



SAPOWER NETWORKS' JOURNEY TO A DIGITAL UTILITY WRITTEN BY JOHN O'HANLON

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SA Power Networks provides energy to South Australia. Over five years, the transformation of its award-winning IT team, led by Chris Ford, has demonstrated the power of innovation

ith 1.75mn people dispersed over an area of nearly a million square kilometres, the job of distributing electricity to all South Australia's inhabitants is no small one. While the vast majority live in Adelaide, supplies need to reach people in upcountry communities like Port Augusta, Nullarbor or Oodnadatta (which lies more than 1,000km from the capital). The job of supplying and maintaining the power infrastructure across this sprawling state, about the size of Germany and France combined, falls to SA Power Networks (SAPN), which employs more than 2,000 people, including an IT team of around 250.

Before Chris Ford was appointed CIO, the IT organisation had yet to live up to its full potential or be recognised as a vital part of the wider business – a familiar story. CEO Rob Stobbe recognised that IT could no longer be seen as a backroom function if the company were to meet the strategic goals of the Future Operating Model it was developing. In 2014, he brought in someone with more than 25 years' of senior leadership experience, both within









"A key pillar of our success as a leadership team has been our willingness to listen"

Chris Ford, General Manager Technology and Innovation, SA Power Networks and beyond IT, in large regulated enterprises. Previously, the IT leadership had reported indirectly to the senior leadership but Ford was brought straight into the executive team to help drive forward and digitise the business strategy. Five years on, his role has been redefined and broadened to that of General Manager of Innovation and Technology.

It's refreshing to talk to Ford about his journey so far and his vision for the future. Not afraid of risk, experimentation or even vulnerability, his mind is as





much on the people and their engagement as on the nuts and bolts of IT.

"Technology has changed, of course, but I think the changes in management and leadership techniques and ways of working are just as important. Though I lead the technology function my real focus and strength is in people leadership, the development of capability and team building." The evolution of a future business strategy, he believes, should go hand in hand with personal evolution and development: change is the engine of growth, and he has set 'always evolving' as one of the IT team's mantras.

TECHNOLOGY SERVING BUSINESS GOALS

Nevertheless, the technology did need fixing, so the IT leadership team was radically restructured in 2014 and their style of working changed. A comprehensive review of the way the organisation handled its day-to-day processes took the existing data storage and enterprise functions onto the cloud. In 2016, it transitioned its legacy SAP ERP and BW platforms to SAP HANA, giving the workforce a database and reporting system relying on live data and making regulatory compliance more dependable in a major migration exercise in



Microsoft: a trusted digital transformation partner

Throughout SA Power Networks' (SAPN) significant transformation of its IT team and its transition from legacy platforms, software giant Microsoft has been a key partner every step of the way. Rather than a typical vendor-buyer relationship, Microsoft has worked collaboratively to ensure SA Power Networks maximises the value of investment in its solutions.

Collaboration empowered by Office 365

SAPN has adopted Office 365, utilising Teams to improve collaboration across the business with great success – the business helped SA Power implement its Future Operating Model in order to achieve operational excellence. SA employees have transformed the way they work through digital, utilised data to improve customer experience, gained smart insights into how the business can be run more efficiently, and improved communication and collaboration though open platforms.

An important use case of Office365 has been promoting onsite safety. Teams is an easy to use, mobile friendly platform that improves communication between field workers to reduce the number of incidents. Questions can be asked in real-time, even through photos, to gain answers quickly.

Other Office365 tools, SharePoint and Flow, have helped SAPN move from a paper-based to digital system, improving efficiency throughout the company's procurement process. Without the need to scan paper documents, and with all information at the fingertips of staff, the business has reduced the procurement timeline from months to weeks.

"We were early adopters of Office 365 and Microsoft have worked very collaboratively with us to ensure we maximise the value of the investment. We have really promoted the use of 'Teams' to improve collaboration across the organisation and it has been embraced by every group that has tried it."

 Chris Ford, General Manager Innovation and Technology, SA Power Networks

More than a software vendor

As a trusted partner, Microsoft brings software engineering, research and development, solutions architecture and support, which would not come from buying an off-the-shelf solution. As such, Microsoft has helped SAPN to innovate through its technologies, formulating the best ways to navigate a complex digital transformation as a true enabler.

With SAPN having come on leaps and bounds implementing a modern workplace, Microsoft is also helping SAPN introduce SAP's S4/HANA solution on Azure. This next-gen enterprise resource planning (ERP) solution is a truly mission critical application for SAPN. In addition, the partners are collaborating on a Virtual Power Plant project, which is funded by the South Australia government and aims to help South Australia 'transition to a sustainable energy future'.

Lastly, Microsoft has been instrumental in moving SAPN's data to the cloud, with all the time and cost efficiency that goes with it. Moving to Microsoft's cloud-based solutions has also improved collaboration with external partners through secure sharing.

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partnership with DXC Oxygen.

Previously teams going out to restore storm outages, for example, used paper maps to locate sites but now they use the SAP Work Manager app running on SAP Mobile to access all the information they need for the job. This alone is saving 2,400 working hours a year.

