govtech review

COGNITIVE PLACES
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INSIDE

FEATURES

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Insider

Is it just me, or are we living in an age where time almost has no meaning? Two years of cycling through lockdowns and working from home, followed by gradual introduction of freedoms and a return to the office, only to find ourselves back at home again, has had a curious effect. Time has become elastic — seeming interminably slow in its progress and yet somehow still managing to fly by. I may be alone in feeling this sensation, but it seems crazy to me that a quarter of 2022 is already in the rearview mirror.

It's no surprise, of course, that the rate of digital transformation in many agencies and organisations has been helped along courtesy of the events of the last two years… no doubt with varying degrees of success.

While speed was of the essence in a rapidly shifting landscape, many discovered that there is no 'one size fits all' approach for digital transformation… and certainly no guarantee of success if the necessary building blocks aren't in place. Developing a well-defined strategy at the outset goes a long way to ensuring a smooth transition from inefficient legacy systems and processes to a streamlined, futureproofed result.

As with any development project, creation of a solid foundation is vital… but it's not the only essential factor. Culture, integration, support and a holistic vision all play a part in the initial outcomes and future course of every digital transformation. Rather than being viewed as a 'set and forget' project with a clear beginning and endpoint, it helps to see transformation as an ongoing journey, with potential for improvement and advancement well into the future.

The hybrid life we've all come to accept as — dare I say it — 'normal' is now seeping in to other arenas, including the evolution of smart cities. Our cover story this issue explores how merging physical experience with the digital world will lead to 'cognitive places' — environments that position citizens at the centre and deliver elevated experiences through the use of innovative technologies and human-centred design. It's exciting to think where this will lead.

I hope you enjoy this issue of *GovTech Review*.

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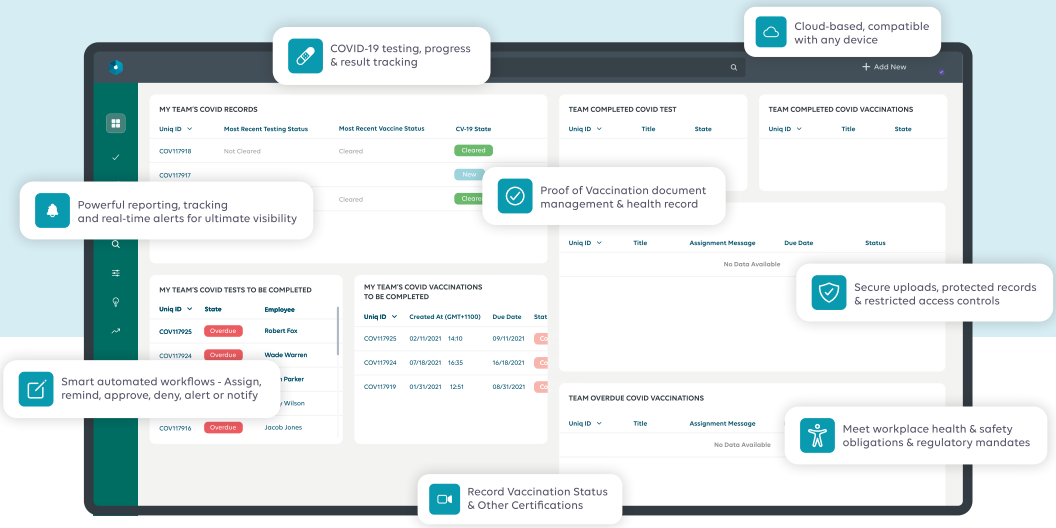

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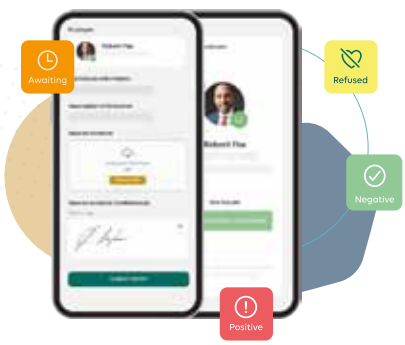

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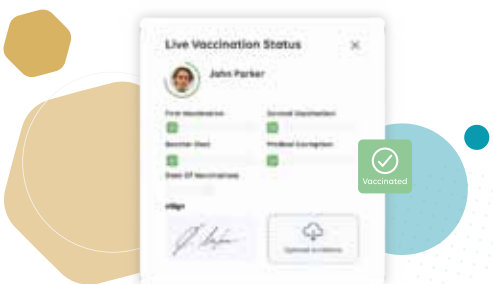

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SMART PLACES GETTING SMARTER

MERGING PHYSICAL AND DIGITAL WORLDS

Anna Faithfull, Senior Client Partner at Publicis Sapient

IN RECENT TIMES, SMART CITY CAPABILITY HELPED DRIVE OUR PUBLIC HEALTH RESPONSE. AS WE MOVE INTO RECOVERY AND RENEWAL, THE NOTION OF CONNECTEDNESS UNDERPINS THE MERGING OF OUR PHYSICAL AND DIGITAL WORLDS TO DELIVER 'COGNITIVE PLACES'.

The first wave of smart places focused on the digital augmentation of the experience of a particular place. This meant sorting out the 'digital plumbing', at its most fundamental level, for instance making sure everyone could access Wi-Fi. Over time, this has shifted into enhancements such as where point tech solutions could augment the experience of living in or visiting a location — such as car park sensors to give an indication of space availability.

During the COVID-19 pandemic, smart city capability has been essential as density and movement data became key to informing the public health response. As we move into recovery and renewal mode, the impetus to re-enliven city centres and combine our 'zoom' life with our 'in real life' demands that the notion of 'smart cities' get even smarter.

Future 'smart cities' will be cognitive places: merging physical experience with the digital world; linking your physical journey to your service journey to your online journey. The 'place' itself will learn, through smart materials, IoT, computer vision and machine learning, creating a seamless experience across the trajectory of your journey to create personalised, seamless moments that matter.

Cognitive places, however, won't just be about data insights and point-in-time interactions. The sense of place is built by designing for mindsets, applying deeply empathetic human-centred design, insight and innovative technology to shape journeys that traverse time and space, incorporating preparation, experience and memory.

CITIZENS AT THE CENTRE

Citizens and users must be at the centre of a smart city vision and design to ensure that they delight in the cognitive capability and their experiences are elevated and respected. By respected, we mean that users' rights and privacy are protected and enhanced; and data insights are ethically used and applied. Smart city capabilities and insights come with great responsibilities and the NSW Government's Smart Places Customer Charter provides excellent guidance on designing, building and using ethical, safe smart city technology.

DIGITISING THE DESERT

The city of Neom on the Red Sea coast is an example of the next level of smart places. It is being built from the ground up and will be powered by 100% renewable energy with a carbon negative footprint. Based on deep user insights, the city will feature cognitive and sensing capabilities, enabled by a state-of-the-art platform for computing called Neos.

The project includes designing the core automation needed for different sectors, such as environment, governance, travel and infrastructure. All these sectors will share data through an integrated platform, delivering increasing layers of autonomous and pre-emptive actions to achieve services never previously possible — a 'cognitive place experience'. This insight is being connected to create new and enhanced experiences across all aspects of living in a place, from starting a new business to playing golf at the weekend.

One example of using these citizen journeys to connect services might be someone planning a holiday. A resident books a flight to travel overseas. This online action notifies the government affairs sector to automatically initiate and process passport and visa clearance. Sequentially, the transport sector books an autonomous vehicle to transfer the citizen to the airport on the travel date, while the energy and water sector schedules an automated reduction in utility requirements for the household during the holiday.

