manually constructed algorithms to embedding artificial intelligence to identify risk. For example increasing sophistication of data analytics is already identifying non compliance much more effectively than in the past. This highly targeted intervention is less obtrusive for the bulk of the population seeking to live their everyday lives while much more disruptive for those seeking to undermine our national interest.

From government interposed in transactions to blockchain tracking transactions that eliminate the need for government mediation. For example, more robust payment systems will reduce or eliminate the need to follow up accidental or intentional payment integrity issues. Government can get out of the way and let the system embed its own integrity.

From responding to human behaviour to predicting human behaviour. For example, if non compliance or breaches in regulation can be predicted before the breaches occur, considerable cost can be saved through prevention rather than response.

From humans complying with the law to autonomous compliance built in. For example if cars are autonomous and designed to comply with the law, traffic infringements would no longer be a concept.

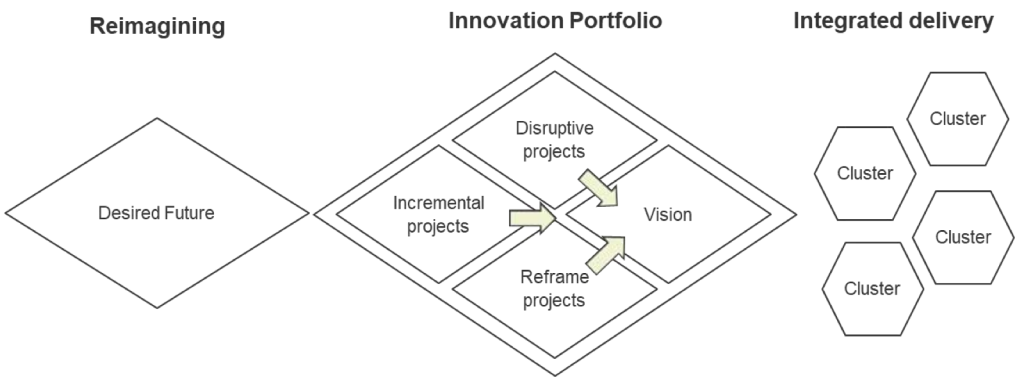
What are the implications for the Australian Public Service? This will mean an acceleration of the trend that has been occurring over a long period from a lower skilled transactional workforce to an increasingly technology empowered workforce. It will also mean designers of policy, law and administration who can envision and then respond to the emerging future. At some point this may move from a trend to a disruption. If the rate of change in the external environment outpaces the APS's ability to respond, then the APS may be forced into new models of acquiring the skills needed for the future.

Policy 2030 - new policy platforms to disrupt

Dr Nina Terrey
Partner and Chief Methodologist, ThinkPlace Australia
Associate Professor, Institute of Governance and Policy Analysis
Nina.terrey@thinkplace.com.au

2030 will be a decade of systemic and human-centred policy disruption

Imagine in 2030, the APS is highly equipped to deal with complex policy and service delivery issues. In the context of complexity and uncertainty, policy makers, leaders and delivery agencies embrace complexity using tools and methods adaptive to these realities. The way complex problems are tackled is through deep collaboration that permeates beyond the boundaries of APS and traditional engagement models.
The basis of collaboration is design-led system innovation. This disciplined approach moves from Vision, to an Innovation Portfolio, to integrated delivery, and measurement of the effect.

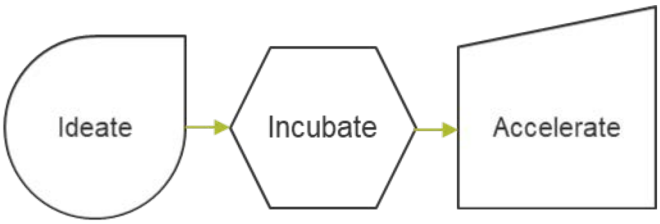


- Collaboratively understand the complexity of where we are now. Use deep reflective learning: Single, double and triple loop learning
- Use method toolkit
- Uncover the articulation of a disrupted vision from today, encouraging deep change to the wider system

- Using method toolkit articulate and define a portfolio shifts todays system toward the vision
- Draw out the disruptive (changes todays world view); incremental project (improve effectiveness and efficiency of existing system) and reframe (using insights re frame how the system works)

- Multi-actor teams bringing together policy, regulatory, admin, industry, citizens to ensure integrated delivery
- Start small and then scale

The delivery models are based on more experimental, fast to learn, and then generate evidence to support scaling up. If we took a zoom, the pattern of creating the policy innovation portfolio, and the integrated delivery would assume a disciplined approach to generating ideas, incubating experiments to implement to learn, and then looking for scaling of great experiments.

