Adapting the evolving shared services model

Integrating SaaS for future-ready operations

The evolution of shared services

The shared services model emerged in the public sector during the 1970s as computers and technology became more common in the workplace. At the time, fax, print and telephony were essential business tools that reached into every department and vertical, while early applications controlling the Finance and HR function were delivered from an emerging department called Information Technology (IT).

The IT purchasing process back then was inflexible and slow, and a total contrast to ordering cloud services today. New software applications were intrinsically bound to the accompanying hardware, meaning the whole process from raising a PO number to a functioning application could take anything from a few weeks to several years.

At this time, the only real option to take advantage of economies of scale and to make the most efficient use of capacity in the server room was to centralise the Information and Communication Technology (ICT) function.

Centralising the procurement and distribution of these central services also had some secondary advantages, such as minimised duplicated data, making it easier to scale, and more importantly, allowing individual agencies to focus on their core functions, and not be distracted by IT issues.

Desktop computers became the standard tool for office workers and the IT department took control over purchasing and distributing new applications, making it the central point for purchasing and delivering all IT services, and solving technical issues.

The path to SaaS

The next generations of office workers witnessed computing power and connectivity speeds increase exponentially, with fibre optic connections and wi-fi enabling low latency access to data from any location.

This created the perfect environment for vendors to start hosting their own software and then supplying that to users through any browser. One of the first of these services was Hotmail, launched in 1996. Salesforce followed with its online CRM app in 1999 and Software as a Service (SaaS) was born.

For the first time, organisations could take advantage of a new business tool without going through the traditional IT procurement process. This disrupted the shared service model. SaaS offerings mimicked the cost and scaling benefits attributed to shared services — both are delivered from a centralised pool of resources and managed by a third party.

But more importantly, agencies could choose from a range of productivity and business process tools designed specifically for their niche. To make SaaS even more attractive, procurement didn't require a massive upfront capital investment or deep tech skills and could be online within a few hours.

So, it's no surprise that agencies have started using SaaS to either replace or run alongside their shared service products. Government ICT systems are evolving, with vendors changing their delivery models, and agencies choosing to shift their resources to services and products that are designed for their niche.

To understand some of the real-world problems faced by different agencies, InnovationAus.com held a roundtable discussion in Canberra where representatives from various government departments openly shared their experiences — both good and bad — with shared services, and discussed how they believe the situation could be improved.

Contributors (in alphabetical order)

- **Michael Alp,** COO**,** NZ Ministry of Business, Innovation and Employment

- **Chris Fechner,** CEO**,** Digital Transformation Agency

- **Holger Kaufmann,** CIO and Executive Group Manager Digital Solutions, ACT Health

- **Ash Rutledge,** Executive Branch Manager Technology Services Branch at DDTS

- **Dr Joe Sweeney,** Global Research Director & Advisor, Future of Work, IBRS

- **Anonymous**, Department of Climate Change, Energy, the Environment and Water

One size most certainly does not fit all

Public sector agencies come in all shapes and sizes, with diverse requirements that cannot easily be satisfied by a single service. But in a shared services environment, the largest agencies with the biggest budgets tend to have far more say about which technologies and applications are deployed, leaving smaller departments often supplied with services not fit for purpose.

Panellists pointed out that the traditional model of shared services mean that the Government ends up with a compromised solution.

Chris Fechner, CEO, Digital Transformation Agency, points out that in his current shared services environment, "there are as many process variations as we have agencies within the system." The DTA is the Australian Government's advisor on digital and ICT transformation. This increases the cost of all transactions for everybody.

There are many different government departments and they all perform different functions with different profiles and appetites for risk. For example, the Department of Foreign Affairs and Trade focuses on internal government operations and has little to no direct contact with citizens. The opposite is true for the Department of Human Services, which runs Centrelink and Medicare. In large organisations, these diverse requirements make it impossible to find common applications that satisfy everyone.

This all changed with the arrival of SaaS because for the first time agencies had the option to choose software tools most suitable to their specific needs. The flexibility and customisation inherent in SaaS have resulted in government agencies widely deploying SaaS solutions to provide core functionality such as, Finance, HR, Supply Chain, CRM and either running them in parallel to the shared services or in many cases, entirely replacing them.

South Australia was highlighted as an example, where a mainframe provides the shared finance function. "Amongst our clients we've often seen this — where agencies subscribe to a secondary core system and run it alongside the main one. In South Australia, agencies are looking to move off a mainframe as much as possible, instead opting to integrate it with SaaS front-end solutions," said Dr Joe Sweeney, Global Research Director & Advisor, Future of Work, IBRS.