This simple example shows how one isolated use case can trigger multiple automated and pre-emptive actions that completely transform how citizens will live in the place.

CREATING AN EXPERIENCE ECONOMY

Closer to home, as part of its physical renovation, the Australian Centre for Moving Image (ACMI) sought to integrate the physical and digital experience for visitors by introducing the 'lens'. A physical, handheld device (separate to the user's own smartphone) that allowed the visitor to digitally interact with physical exhibitions — recording, noting, learning, tagging, commenting. The lens could then be used from home to engage with the ACMI website and facilitate online purchasing, as well as for return visits, creating a portfolio of engagement between the visitor and ACMI. The 'lens' enables an integrated physical and digital experience for the user. It also allows ACMI to become a cognitive smart place tracking movement data throughout the gallery spaces, gathering real-time insights into what visitors are enjoying or dismissing and engaging with visitors pre- and post-visit to create sustained, seamless moments that matter.

ACMI exemplifies how public buildings — galleries, libraries, schools, hospitals and courthouses — can become cognitive combining the

physical experience with the service or process experience. For example, a 'day in court' fraught with stress and anxiety can become a more engaging and transformative experience as integrated digital and physical wayfinding helps a citizen pre-court 'prepare' and 'plan'; 'feel safe' and 'connected' whilst in the physical building through navigating to safe waiting areas and connecting to services and supports; and post-court 'understand' and 'action' the outcomes of their day in court through follow-up SMS prompts and online engagement.

COGNITIVE PLACES ENHANCED BY DIGITAL TWIN CAPABILITY

Digital twins such as the Government of Victoria's Digital Twin and Cooling Singapore's Digital Urban Twin have the potential to enhance the capabilities of a cognitive place by adding additional layers of spatial data to a 'places' cognition. Neom demonstrates how a digital twin can enhance cognition through its combining of multiple streams of data.

As integrated physical and digital capability expands and the demand for cognitive places grows, there is the potential to expand digital twins beyond their current 'spatial' remit to encapsulate service and experience twins. Just like current spatial digital twins test innovative ideas such as Cooling Singapore's digital twin that tests city-wide ideas to reduce the city's temperature, a service twin could test innovative preventative or early intervention social service offerings, or test integrated and connected whole of city art, entertainment and leisure experiences.

Cognitive places, however, won't just be about data insights and point-in-time interactions.

IMPROVING PEOPLE'S LIVES

Cognitive place approaches will lead to better outcomes for citizens, communities and public and private businesses that develop and plan services and experiences.

In the case of Neom, it creates a more livable city that better leverages its resources and energy, but also attracts businesses and people to locate there. For ACMI, it's deeper engagement beyond the physical boundaries of the gallery walls and into people's homes and lives. For community buildings, the potential impact is personalised and accessible citizen services and supports with improved outcomes over time.

Whilst the focus of each of these projects has been on the citizen or user experience; the digital innovation also allows 'back of house' to plan for, respond to and avoid disruptions through real-time monitoring and predictive analytics — in the era of COVID-19 this creates safer, more pleasant experiences.

In all these cases, the result is far more than just collecting up the latest technologies and sprinkling them amongst existing physical infrastructure. It's about deeply understanding how people access, use and interact with the physical space; integrating with the services and experiences that are provided in and around the place; connecting with the virtual or digital experience that overlays our interactions; and creating an experience that resonates for the user beyond time and space.

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Today's government workforce is on the front lines of public service, in the field, in the office, or from home. Aligning your agency around a connected government framework that empowers your teams to boost productivity, transform information, and continue perform at the highest level is essential. Lenovo is committed to keeping government organisation connected with smarter technology.

Transport for NSW using AI to tackle congestion

Transport for NSW is conducting a new trial, believed to be a world first, involving using artificial intelligence and edge computing technology to reduce congestion.

The agency has partnered with Cisco to explore ways to use technology to improve the experience for commuters, travellers and public transport users.

"We've partnered with Cisco to investigate how a real-time view of vehicle supply and customer demand, and performance, can guide future network decisions and monitor road conditions to identify where repair work is needed," NSW Minister for Transport and Roads Rob Stokes said.

As part of one trial, Transport for NSW is using AI, Wi-Fi and edge computing on Pitt St near Central Station to capture real-time data and identify high-risk events.

Road user movements are also being tracked at several intersections in Newcastle, using intelligent sensors to help improve overall road safety.

Another trial involves connecting several buses, ferries and light rail vehicles, and then using real-time data to help identify ways to improve the services.

"Buses fitted with this technology can also monitor asset and road conditions, and provide us with real-time information on vehicles," Stokes said.

Cisco is providing a number of technologies for the trial, including IoT, edge computing, AI and other capabilities. Cisco and Transport for NSW have an existing partnership aimed at using technology to solve pressing and common transport problems.

Australia Post completes major network upgrade

Australia Post has concluded a major network upgrade involving improving internet connectivity across around 4000 post offices, deliveries facilities and support offices Australia-wide.

The two-year network upgrade, which included the deployment of a new data network connecting the offices as well as enhanced Wi-Fi connectivity, is now complete.

According to Australia Post CIO Munro Farmer, the upgrade also included the deployment of a collaboration platform to support working from home for those employees able to during the pandemic, as well as the standardisation of the organisation's 20,000 mobile devices onto a single management platform.

"Customers expect more information in real time and transparency through the supply chain and we are making sure we have the telecommunication infrastructure to deliver for them. By transitioning all of our post offices and facilities to a new, highly resilient and scalable data network, equipping them with Wi-Fi capability and improving internet bandwidth, we are now able to deliver a significantly higher service level at every one of our sites," he said.

"We will now be able to scale up internet bandwidth when and where we need to, accelerate the onboarding of new services to days rather than weeks and enable new capabilities such as mobile point of sale, Internet of Things (IoT), artificial intelligence and machine learning solutions."

Australia Post's partners in the network upgrade program included Cisco, NBN Co, Orro Group, Engage, VMware, Star21 and Telstra.

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Energy Queensland selects substation automation system

CGI has won a five-year contract with Energy Queensland (EQL) to supply its operational technology hardware, software and specialised services.

The new contract comprises a collection of technologies, including CGI's MD series remote telemetry units (RTUs) and proprietary browser-based human–machine interface (HMI), enabling management capabilities in a substation or an asset. Use of CGI's substation management system will support the reliable delivery of energy for EQL's customers across Queensland, whilst helping meet the challenges introduced by distributed energy resources (such as wind and solar) as they play an increasing role in the energy mix.

The newly released modular RTU supports a broad range of EQL's use cases and provides flexible configurations that can be tailored to the specific operational requirements of the distributed control system.

Tara McGeehan, President of CGI in the UK and Australia, said: "We are delighted that Energy Queensland has chosen CGI's MD Series RTUs and substation automation capabilities as one of the foundations for its delivery of safe and reliable energy to homes and businesses across the entire state of Queensland. We look forward to continuing to partner with Energy Queensland in future projects, particularly in support of the challenges associated with the energy transition over the next decade and beyond."

CGI has a long history in Australia, with operational technology (OT) clients across several sectors — including utilities, government and financial services — for over 40 years. It also has five client proximity locations in Melbourne, Sydney, Brisbane, Adelaide and Hobart.