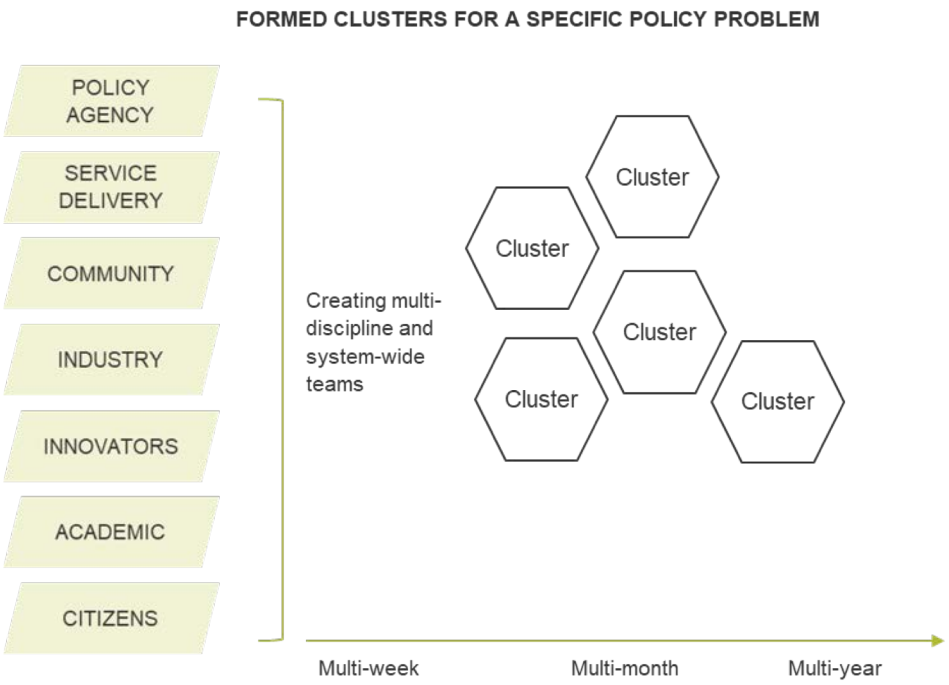


This means a diverse method toolkit for these clusters is at the nexus of:

- human-centred design,
- innovation incubation,
- behaviour-shaping economics,
- integrated design delivery methods, and
- adaptive evaluation models.

The collaboration patterns in the APS operates in an agile, highly adaptive way by creating necessary “clusters” of actors that are required to fully explore and comprehend the vision for a policy outcome, and to co-design and implement solutions that work.

A cluster is constituted actors from across the APS, industry, community – citizens, innovators, and emerging disciplines in academia. The clusters might range from 10-30 people. They create a team that works intensively on a policy problem. They form either fulltime and dedicated for a period, or they come together for distinct activities.



The clusters are created within a framework that includes such principles as:

- Clear understanding of systemic nature of the problem
- Outcome-focussed
- Act with agility and pace
- Form new partnerships and relationships
- Time bound and delivery focussed
- Integrated human-centred solutions
- Strong coordination and support to enable effective cluster operations
- Learning is distributed and shared
- Adaptive measurement to inform change

If we assemble these actors across the 'system' (a system being people, things, interactions that exist to achieve a specific purpose, like the immigration system, the justice system, the social service system) then we would start to see a public service that is able to work at a focussed outcome with the right people and following methods that allow a system to participate in the reimagining, exploring and innovating of solutions that are more likely to work for people and be implemented successfully.

If we followed a design-led system innovation approach then we would see new and interesting perspectives on the complex problems we face because we took time to understand complexity from human

experiences, from behavioural analysis, from networked understanding of the interactions that drive the system today. It would in turn open up the abilities of the APS to genuinely collaborate with others who bring technical and innovative skills and knowledge to the kinds of solutions necessary to realise the vision or change. And in the co-designing and collaboration create the necessary networks to make change happen, and successfully scaling the implementation of great ideas.

Strategic shifts

The way we can see what changes are required to achieve this future state:

	FROM	>	TO
1	Complexity gap[1] (the gap between the problem and the capability to address them)	>	Complexity joined-up (the ability of an agency to find the necessary capability across the system to address the problem)
2	Binary, and expert perspectives of the complexity	>	Multiplicity and multiple perspectives of the complexity
3	Intervention focussed solutions	>	System focussed solutions
4	Solutions that fail to scale because they are developed with a simplistic view of who needs to participate in the policy process	>	Solutions that succeed to scale because early formation of necessary actors increases knowledge of necessary scaling needs early in the policy process
5	Conservative approach, analytical, deterministic methods to understand complexity	>	Inspirational approach, abductive, emergent methods to understand complexity
6	Participation limited to 'known' and trusted actors	>	Participation broadened, deepened to be more diverse and inclusive
7	Limited capacity and time given to design a 15 – 20-year view to realise a deep systemic change (or reduced to political cycles)	>	Deep capacity and passion to create 20-year vision that disrupts the current, coupled with time given to define how we will get there
8	Too caught up in short terms 'wins' or slow deliver projects	>	Start with small, targeted projects and learn how to scale, iteratively.
9	Evaluation models that fail to embrace complex adaptive systems	>	Adaptive evaluation models that are invested in at the start of all work, not post the solution or intervention

How might we get there?

The recognition that policy design and implementation is in the business of understanding complexity and navigating this complexity with the necessary mindsets, structures and tools is where we are at, but there is still nervousness to be bold and work in ways that demonstrate the shifts to drive systemic and human-centred policy disruption.