Roundtable participants agreed that adopting SaaS breaks some of the fundamental reasons for a shared service in the first place, one of which is to consolidate purchasing power and negotiate the best price from vendors.

Despite the added expenditure, moving away from the shared services model means individual departments have the chance to work directly with the vendor, which is a very different experience from working with the central ICT body, which acts like a vendor but isn't accountable in the same way.

Being the 'customer' of a central service means individual agencies have little choice about the services being supplied. As they are not bound by an enforceable Service Level Agreement (SLA), if delivery of the service is disrupted, the agency has no protections. There isn't an enforcement contract where you can recoup the money because you're dealing with another government department.

"The head agency sets up the shared service, it could be SAP or whatever it is they choose, and even if your requirements change, you have to be the square peg in their round hole," said a government employee that wanted to remain anonymous. "A smaller agency has no power and there is no accountability, no contract, no compensation, no leverage and no SLAs. Your requirements and your timeframes don't matter, and compared to the big users, you're essentially irrelevant."

The anonymous government representative recalls a disastrous implementation they were involved with, "In the early days of shared services I've seen millions and millions of dollars handed out by a smaller department with no outcome, the services were never delivered. The agency ended up paying for the non-existent service by shedding staff and then they had to try and continue as before with fewer resources."

Once an agency first uses SaaS, it suddenly gets the added benefit of being a real customer, so not only do their employees finally have access to tools that make them more efficient and productive, they also receive improved support and guaranteed service levels.

Roundtable participants generally agreed that, compared to SaaS, implementing shared services are big and complicated projects that are becoming more difficult to justify. Individual agencies can now connect their new SaaS products to their existing IT system using low-code platforms, artificial intelligence (AI), and a 'digital fabric' to connect with the back end to deliver business processes that are customised to the agency's specific needs.

SaaS-based applications also make it easier to share data and collaborate with other agencies, especially if they are also SaaS-based. But running parallel systems comes with its problems. If integrations between the SaaS and shared service are not watertight, they can undermine another fundamental reason for a single shared service — having a single source of truth.

Speakers explored the risks of running applications in parallel and the potential for unexpected errors to occur. Having SaaS products alongside corporate shared systems leads to the potential for system drift. When discrepancies appear in the data between multiple systems, it pushes solutions further and further away from their original value add.

The Australian Capital Territory: the exception that proves the rule?

From all the regions in Australia, the Australian Capital Territory stood out as being the only place where shared services have found some success. Ash Rutledge, Executive Branch Manager Technology Services Branch at the Australian Capital Territory's Digital, Data and Technology Solutions (DDTS), admits he is a 'Kool-Aid drinker' for shared services but points out that other states have very different challenges, in terms of geography, population and connectivity, making the territory a unique case.

"The Australian Capital Territory enjoys an extremely luxurious position of having very condensed jurisdictions with amazing connectivity everywhere. We maintain and run a fibre network to over 400 locations, connecting schools, office blocks, fire department and hospitals," said Mr Rutledge.

Although being a small state has its advantages, Mr Rutledge admits there are still problems. "This doesn't mean we deliver everything to everyone

all the time, I don't think that any shared services model would ever do that. There will always be some customers that really wanted to do something and we didn't allow it for various reasons — such as security, the total cost of operating or technical incompatibility. In the Australian Capital Territory we do work to accommodate customer requests wherever we can, it is part of needing to support local and state government needs at the same time."

The evolving ERP marketplace

Despite growing problems with the traditional shared service model, there are still many positives in having a centralised body oversee some of the essential ICT functions of individual government departments.

Most of the problems experienced by agencies generally aren't about the actual services, or the intentions of the shared services department, they surface because all the technologies 'under the hood' have transformed, and central services have been unable to evolve quickly enough to remain relevant in a rapidly changing environment.

The government has demonstrated it recognises some of these problems by recently reversing its policy locking more than 100 agencies into a bespoke Enterprise Resource Planning service called GovERP.

Mr Fechner explains that GovERP had high ambitions. "The original business case associated with GovERP talked about billion-dollar savings being returned to the government. But that was based on 190,000 people thinking, behaving and doing things in one specific way."

The ERP reset comes after an independent review detailed that the project didn't deliver its intended back-office improvements or realise any cost savings, with Services Australia being the only agency expected to continue using the platform.

Although obvious with hindsight, this outcome wasn't predictable when the policy was made. "With GovERP, the government chose to aggregate scale, standardise processes, and deliver volume-based savings. In 2014 that was a reasonable approach but it's now clear that the dynamics of government mean that processes cannot be harmonised consistently across government; there isn't a one-size-fits all ERP," said Mr Fechner.