Verizon Business underpins vax passport integration

Verizon Business has announced it played a role in securing Australia's international COVID-19 Vaccination Certificate through an agreement with the Australian Passport Office.

Under the deal, Verizon Business helped the Australian Passport Office roll out the secure digital platform that underpinned the integration of a digital COVID-19 vaccination certificate with the ePassport platform.

The international certificate uses a QR code generated using the COVID-19 vaccination information in the Australian Immunisation Register and the traveller's passport details.

Each individual QR code is digitally signed to help combat tampering and can be validated by most immigration authorities at airline check-ins. Digital sign-in is completed using private digital keys that are stored on hardware security modules to prevent unauthorised access.

Verizon Business Group VP for Asia-Pacific Robert Le Busque said the company is pleased with its work on the contract.

"Speed and accuracy were critical for this important national initiative to get established and operational. We are extremely proud to work with the Australian Passport Office to deliver a service that is instrumental in opening up Australia to the world once again," he said.

Certificates are seen as the gold standard for authenticating communications and ensuring a user-friendly experience, Busque said. Verizon Business estimates that 61% of confirmed data breaches involve stolen credentials.

Verizon Business Australia is a certified supplier on the federal government's Telecommunications Marketplace, and has provided managed network and security services to enterprise and government agencies in Australia for over 20 years. Verizon Business's Asia-Pacific Advanced Security Operations Centre is based in Canberra.

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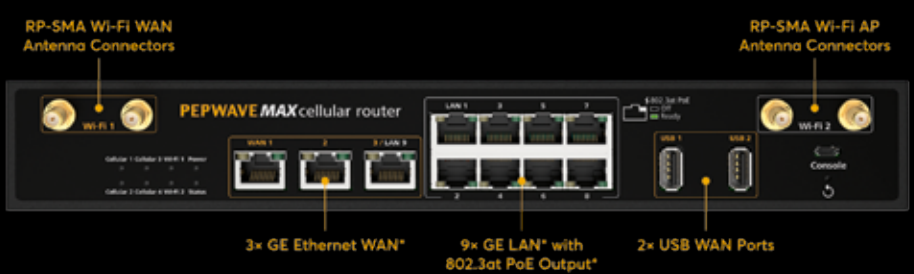

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THE DIGITAL BACKBONE

WHY STRATEGY AND SYSTEMS MUST ALIGN

Chris Smith, ANZ alliance and partner manager, M-Files

INFORMATION MANAGEMENT SYSTEMS ARE THE DIGITAL BACKBONE OF MODERN GOVERNMENT ORGANISATIONS, DELIVERING SIGNIFICANT BENEFIT OVER LEGACY ENTERPRISE CONTENT MANAGEMENT SYSTEMS, THANKS TO AN AI LAYER.

At a high level, information management systems (IMS) help manage, store and access information as a collaborative single source of truth. The main purpose of an IMS is to support an organisation's business needs by providing a platform that structures and stores data in a central, connected way.

An IMS is a modern enterprise content management system that integrates an additional layer of artificial intelligence (AI) to assist with tasks such as organising data or performing predictive analytics on large volumes of data. This puts data in context for users, removing the frustration and delays that occur when information is hard to find.

THE LIMITATIONS OF LEGACY

While legacy enterprise content management (ECM) systems are still in use in many government agencies and departments, a more modern IMS can deliver significant benefits around productivity, efficiency and cost savings. Importantly, a modern IMS can operate as an integrator of various ECM systems, letting agencies leverage existing investments while futureproofing the organisation.

Many government organisations have found that legacy ECM solutions don't fully resolve their data management issues and need to be upgraded often. This usually means new ECM systems are layered over the top of each other, creating unnecessary complexity and cost. Legacy ECM

systems can be useful for a small project or data set, quickly organising and structuring group activities; however, in a modern environment, these legacy systems may limit the options to share or reuse data.

Because modern information management solutions have a superior feature set and have become the clear way forward for many government agencies and departments facing the same pain points, the ubiquity, along with inherent scalability and flexibility, has made it the more cost-effective choice for all but certain edge cases. This flexibility enables organisations to adapt quickly and grow with the changing market, adopting new feature sets and capabilities with the evolving information management platform.

THE BENEFIT OF A STRATEGIC APPROACH

Information management has recently come to the fore in light of the global pandemic and business lessons learned, which have fuelled worldwide demand for a more intentional, holistic digital transformation approach.

Strategic information management lets government departments capture, store, share, edit and analyse the business data that contributes to achieving their goals. In addition to standard documents and historical logs, IMSs are designed to pull in metadata about every interaction and event relevant to the success of a department, and trigger actions where required. Because these solutions work with a complete view of operations unavailable to any individual system in isolation, they can reveal new insights about patterns in data that previously could not be identified.

By taking a strategic approach to information management, government agencies can make better decisions and set themselves apart from those limited to an old-world view of the landscape. They can use the IMS to analyse the data and come up with creative solutions for specific problems, informed by the data.

Information management delivers significant benefits for government departments and agencies. For example, by using metadata and AI to classify information, information management systems can dramatically lower the time it takes for workers

By taking a strategic approach to information management, government agencies can make better decisions.

to find the information they need. Powerful search capabilities immediately surface all documents that are relevant to the user's needs based on context. This improves time and cost efficiencies, letting workers deliver value sooner. This also frees up bandwidth up the line to IT departments, service providers and management. Productivity is increased through the continuous improvement of processes, letting attention flow from triage to innovation.

SCALABLE, TRANSPARENT AND AUDITABLE

This innovation can be seen when government agencies use an IMS to identify new technologies and methods to achieve goals at scale more efficiently. They can then explore opportunities more readily, with less need to divert resources to uplift projects. IMS platforms can be integrated with other technologies like machine learning, chatbots and natural language processing to create intelligent agents that work across platforms.

Smart information management systems can also improve transparency and create an audit trail. The risk with using many disparate or legacy systems is a lack of visibility across the whole organisation, meaning important information can slip through the cracks. Information management identifies patterns and can trigger alerts or automated actions based on business rules and bespoke requirements.

Government organisations that leverage information management solutions can deliver more reliable services. They can more easily identify efficiencies for end users and service consumers, with process and technology improvements flowing down to customer experience gains. Strategic information management helps government departments to provide better customer service by ensuring that they have all relevant and necessary information at hand when needed. This benefit cannot be overstated since customer experience is a key differentiator for government organisations. Therefore, the ability for frontline agents to answer questions and provide accurate information in a timely fashion is essential, as it contributes to exceptional customer experiences.

INFORMATION MANAGEMENT IS MORE THAN DIGITISATION

Government agencies have used strategic information management software successfully to recognise emerging trends and enhance informed decision-making, with the aim of continuously optimising end-to-end operations. It's a key building block at every step of the digital transformation journey for government, creating a virtuous circle of improvement across disciplines.

It's important to note that information management is not just about digitising information, but also about making it intelligent and letting government organisations leverage it in various ways to personalise the customer experience. It is not just about capturing data, but also about how this data can be used for business purposes.

Information management is a driving force of digital transformation. It's a strategic, systematic and automated approach to gather and organise information for decision-making. It can be easily integrated with existing government systems or deliver new, holistic, integrated systems that communicate and act, thus removing a great deal of manual work from employees.

Government organisations that invest in information management systems as part of a comprehensive information management strategy can achieve significant benefits and lower costs. By improving access to information, government departments and agencies can transform faster, deliver better services to citizens, minimise worker frustration and increase efficiencies.