There are cases of organisations already working like this today, and by reflecting in these we can start to identify how the broader APS can make change.

Case study: Australian Renewable Agency: A-Lab

In late 2015, ARENA partnered with ThinkPlace as their key design and innovation partner to co-design a new model to generate projects for investment. The problem to be solved was "are we getting the right projects to really disrupt the sector and ensure we reach the goal of increased renewable energy in the energy system in Australia?" The response to this question was the invention of the A-Lab. A-Lab is ARENA's innovation lab creating cross-sector partnerships and world-first projects to transform Australia towards a clean energy future. It brings together a diverse network of people, expertise and passion to drive systemic change in the electricity sector. A-Lab works to define solutions to the most complex challenges of integrating renewables and grids, combining the respective strengths of participants in order to build momentum for change. This model of collaboration in action is what has been describe in the 2030 vision. What did it take?

- Recognition by the agency executive that no one actor can come up with the project that would solve the complexity of the adoption of renewable energy
- Convincing the Board that a new approach would help the organisation generate projects that were innovative and driven by new partnerships, thereby creating an authorisig environment
- Uncovering the frustrations of the industry that the siloed and regulated industry largely focussed changed efforts on technical, regulatory and market issues was not solving the problems they were all facing.
- Creating a new framework for engagement that brought the sector together.
- Reframed the problem into an innovation challenge, that was defined by co-designing the the sector the areas of innovation that matters.

- Setting up a team that enabled the system to collaborate. This team uses skills such as design thinking, collaboration, innovation, subject matter expertise
- Assigning funds to be allocated to people whom participated and created projects that could help achieve the outcomes
- Delivering a structured program of collaboration that moved the sectors from ideas, to experiments to scaling
- Using design and innovation expertise from ThinkPlace build the capacity across the sector to think differently introducing new thinking tools, and methods that liberated them from the constraints of how they think.
- Supporting a human-centred approach by using insights lab methods to inject citizen views, attitudes and behaviours into the innovation and project definition process, de-risking projects by taking away assumptions early

The result of ARENA taking this approach has led to over $50M of projects being established which demonstrate leading edge thinking and innovation in the adoption of renewable energy in Australia.

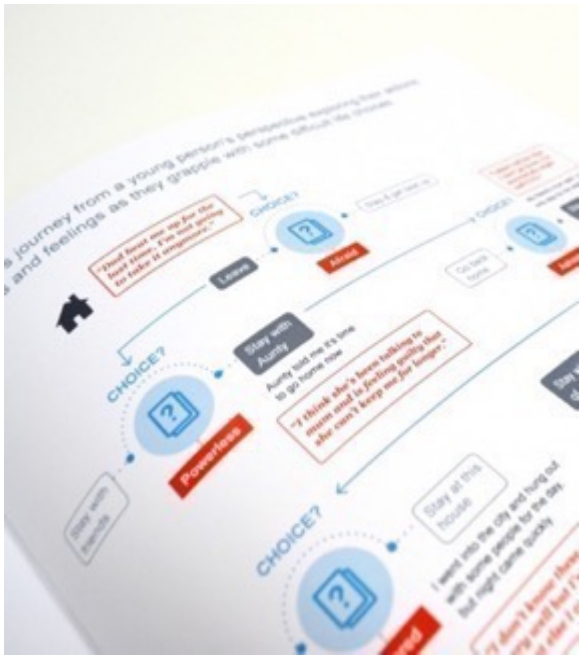
The questions this case triggers in terms of how we need to change the APS to be more systemic and human-centred in policy and service delivery:

- How might other APS draw from this example and embrace more innovative, design led approaches?
- What leadership mindset is necessary, to be comfortable to try new models such as these system wide engagements?
- What skills such as facilitation, systems thinking, innovation methods are learnt and applied?
- How can we institutionalise the idea of many actors coming together and driving new ideas and actions?
- How can we make risk-adverse cultures confident to create these environments?

We open the proposition that we need to reflect as policy makers on how we embrace the systemic nature of most public sector challenges and consider how design-led systems approaches might need to be the way we operate to achieve our desired outcomes.

Our work on three projects – the ACT Family Safety Hub, Victoria's Out-of-Home Care initiative, and mapping out the Justice Pathways for Perpetrators of family violence, were awarded prestigious Design Ticks at the Australian Good Design Awards (2018)

Our study into Rough Sleeping won a gold award from the Design Institute of New Zealand (NZ, 2015)



We designed a mobile app for remote field nursing in Ghana which won the Design Management Institute's International Design Value Award (USA, 2015)

We were awarded the ACT's Social Change Maker of the Year in the Telstra Business Award (Australia, 2018)

ThinkPlace was awarded a Good Design Award Selection for working with the Renewable Energy Agency to set up A-Lab, a renewables innovation capability (Australia 2017)

ThinkPlace's collaboration with the Australian Capital Territory Education Department on the groundbreaking It's Your Move curriculum, which uses design thinking to help children solve health challenges in their school, was awarded an Australian Good Design Award Selection and a German Design Council Award (Australia 2017 and Germany 2018)