The project was designed with a key principle that agencies would be able to simply adopt GovERP into their business processes, but it didn't work out that way. "GovERP started with the key principle of adopting technology, not adapting to it. But what has become true across the period of the execution is that adaptation was always the main driver," said Mr Fechner.

Individual agencies now have a choice of [ERP services from a 'marketplace'](#) of 35 companies, giving departments and agencies the ability to choose their own back-office systems for the first time since 2016.

New ERP marketplace, same skill shortage

Taking into account all of the known problems with shared services, it is natural that the government is making a positive move and introducing a more flexible solution. However, although agencies are now free to procure the most suitable ERP for their needs, it doesn't solve the issue of fully integrating the new ERP solution as the front end of their existing system.

"Ending the ERP lock-in is a natural outcome of movements in the market, and although it will provide agencies more flexibility, it does not address some of the core issues around skills," said Dr Sweeney.

There isn't a government component providing the technical skills or best practices required to make the most of the new services, which means agencies will have to spend outside their central budget for deployment and maintenance. "This may explain why of the 35 ERP suppliers listed by the Digital Transformation Agency, only a handful are actual ERP software providers, the rest are consulting and business technology firms," said Dr Sweeney.

Although having flexibility to use different ERP services is positive, along with some help from migration and data importing tools from vendors, agencies can be hesitant to move from a monolithic legacy service. ERP is one of the most critical applications in any organisation and it's always risky migrating to a new platform.

Any ERP migration needs preparation and technical skills. It's natural to be nervous about making changes to a platform with decades of investment — nobody wants to rush changes that could cause catastrophic failures and generate unwanted front-page headlines!

The roundtable panel agreed that government policy on this issue needs to continue evolving and agencies should focus on how to improve their business processes, rather than fixate on any particular technology.

Options for a new model of shared services

There is still a role for shared services in the world of SaaS but the model is evolving and adapting so SaaS can be properly delivered, managed and supported, according to the needs of each agency.

Traditionally, if individual departments wanted to take full advantage of a shared service, they would have to change their business processes in those departments to align to the best practices already implemented in the shared platform. Participants agreed that it should be the other way around, otherwise agencies don't receive any business benefits from the common platform, they get very slow processes and bad support, which makes this a systemic problem.

Regardless of their size and status, more and more agencies are choosing to use SaaS because they can choose services that best match their business processes. This is a trend that will continue and the shared services model needs to adapt and evolve.

The roundtable panel agreed that one obvious area where shared services do work is in aggregating data and acting as a mediator for data exchange between agencies. It's in an ideal position to fully understand the risks and the benefits of resources shared by all departments, such as AI vs. machine learning (ML).

This means central ICT serves as a connection between different agencies to oversee information sharing, governance, and best practices. It could help under-resourced agencies with complicated issues; smaller agencies may lack the expertise to properly evaluate their technical needs and choose an appropriate SaaS, so a central procurement systems programme could help these agencies make more intelligent purchasing decisions.

A big argument in favour of this model is that the consultants provided by shared services would hopefully have a better understanding of the day-to-day needs of a government agency than individuals from an external consultancy. However, relying on central ICT for support could replicate some of the fundamental issues with shared services where smaller agencies fight for attention.

New Zealand's government is working on a hybrid model where the central ICT provides some basic services but its role transitions to one of a managed service provider and it goes to market and negotiates the best price with SaaS vendors for a universal licence to all its agencies.

This leaves each agency responsible for finding the technical skills needed to support and implement its services. "We set a minimum baseline for cyber security, which previously was being very differently interpreted from agency to agency, and we are working to a hybrid arrangement where each agency can choose to do its own thing," said Michael Alp, COO, NZ Ministry of Business, Innovation and Employment.

The panel agreed that the look and feel of shared services is presently in a flux and will continue to evolve over the coming years. Agencies need to be prepared before engaging in any major SaaS projects. To succeed, agencies need to be clear about their measures of success. They need to understand exactly how their systems are performing now and be able to measure the actual and implied success of any potential project.

Do the agencies know which tasks or processes they want to be able to complete better, faster, cheaper? Are they looking for a new solution that will work in a similar manner, or would they consider an innovative and creative solution that could have a dramatic effect improving productivity and efficiency, but require a period of adjustment and retraining?