With an ever-increasing reliance on data and documents, streamlining this part of an organisation's operations goes a long way towards improving overall performance. Getting the strategy right is just the first step; aligning that strategy with the right systems is crucial. Choosing smart information management systems lets future-conscious government organisations prepare their systems and workforce for a faster-moving future in which their ability to service customers will determine their overall success.

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BETTER GOVERNMENT THROUGH SIMPLE, INTERCONNECTED SYSTEMS

Alethea Murphy, regional director, public sector & education at ServiceNow

The last 18 months have seen a rapid acceleration in digital transformation as businesses and governments responded to the pandemic. This has also increased expectations of what good, interconnected experiences look like. Australians expect government agencies to provide the same level of customer support they receive for everything else — from booking a doctor's appointment to ordering groceries.

New research by Lonergan shows that government agencies still have some catching up to do, but there are also many examples of government agencies providing seamless, proactive and connected customer experiences.

WHAT ARE THESE AGENCIES DOING DIFFERENTLY?

Quite simply: they are using the technology available to them to enhance the secure exchange of customer-related information to remove delays, streamline processes and resolve customer queries faster, more efficiently and more intelligently. They are marrying this insight with a vision of future costs, effort and an acknowledgement that digital transformation is an ongoing process of continuous improvement, which needs to be flexible enough to adapt to changing legislation, policy, external threats and customer demands.

THE IMPERATIVE FOR AUTOMATION AND INNOVATION

The Australian Government has a vision to provide seamless and personalised service delivery in line with the Digital Transformation Agency's five principles:

- Putting people at the heart of policy and service design.
- Proving trustworthiness.
- Partnering to deliver value.
- Continuously exploring and implementing innovation.
- Delivering the best possible value for money for the public.

To succeed with this vision, governments are recognising they need platforms that enable a simple, interconnected experience using intelligent automation: both for employees and for customers.

IMPENDING SKILLS SHORTAGES REQUIRE BETTER SYSTEMS

This is becoming even more important as skills shortages loom, meaning that government will increasingly have to compete with the private sector for good people.

In order to recruit the best people, government departments need to ensure their internal processes flow smoothly. Having too much red tape will make it harder to retain good people. This may be in the guise of basic issues like a payroll discrepancy or as a result of having too many manual overheads when creating a new position code.

The alternative is a seamlessly connected platform that enables departments to fuel efficiency by giving federal and regional employees the ability to focus on high-value work rather than time-consuming, repetitive, manual tasks. They also free up employees' time so they can more promptly deal with complex issues and requests.

Intelligent automation can lead to greater operational efficiency, reduced operating costs and a reduction in errors, all of which improve the speed and quality of services delivered to customers.

Those familiar with the need to adopt interconnected technology are familiar with this narrative, but how does it actually work?

HOW INTERCONNECTED ENTERPRISE SYSTEMS REDUCE COMPLEXITY

Traditionally, multiple systems, departments and people are required to interact to resolve customer requests: whether a manager needs a team to write a report or a citizen needs the right documents to travel overseas.

This was the case at the outbreak of the pandemic when overseas travel was banned without a government-approved exemption. A new process was required for people to request this exemption, and the initial response by the Department of Home Affairs was to require applicants to send an email to justify their reasons for travel, with supporting documents. Invariably, applicants would not provide all the necessary documents to justify their case, so when their emails were read, they would often be knocked back for trivial reasons such as incomplete information.

Home Affairs recognised this was not sustainable and realised they could use their existing platform to enable people to make their applications via an online form. This form would do all the simple checks to ensure the application was complete and satisfied the basic requirements before it was submitted for a person to review. This meant that only valid applications were reviewed by Home Affairs, cutting back the response time from weeks to days, even hours in some cases. Applicants had a better experience and received a faster response during what was a stressful and difficult time, and Home Affairs employees could focus on valuable work which would enable them to approve applications more frequently and give them greater satisfaction in being able to support those in need.

"Utilising intelligent automation allows for cost-savings at multiple levels across the organisation."

SEAMLESS EVERYTHING THROUGH A SINGLE SYSTEM OF ACTION

Imagine a single system, accessible to all, that could create world-class employee and customer experiences in one place to manage all workplace needs and transitions. At the heart of this solution is a workflow: the sequence of steps which a task passes through to achieve a specific outcome. Digital workflows are what make all this possible.

An interconnected platform allows problem-solving through workflows and enables existing disconnected systems to become connected, streamlining problems that once required multiple engagements. As a result, stressed employees are able to solve more interesting and complex challenges, and customers get streamlined, personalised experiences, which makes their interactions with government easy and efficient.

BENEFITS OF IMPLEMENTING A SINGLE SYSTEM FOR GOVERNMENT DEPARTMENTS AND AGENCIES

Once simple, interconnected and frictionless systems are put in place using shared foundations, everything becomes simpler, and service employees can gain a 360-degree view of the customer they're serving. Both customers and employees are given time back, creating productivity gains and an enhanced user experience. All this results in a better customer experience.

Additionally, utilising intelligent automation allows for cost-savings at multiple levels across the organisation.

At the department level, when the repetition of work can be reduced, costs are removed by improving efficiency and reducing frustration with manual or menial tasks that can result in costly errors. Staff can also spend time on more complex issues that require more consideration and are more personally rewarding, potentially increasing staff retention.

At the organisational level, these platforms allow governments to reduce the number of systems or applications required to run their operations.

Finally, at a higher level, platforms can help eliminate disconnected operations and create a joined-up business environment where leadership teams have improved visibility and can make better investment decisions. This enables governments to evolve as customer requirements evolve, and improve the experience of everyone participating in the flow of work.

With one platform, underpinned by a single data model, it is possible to create workflows that enable consistent, end-to-end employee and user experiences. That's the beauty of a simple, interconnected, frictionless platform.

Metaverse, an evolution of the online. Three big questions answered.

Caitlin Green, CEO

Everything is changing in how we connect. In a not too distant (or dystopic) future our physical and digital worlds of work, leisure and life will carefully amalgamate. No this isn't sci-fi, it is the metaverse. The metaverse, a simulated digital environment that is all encompassing, combines the best of blockchain, augmented reality, social media, and virtual worlds. Visualise taking a meeting in a boardroom of a corporate suite, with colleagues dialling in holographically. Think of visiting others in virtual worlds of their design, celebrating a birthday with family many time-zones apart.

The age of web 3.0, virtual and immersive experience and the amazing progression of technology has blurred the boundaries of the digital and physical. It is exciting, real, and already here.

What changes in the metaverse?

This new world is designed to change social interaction, the eventual shape it takes is difficult to envision. We do know that the experience of the web will be inherently different to now. This could involve engaging in reality through avatars or a way that is far more engaging and personal than a Zoom call.

The metaverse means a new generation of digital ownership. We have already seen this with the onset of the Non-fungible Token (NFT) craze. NFTs are just digital assets that represent real-world objects and are more than just the economy of the metaverse. How do you ensure your virtual world, your avatar and even digital artwork is unique, one of a kind and owned exclusively by you? Tokenisation and the digital property rights underpinned by blockchain.

What does it mean for industry?

Brands and companies that are early adopters of the metaverse will reap great reward, conceptualisation of the monetisation of this new world is the first step — how does this present opportunity? There is no better example than Facebook's recent rename and pivot to Meta as Mark Zuckerberg and his team bet on the next generation of its enterprise.

The metaverse will no doubt be big. The adoption of the internet in hindsight was explosive, and PwC predicts that AR and VR will add US$1.5tn to global GDP in the next decade.[1] Bear in mind, this is just one facet of the metaverse. How much will this change meetings, customer interaction, gaming, healthcare and even retail?

Marketing and customer connection hinges on an immersive experience in the metaverse. Engagement is the new KPI, as we start to embed into immersive realities. The gaming industry is at the forefront of this innovation, and it is easy to see a spillover into work and social.

What does this mean for me?

As you begin to prepare for the metaverse, adopt an exponential view. If it is hiring a specialist, evolving a marketing strategy, or developing a virtual presence, think big and be bold. In the metaverse, the sky is no limit and growth is inevitable.

From digital marketing to integrations KINSHIP digital are here to provide you with effective solutions to your modern problems. To learn more about this digital environment, and how to integrate this into everyday business operations, register your details.

1 Seeing is believing: How AR and VR will transform business and the economy. https://www.pwc.com.au/digitalpulse/report-seeing-believing-ar-vr.html

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THREE SIMPLE QUESTIONS

ENSURING DIGITAL TRANSFORMATION SUCCESS IN GOVERNMENT

Vinayak Sreedhar, Head of Business Development, ManageEngine

WITH THE RACE TO DIGITISE INTENSIFIED BY THE PANDEMIC, GOVERNMENT DEPARTMENTS AND AGENCIES NEED A CLEAR PATH TO ENSURE SUCCESS. ANSWERING THREE KEY QUESTIONS WILL HELP SMOOTH THE PROCESS AND IDENTIFY THE BEST WAY FORWARD.

In an effort to be one of the top three digital governments worldwide, the Australian Government is committed to moving all federal services online by 2025. Its plan is outlined in the Digital Transformation Agency's Digital Transformation Strategy 2018–2025.[1] In 2020, Australia ranked fifth in the world in terms of digital government, according to the United Nations' E-Government Survey.[2]

The last two years have undoubtedly accelerated the Australian Government's transformation. According to the Australian Public Service Employee Census, 46% of respondents engaged in flexible or hybrid working practices in 2021, compared to 22% in 2019.[3] However, facilitating remote work is only one piece of the transformation puzzle.

TAKING THE RIGHT STEPS TO ACHIEVE TRANSFORMATION

Australia is undergoing an evolution in the wake of the pandemic; organisations in both the public and private sectors are racing to digitisation. However, to meet expectations set by the private sector, government departments must have a clear, carefully planned path to success, regardless of whether they operate on a federal, state or local level.

For government departments, digital transformation is unfortunately not as simple as identifying a cost-effective solution and working with an implementation partner to deploy it across the organisation. To modernise and digitise operations, government departments need to invest in solutions that will help:

- manage critical applications and data in hybrid environments;
- support legacy systems with updates, vulnerability patches and other maintenance;
- administer and govern privileges and access controls for an expanding workforce; and
- make sense of vast amounts of data from different sources for informed decision-making.

On top of this, each solution government agencies invest in must meet the government's strict security and compliance requirements to protect confidential organisational and constituent data.

THE KEY ISSUES TO CONSIDER

When considering technologies and third-party service providers to support digital transformation, there are three significant questions government departments must ask.

1. WILL THIS INTEGRATE WITH THE EXISTING TECHNOLOGY STACK?

Identifying the right technology solution can be challenging when there are so many options available. However, it's important that government departments assess potential solutions based on how well they will integrate with the existing technology stack. Failing to do so may result in a costly overhaul of more technologies or processes than originally planned to ensure that a solution will work without impacting existing systems. To help streamline this process, departments should consider engaging with solutions providers that deliver vendor-agnostic tools that can integrate seamlessly with the existing technology stack.

2. HOW WILL THIS IMPACT SECURITY?

Cybersecurity is one of the highest priorities for governments when it comes to assessing new solutions. Government departments must ensure that every vendor and solution they implement as part of their digital transformation journey adheres to strict department and government regulations to protect confidential and sensitive data. It's essential that departments engage with vendors and solutions that demonstrate how they can meet compliance needs.

3. WILL THIS FIT WITHIN THE BUDGET?

Price is a critical consideration for government departments because they are under strict scrutiny by Australian citizens. As such, it's essential that departments make cost-effective choices when it comes to digital transformation. This doesn't only mean that the upfront cost should be affordable; government departments must also consider the long-term costs and any third-party providers required to support deployment and ongoing maintenance of the solutions.

Failing to consider these elements may lead to government departments investing in costly, cumbersome solutions that don't effectively integrate with their existing technologies. This can result in significant challenges down the road, including delaying the department's ability to transform. By contrast, effectively answering these questions can help government departments transform successfully, delivering the right applications and solutions to help achieve Australia's goal of moving up in the global digital government rankings.

Regardless of the level of government, whether federal, state or local, it's essential that agencies and departments clearly establish goals and understand the requirements to meet these goals. Working with the right partners is a crucial step towards successful digital transformation.

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GOVERNMENT SUPPORT ESSENTIAL FOR BUSINESS DIGITAL READINESS

Chris Osborn, Australian Federal Director and WA & SA Regional Director, Dell Technologies, ANZ

The past two years have seen a massive shift in the way government approaches technology, partly due to the pandemic and partly because of a stated ambition to progress the digital economy.

This shows no sign of abating in the year ahead, with Gartner expecting Australian government sector IT spending to grow 8.8% in 2022. Driving this expenditure is a need to improve the responsiveness and resilience of public services, build a better national cyber response, adopt emerging technologies and ensure regulation keeps pace with technology.

In Australia, the $1.2 billion Digital Economy Strategy announced in this year's Federal Budget aims to support investments in emerging technologies. This is important because of the role the public sector can play in reigniting business innovation, incubating promising organisations and supporting economies with strategic investments.

It needs to be done with an eye to not just responding to the current challenges, but to ensure both business and government are prepared for the next ones.

MOVING BEYOND THE REACTIVE

The good news is that this is not some doomsday prepping scenario. Creating the agility and responsiveness to respond to future challenges will also allow organisations to adapt to changing customer demands.

Think how much the move to the 'work from anywhere' hybrid model has changed the game in a range of

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ways, from cost savings to widening the talent pool. Much of what we were able to achieve during lockdown, from working at home to binge-watching streaming services was only possible because of cloud technologies, connectivity and advances in devices and this will continue to be the case in the year ahead.

In the initial phase of the pandemic in early 2020, many organisations were able to fast track digital transformation projects to adjust to that phrase none of us ever want to hear again, "the new normal". In 2021, we still faced many challenges around lockdowns and so forth, but there was more room for taking a longer view, to ensure measures taken in the moment were viable in the long term and to develop new strategies considering the shift.

The government can help organisations with this. For instance, during the pandemic the federal and some state governments introduced temporary legislation around the handling of electronic signatures and deeds, which allowed many sectors

Setting the foundations for agile, simplified data management now is crucial.

that usually required in-person, paper documents to still function. Legislation in the pipeline at a federal and state level could make at least some of these allowances permanent now that the pandemic served as a test case.

Given where we are, there are couple of areas where the government can act as an enabler for business in the year ahead.

SUPPORTING THE DATA DELUGE

The on-demand economy will expand dramatically and, with it, the proportion of digital businesses creating and acting on exponentially more data. Capturing and harnessing that data will remain a challenge for many organisations. In fact, Dell's Data Paradox research found that businesses believe they are data-driven but many are not treating data as capital, and that businesses constantly need more data yet have more data than they can handle.