The importance of data standards and identity

Data standards and data hygiene were highlighted by roundtable participants as a vital component for enabling the adoption of SaaS products. As the penetration of SaaS increases, and offerings continue to diversify, the central ICT function needs standard data formats.

The panel agreed that national data standards, and even a digital identification system would contribute to improving the secure sharing of information between diverse systems, organisations, and even citizens, on a national level.

Building a data lake for a large government department such as health, is relatively easy from a technical point of view, the difficult part is adhering to data regulations stipulating when, how, who and where that data can be shared. Attempting to do this across multiple departments with different functions and privacy requirements increases the complexity exponentially.

Improved data standards would improve the efficiency of information sharing because when different agencies are using differing standards, vital

information fields can be hidden or lost, reducing the accuracy of models and forecasts.

"The lack of common data standards is one of the biggest hindrances of efficiency because it blocks agencies' ability to fully share and view all the data, leading to incomplete analysis and potentially poor policy decisions," said Mr Alp.

In the world of healthcare, being unable to share relevant patient data in a timely manner could be life threatening, which was highlighted by some of the incidents that have occurred near state borders when hospitals have tried to share confidential patient records.

There are large catchments of people in the ACT who are from southern New South Wales, and although the two regions have a data sharing agreement, it's quite clunky and they are working to improve access to medical records. There are also additional discrepancies between public and private healthcare systems, which further increase complexity.

Issues arising from incompatible data standards and sharing policies were also highlighted in Queensland where some districts have incompatible data standards. This means that if a patient moves, that

patient's information might not be accessible in the same way. The panel agreed that there is a need for a government architecture and data standard to improve data sharing.

National data standards would not only improve sharing, but they are also required to foster innovation. There are many examples from history that demonstrate how standardisation has had a transformational affect. In many ways, data in 2024 can be compared to electricity in 1924 — about a hundred years ago, before the national grid in the US, electricity was produced in local factories and there wasn't a standard voltage. This meant that any electrical devices had to be built for certain areas or even specific factories — the machines weren't interchangeable. Its only once voltage was standardised, and electrical products could be used anywhere, that electronics were mass produced.

The panel agreed that although standardisation is very important, it's not in vendors interests to maximise interoperability — because they want to lock users in to maximise revenues — so it's important for the government to take control and create standards in order to enable safe data sharing and encourage innovation.

Identity crisis

Personal identity is a particularly challenging issue within shared services models and the panel discussed how the introduction of digital IDs could improve the ability of individual agencies to share their data.

The key concept behind a digital identity is that it isn't tied to any one organisation and moves with the person. Currently, health and financial systems contain identifiable information about individuals — such as their name, date of birth and Tax File Number. Replacing the identifiable information with a digital ID makes the record less valuable to potential bad actors and encourages agencies to freely share that information because even if it is stolen, it's meaningless.

There was a discussion on how digital credentials and digital identities could serve as a paradigm shift in streamlining capabilities for all types of services, both across public and private sectors.

Digital identities can also reduce risks associated with deploying AI within shared services models. It's crucial that personal identities are only linked to data when absolutely necessary, and that data is shared only with authorised individuals. Successfully adopting AI requires a comprehensive

understanding of its potential risks and benefits and many agencies lack these skills.

Central shared services ensure business processes and data storage systems adhere to governance, compliance, and minimal security requirements. Technologies such as AI and data lakes are more effectively managed by a central body, which can make stipulations about data standards and privacy to ensure information can be properly secured and only shared according to security policy and risk profiles.

Centralised shared service units are evolving into the enablers of SaaS, and their purpose is being redefined as they start to consider the needs of every agency and department in their portfolio.

It's clear that there are a growing number of options for governments and individual agencies to improve their business processes and adopt services that provide genuine value and efficiency.

Agencies need to understand how they can be more efficient and recognise which of their business processes are outdated. They need to seek out alternative models that provide better value and make changes that enable the agency to improve the performance of its primary functions.

The session wrapped up with presenters speculating on the benefits of agencies ripping up and starting their services again from scratch. However, there was an admission that the impact of legacy spanning 40 years of investment will lead to a very slow transition.

Although going greenfields isn't an option, it's vital that agencies take a step back and examine their actual business needs and not shy away from innovation. They need to be wary of protecting sunk investments and ignoring potential new opportunities. They should investigate alternative solutions that could provide more value, rather than opting to apply new technology to outdated business processes.

The shared services model is evolving at a rapid pace and agencies need to properly evaluate their status within the larger organisation and pick the battles they can win. The goal should be to maximise the efficiencies and benefits from their present circumstances and find innovative solutions that provide long term improvements to their business processes.