To overcome this, businesses need to create a data-ready culture and invest in technology that allows them to automate and scale. As the data deluge flows, businesses can harness their data with the help of as-a-service technologies, and from there, AI and analytics opportunities will continue to grow. Bring 5G into the equation and entire industries will transform. To prepare businesses for the 5G-powered revolution, setting the foundations for agile, simplified data management now is crucial.

But it's not just in the hands of individual businesses. The government can drive policies that establish standards for the acceptable quality of

the data and govern when and how it is used, which will better support organisations navigating the complexity.

As one of the biggest collectors of data, the government also has a role to play in enabling value creation. By supporting access to anonymous, open data with appropriate controls and licensing in place, it allows for better decision-making and prediction in the business sector.

This is especially important when it comes to small and medium-sized businesses who traditionally struggled to access and control data in a way that makes them competitive as a bigger player. However, those players will also increasingly be able to manage their own data collection and protection by tapping into as-a-service solutions.

SETTING THE SECURITY TEMPO

But data complexity is not the only challenge. Cybersecurity is an area of increasing concern, as the rate of attacks grows globally and the vector for attack increases as services move online. According to the Australian Cyber Security Centre (ACSC) Annual Cyber Threat Report, a cybercrime is now reported in Australia every eight minutes, a 13 per cent increase from the last report.

We need to create an environment of 'security by design', where security measures are strategically embedded into every part of a business. As-a-service allows companies to adopt a holistic cybersecurity and data protection strategy to reduce risk and increase resilience.

With recent announcements, the Australian Government has started the conversation on how to support organisations in cybersecurity. These included the critical infrastructure bill amendments, which increase the number of sectors considered critical infrastructure in Australia and their obligations in the event of a cyberattack. There will be further refinements in 2022.

The Australian Federal Police has also announced the Joint Policing Cybercrime Coordination Centre will launch in March and will work with ACSC to investigate cybercriminals.

These initiatives reflect the shift in thinking around cybercrimes, focusing not just on cybersecurity, but on building cyber resilience, so that organisations can both automatically defend against and quickly recover from a cyber attack.

Building a secure, data ready organisations require multi-cloud infrastructure and automated as-a-service solutions to help businesses to process, analyse and manage complex and growing data, forming the technological baseline for business innovation. With the right strategies, governments are in a prime position to not only navigate out of the pandemic but to also make Australia a truly digital economy.

'BE SUMMIT' PART OF AUSTRALIA'S WEEK OF BUILT ENVIRONMENT EVENTS MAY 2022

Running in person for the first time on Friday, 13 May, Be Summit, a one-day conference dedicated to Australia's built environment sector, will be rounding off four days of immersion in the latest products, technology and education from the leaders in the built environment. In an Australian first, the Be Summit will be one of four events hosted at the Melbourne Convention and Exhibition Centre, as part of a week of events for professionals across the sector.

Covering industries ranging from planning and construction to technology and facilities management, DesignBUILD, Total Facilities (TFX), the Be Summit and Digital Construction Week will join forces to create a unique built environment event for Melbourne.

The Summit features a full speaking agenda of industry leaders, government officials and market leaders plus valuable networking opportunities. Featured speakers include Jerad Tinnin of Hassell, Caitlin Guilfoyle of PricewaterhouseCoopers, Elly Dalziel of Mirvac and Matt Bien-Izowski of Autodesk. Topics will cover the latest thought leadership within Australia's built environment with headlining sessions 'Post-Covid CBDs and the Future of Work', 'Integrating the Circular Economy into the Built Environment' and 'What is Next for Technology in Construction'.

Early bird ticket prices to the Be Summit are now available and offer those who purchase a ticket and attend automatic and free access to both DesignBUILD and Total Facilities prior to the conference. https://besummit.com.au24 February

Australian Utilities Improve Processes with LTE and 5G Networks

Utility companies including power, gas, and water have vast opportunities to improve operational efficiency and customer service by upgrading infrastructure with smart devices and automated systems — and by implementing broadband connectivity solutions that maximise data and improve communications. 4G LTE and 5G securely connects power grids, smart meters, personnel, stations, and beyond.

Remote Sites

For systems and installations located in remote or difficult to reach areas, reliable wired connectivity isn't always readily available. Sites ranging from substations to neighbourhood roof-top solar installations to remote wind farms can use highly flexible LTE and 5G solutions to keep teams, offices, and IoT connected 24x7.

Central Highlands Water (CHW) provides water and wastewater services to their customers in the Central Highlands region of Victoria. There are over 200 outstation sites across its network, spread over CHW's area of operation and includes pumping stations. These outstation sites have Operational Technology (OT), such as sensors and controls which are used to monitor and operate critical infrastructure assets. These OT devices connect back to multiple high availability SCADA servers. The SCADA servers periodically poll the Remote Terminal Units (RTUs) located at the outstations for sensor information and can also issue commands to the RTUs, for example to adjust a valve or turn on a pumping station.

CHW is using Cradlepoint LTE solutions to enable primary and failover connectivity between their SCADA servers and their RTUs, which requires a reliable and secure network.

Failover

During network failover, standby equipment and connections automatically take over when the main network connection fails. As organisations use an increasing number of cloud-based services in their daily operations, automatic failover and uninterrupted network access have progressed from important to essential aspects of remote and branch networking. Increasing the diversity of network components and connection types help reduce the impact of any single point of failure. Adding wireless network connections to branch locations is a flexible and cost-effective method of improving uptime, application performance, and business continuity.

In-Vehicle Networks

Installation and maintenance of power, water, and gas lines involves a wide range of specialised services. Vehicles equipped with mobile routers have the wireless connectivity necessary to enable the continuous transmission of important data between field workers and headquarters.

In Australia, Cradlepoint customer, Westernport Water uses in-vehicle Wireless WAN connectivity for on-the-road monitoring, asset reporting and live site data access in the field.

Video Monitoring

Ensuring persistent oversight and security is just as critical for physical facilities as it is for the network. With surveillance cameras, sensors, and drones providing on-demand feeds — available in real-time through LTE- and 5G-enabled wireless edge routers, teams can quickly conduct video, thermal, and LiDAR-based (Light Detection and Ranging) inspections across widely distributed sites.

Edge Computing

Utilities can get closer to real-time visibility of systems and infrastructure by shifting key components of application workloads and computing to the network's edge. Wireless edge routers connecting devices like smart meters and sensors can be monitored and managed centrally but also process analytics, run applications, and more in the field.

Predictive Maintenance

With utility systems going digital and wirelessly connected sensors and smart meters streaming real-time data, information about downed wires, faults, and grid imbalances can be collected and analysed quickly and automatically. Machine-learning and Artificial Intelligence (AI), which rely on stable connectivity, subsequently enable predictive maintenance to decrease outages and identify where investment is needed.

Private Cellular Networks

Connecting the facilities and components of a utility with a Private LTE and Private 5G network can provide significant benefits. Complete control of the network enables layers of security that aren't possible over Wi-Fi or public networks, eliminates traffic competition, boosts performance and Quality-of-Service, and greatly reduces monthly costs.

As utility organisations rely more and more on technologies for essential monitoring and maintenance, secure and reliable connectivity with Cradlepoint Wireless WAN ensures that these vital processes are not interrupted and run efficiently at all times.

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WHY GOVERNMENT SHOULD ADOPT LOW-CODE PLATFORMS

Rob Bollard, Director, Industry Principal – Public Sector APAC, Pegasystems

Globally, it has become increasingly apparent there is a rapid technology revolution occurring within governments, underpinned by a dramatic shift towards low-code platforms to deliver real outcomes for citizens.

Public sector agencies are recognising the power of these repeatable platforms to deliver value fast, providing long-term capability built for change and supporting strategic and operational outcomes.

In fact, analyst firm Gartner said that by 2025, 70% of new applications developed by enterprises will use low-code or no-code technologies, up from less than 25% in 2020.

So why is this unprecedented change in the digital landscape occurring? Well, there are four key elements driving this change:

1. Increased citizen expectations. Citizens are expecting more from government services with the impacts of COVID further accelerating the need for rapid transformation of services to support the new digital norm.
2. Citizen experiences at the core. There's a need to put the citizen experience at the centre and build around them to deliver more intuitive digital experiences.
3. System and infrastructure modernisation. There's growing pressure to continuously modernise and digitise ageing enterprise-critical processes, systems and capabilities that can no longer support agencies into the future. Without modernisation, organisations create massive roadblocks to achieving strategic and operational outcomes today and in the future.
4. The skills shortage. A significant emerging workforce crisis involving a lack of skilled professional developers within the marketplace to support digital demand combined with the urgent need to democratise digital enablement to support the growing role transformation of knowledge workers.

Low-code platforms provide solutions to many challenges governments face today, particularly in relation to scalable investments and

reducing IT costs — but the benefits don't stop there.

Here's why governments are (and should be) investing in low-code solutions:

- Agencies can build more applications, faster by democratising access to application development with visual tools/model-driven processes, automated deployment and execution. Visual, model-driven development has proven to be 12x faster than traditional code and significantly aligns business and technology to reduce rework and wasted effort.
- Low code streamlines the app development process. This means developers can build more with less, focusing on innovation and addressing needs to optimise the value to the organisation.
- They help to achieve scale and agility across the organisation at an enterprise level, managing complexities, and can be deployed in a channel-less manner. As government and citizen needs and opportunities arise, public sector organisations can move more quickly to produce and deploy new digital initiatives targeting the changing requirements of their employees and customers to maximise success.

Low code streamlines the app development process.

- Supporting the new digital workforce paradigm by enabling business experts to get involved directly in development, dramatically reducing rework and organisational buy-in, responding more quickly to business changes, investing in new career opportunities for staff and better leveraging value from technical resources.

The good news for governments is this isn't something untried or untested within the public sector, it's happening (to great success) across the world. For example, when faced with a significant COVID-19 challenge, the Bavarian Ministry of Economic Affairs had to find a way to efficiently manage incoming applications for financial relief for small to medium-sized businesses.

Using low-code platforms, the Bavarian government was able to create a fully digitised process in just five days. This application revolutionised the way the government managed claims for COVID-19 financial aid ensuring more than 300,000 applicants were able to get financial aid amounting to EUR 2.2 billion within several weeks in a time of extreme need for their citizens.

The time of enterprise-scale low-code platforms is here and it is something the public sector must embrace moving forward. It is the solution for government agencies to deliver modern and seamless citizen experiences, now and into the future. Requiring a massive shift from traditional digital build thinking, these new-generation platforms will reshape transformation and the relationship between business and IT, and create the new job roles that will reimagine the modern public service.

DIGITAL TRANSFORMATION: WHY CULTURE MATTERS

Nicolas Betbeder, SVP & President APAC & Japan, Software AG

The pandemic has been a big driver in the acceleration of digital transformation (DX) projects and investments across ANZ, despite lockdowns and restrictions impacting the region.

This is further corroborated by IDC's recent report which forecasts ANZ ICT spending to reach AU$114 billion in 2021, with this growth to continue at a CAGR of 2.5% to reach AU$126 billion by 2025. In the 2020 ANZ IT Services Ecosystem survey, 69% of ANZ organisations told IDC that the pandemic had accelerated their digital transformation programs, and many agreed this investment played a major role in creating digital resilience.

With so much change happening in so little time, it's more important than ever to have a clear path to ensure success in these endeavours.

Sadly, the rate of failure in these kinds of projects has always been high. In 2016, McKinsey estimated that no less than 70% of complex, large-scale transformation projects fall short of their goals. Two years later, McKinsey revised that estimate, reporting that only 16% of digital transformations achieved "successfully improved performance".

WHY DO DX PROJECTS FAIL?

When trying to understand what goes wrong in DX projects, we need to look beyond the technology. For the most part the technology is mature and fundamentally works. The challenge is taking it and turning it into positive, valuable outcomes. And for that you need to bring your team along. Cultural acceptance is the key element of digital transformation.

There are many reasons why people are hesitant to use new technology. They might be threatened by it and think it's going to negatively affect their job. Or perhaps they don't know how to use it and aren't successful despite wanting to be. Or simply, sometimes change is slow and people like things the way they are.

How you introduce new technology into your organisation is more important than the technology that you choose to deploy. If it's rolled out at the wrong time, people won't give it the attention it needs. If it's rolled out in the wrong way, people can get a bad impression of it.

Below are three steps that can help teams overcome some of the more

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How you introduce new technology into your organisation is more important than the technology that you choose to deploy.

common obstacles and pave the way for more successful digital transformation:

1. IDENTIFY THE "WHAT" AND "WHO" OF CHANGE

It seems simple, but knowing what you need to do before you do it is often overlooked. It's tempting to introduce new technology and only then go in search of 'problems' it can solve. However, gaining an understanding of what processes or outcomes need to be addressed is the first step you need to take.

If automation is part of the plans, identifying which processes are practical to automate is also an essential part of the process. While some things are suited to automation — with tools like Robotic Process Automation (RPA) — others aren't. It's essential to spot the difference early.

A fundamental consideration of this pre-transformation assessment has to be who are the people that will be affected by these new processes and new tools. Cultural acceptance largely includes identifying who will be affected and what impact they will feel.

With that knowledge in hand, you can then begin to develop new processes, adapt technology to your business and roll out the changes.

2. COMMUNICATE AND TRAIN

Proactively address any potential concerns about those who are going to be affected by digital transformation and the impact it will have on them. If employees are expected to use completely new tools — either new systems or simply new interfaces — then they need to have the training laid out for them so that they know what they're doing. By doing this, you enable employees to do their jobs better and help overcome barriers.

However, if you are trying to change ways of working more fundamentally — perhaps around automation or analytics — then communication, understanding and training need to be wedded together in a more intricate way. This is the change that people more commonly resist because there is more uncertainty. Easing people into training that they can understand and that's relevant to them will help to bring them on the transformation journey.

3. KEEP EVALUATING SUCCESS

Once you know what needs changing, you've changed it and you've taken the right steps to bring people along with you, it's important to understand if the change is positive. Some things that you should reflect on include: Has the transformation worked as hoped? And if it hasn't, what is the status quo? Do you need to go back to step two and re-train/re-develop your people? Or even back to step one and re-evaluate the change entirely?

A lot of projects will fail because early understanding of what was happening wasn't gathered (or gathered properly). If something isn't working, you have a limited time window to change it before the negative change becomes the new status quo and people either reject it or fall into a habit of doing things incorrectly.

Process management tools can help to make the assessment of whether something is working as it should be. They should be used alongside infrastructure management to assess the wider impact of technology. From a cultural change perspective, understanding whether people have embraced new ways of working is a key indicator for the long-term success of digital transformation.

THE LONG ROAD TO TRANSFORMATION

The task of transformation is never finished. As things change they create new situations and challenges of their own. So being constantly in the loop of what's going on within your business — creating a truly connected enterprise — will not only help make informed decisions, but will also help you stay close to what's happening with all the people in the organisation. This will ultimately be the critical success factor.

LGs COLLABORATE TO BOOST DIGITAL TRANSFORMATION

DIGITIAL TRANSFORMATION IS A HUGE, BUT NECESSARY, UNDERTAKING. COLLABORATION BETWEEN THREE SOUTH AUSTRALIAN LOCAL GOVERNMENT OFFICES HAS BUILT A FOUNDATION FOR RESOURCE AND KNOWLEDGE SHARING.

Resource constraints often thwart the digital transformation plans of local government departments. For three South Australian councils, the key to speeding up plans and enjoying success in a particularly challenging year lay in collaboration.

We spoke with Karin Swiatnik, LGITSA President, City of Charles Sturt, to learn more about the benefits of pulling together to enable knowledge and resource sharing.

HOW IMPORTANT IS DIGITAL TRANSFORMATION FOR LOCAL GOVERNMENT TODAY?

Digital transformation is becoming increasingly important. Like all industry sectors, we had to move quickly in response to COVID-19 and, as such, finding ways to build resilience and manage uncertainty became key. In fact, recent research has shown that nationally, digital transformation was the highest-ranking priority for local government organisations this year, proving it's now critical.

WHAT ARE SOME OF THE CHALLENGES FACED BY LOCAL GOVERNMENTS IN ACHIEVING THIS?

Local governments are often time poor and don't have the same level of resources as other levels of government or big businesses. Because of this, change and digital adoption can be slower and, at times, stifle innovation. That's why adopting the right type of technology is so important, as well as collaboration across the board.

Other key challenges include the high proportion of legacy systems that exist in digital environments, technical debt and the vulnerability to cybersecurity attacks.

WHAT ARE SOME WAYS THAT LOCAL GOVERNMENTS CAN COMBAT CHALLENGES WITH DIGITAL TRANSFORMATION AND OTHER KEY PRIORITIES LIKE COMMUNITY ENGAGEMENT AND TECH ADOPTION?

Technology adoption can and should play an important role in tackling these challenges head on, and collaboration is also critical.

By breaking down silos and creating a more collaborative public sector, we have the potential to unlock far greater capabilities and learn from one another.

Ultimately, this enables us to create communities in which people come first.

WHAT'S TOP OF ADELAIDE COUNCILS' LIST WHEN IT COMES TO DIGITAL TRANSFORMATION AND WHAT ARE YOU ADOPTING TO MEET DEMAND IN THIS AREA?

One of the key initiatives for us has been updating our IT service desk solution with Freshservice, a product of Freshworks, which has helped to streamline internal operations and deliver a strong employee experience. While this might not be the futuristic ideal that some have in mind, it's vital technology like this that can be game changers in how we operate and perform across the organisation.

As an example, by tapping into the Freshservice service catalogue, we saw a reduction in IT requests, which translated into a 10% decrease in phone calls because employees were able to easily find a resolution without having to contact the team.

YOU RECENTLY COLLABORATED WITH TWO OTHER COUNCILS TO SHARE IT SERVICE DESK RESOURCES. WHAT WAS THE GOAL IN THIS COLLABORATION?

In 2018, a collaborative partnership was formed between the Cities of Charles Sturt (CCS), Marion (COM) and Port Adelaide Enfield (PAE) with the shared goal of greater serving our communities. To enable collaboration and knowledge-sharing across business functions, the vision is to align our IT infrastructure and applications, project by project.

As I mentioned before, one of the key opportunities for alignment has been the service desk, which is the main point of contact for IT-related requests. However, the set-up across each of the councils was very different and made effective collaboration and cross-team communication a challenge. For starters, each of us had our own service desk solutions so information from one couldn't easily be shared with the other. On top of this, ageing legacy software provided a further challenge.

We replaced our IT service desk solutions with Freshservice which has been a game changer for us all. As well as the reduction in phone calls, we've also migrated over 1500 IT assets, which has transformed the way we work and manage our IT assets.

Plus, the benefits are not just in the dollar value savings. It's helped us build a strong local network and share knowledge and skill sets more broadly, providing the foundations for sharing resources and further collaboration into the future.

WHAT'S NEXT FOR THIS COLLABORATION?

We've since shared learnings on the benefits of fostering cross-council relationships with other South Australian councils and are now expanding the foundations for improved collaboration and communication, with a network trust project to enable the sharing of calendars and create efficiencies for staff working across the councils.

Karin Swiatnik,

LGITSA President, City of Charles Sturt

DIGITAL TWINS

Dylan Bushell-Embling

INFRASTRUCTURE AUSTRALIA AIMS TO ENSURE ALL FEDERALLY FUNDED INFRASTRUCTURE PROJECTS INCORPORATE A DIGITAL TWIN WITHIN THE NEXT 10–15 YEARS, AS PART OF ITS 2021 AUSTRALIAN INFRASTRUCTURE PLAN.

The newly published plan calls for the government to adopt a 'digital by default' posture for infrastructure projects, and for the infrastructure sector to embrace digital innovation and the use of data tools.

The plan states that governments can work together to accelerate digital twins for infrastructure projects by creating governance models, processes, technologies, systems and capabilities.

Infrastructure Australia has made additional recommendations including establishing a national office for digital by default in infrastructure. This office would be led by the Department of Infrastructure, Transport, Regional Development and Communications and supported by industry representative groups including the Smart Cities Council of Australia New Zealand and Australian Smart Communities Association.

Under the plan, the new office would work with states and territories and their infrastructure delivery agencies, as well as other key stakeholders, to provide a unifying strategy for embedding digital infrastructure delivery and operations as the default.

It is envisaged that the scheme would begin with public works infrastructure where the government has the most influence, before flowing on to commercial and residential sectors.

The report also calls for 100% of infrastructure projects with a budget of over $50 million to have digital asset champion roles, appointed by the state and territory infrastructure delivery agencies.

Meanwhile, federally funded projects should adopt innovative approaches across their life cycle, including building information modelling (BIM), digital engineering, embedded sensors and digital asset management, the plan states.

Within the next five years, all major infrastructure projects should be digitalised by incorporating contemporary technologies including BIM.

According to the plan, BIM and digital engineering have been shown to deliver better project outcomes, increase productivity and improve infrastructure performance.

The sector should also strive to replace engineering with digital engineering, using data to drive decision-making, the plan states.

An effective digital engineering environment would allow components to be shared between projects and allow governments to accurately model how infrastructure will operate in the future when sustainability, climate, resilience and public safety factors are considered.

Monash Art, Design and Architecture Director of Urban Planning and Design Professor Carl Grodach said the report has taken on an important new dimension in light of the protracted COVID-19 lockdowns.

"COVID will not dismantle cities as powerful, economic engines. They will endure the instability, just as they have with previous pandemics and other major urban shocks. The enduring lockdowns have distorted employees' work preferences and influenced business decisions. These will change again as restrictions ease," he said.

"Infrastructure Australia's report highlights Australia's infrastructure deficit and the lack of funding for essential community infrastructure, particularly in developing areas. The real challenge is developing both hard and soft infrastructure to accommodate a changing economy and workforce, including planning for different types of employment centres in both regional and metropolitan areas."

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