Earlier this year, SAPN was proclaimed Australia's Digital Utility of the Year for Energy. Its Digital Strategy, unveiled in 2018, was a big part of that thanks to its record of cloud migration and the automation of many manual processes. Just as Work Manager streamlined field

operations, My Workday massively simplified payroll, while across the business the roll-out of MS Office 365 provided employees with tools such as SharePoint and Team sites to bring the organisation together.

Ford believes that one of the keys to success is forging strong partnerships with key suppliers. The relationship with Microsoft has been a great example of this, culminating in a study tour to Microsoft's head office in Redmond last year. Ford says: "we were early adopters of Office 365 and Microsoft have worked very collaboratively with

EXECUTIVE PROFILE

Chris Ford

Chris Ford is an internationally experienced Chief Information Officer with a proven track record of delivery in large private, government and regulated organisations. He is responsible for driving the digital transformation of SA Power Networks.

Ford's management responsibilities include all aspects of Information Technology, from supporting the day-to-day operations of the business through to delivery of the long-term business strategies enabled by the implementation of innovative, cost-effective and reliable information technology.

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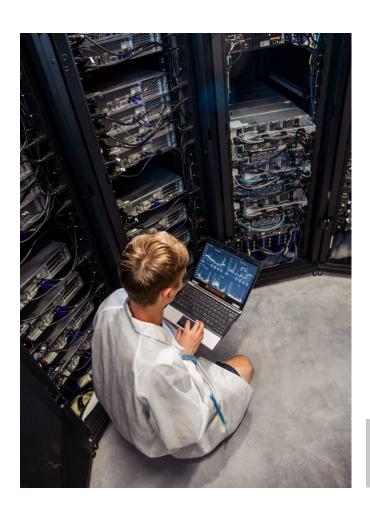
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us to ensure we maximise the value of the investment. We have really promoted the use of 'Teams' to improve collaboration across the organisation and it has been embraced by every group that has tried it."

Leadership strategy benefited too, with the Corporate Portfolio Management Office (CPMO) being given a MS Power BI dashboard that has enabled management to create and share reports and images and insource a lot of contract work. It increased the team's ability to develop projects and cut the time and effort involved in producing reports. That project helped the CPMO win the award of PMO of the year at the PMI Australia awards in 2018. The Digital Strategy, set to be fully in place by 2025, aims to create a seamless customer experience through automation and equipping the workforce with digital tools based on robust core IT platforms.

The most successful demonstration of the new work culture arose from the challenge Ford gave to his young developers and engineers to convert thousands of old CAD drawings from different sources onto one new platform. The team used facial recognition technol-



ogy to identify the images on CAD drawings and then machine learning algorithms to correct and improve them before transferring them to a digital drawing. More than 6,000 Quicksilver files were converted to intelligent AutoCAD drawing files using a machine learning algorithm while 60,000 files were transferred into Autodesk Vault, says Ford. "The MLA project was a great success – it saved thousands of labour hours and improved the quality and accuracy of our drawings." The project won two awards – the 2018

Digital Utility Award for 'Best Use of Technology' and ICT Project of the Year at the 2018 SA Australian Institute of Project Management.

THE ART OF THE UNEXPECTED

The literature of leadership has tended to concentrate on getting the most out of people in much the same way as you'd maintain a machine. Ford doesn't tick that way, though he does encourage his leadership team to engage with writers like Brené Brown and Aaron Dignan who challenge received thinking. He likes to embrace VUCA (volatility, complexity, uncertainty and ambiguity), seeing these seemingly negative or threatening concepts as occasions for growth. "I think the whole style of leadership is currently changing. These people are talking about vulnerability, even as a leader, and being open to your team so they see you as someone with integrity. A key pillar of our success as a leadership team has been our willingness to listen to and work with people across the organisation to improve the way we work."

One of the first changes Ford made was to join his team in an open office. IT people are by nature introspective,









he admits – they relish the solitary joy of coding. To encourage intermingling he created a large kitchen area and banned eating at one's desk. Not only does the team have to eat together, but they are asked to sit with someone they don't know. "We have created a real buzz in that kitchen as people step out of their comfort zone and share their experiences of both work and life."

No doubt the kitchen is an incubator of ideas brought before a monthly gettogether called Shark Tank where IT team members can have 15 minutes to present an idea, using no more than four slides. The idea is to share a story of success and challenges overcome, and get feedback from colleagues. Belying the title, it's a supportive rather than a critical space, where anyone has the opportunity to gain confidence and show how a simple solution often produces a beneficial result. "It is about giving people permission to take ownership of a problem, then go and fix it," says Ford.

SAPN has many long-serving staff. For those who had been doing things the same way for many years it must have been a shock when they were asked to embrace Agile working – to challenge



without inhibition, and to be challenged in return. "We started on a journey of training the IT function first about what Agile meant and how it could add value to the organisation. Slowly over time, we started to engage the wider organisation each time a business project needed a sponsor. So we started to extend our Agile transformation into other parts of the business as we got better at it. We have a lot of stand-up meetings,

especially for Agile projects. When we started rolling out Agile, there was scepticism but then people started to notice these stand-up meetings and seeing they looked like fun. It's a viral change. If you create pockets of energy and enthusiasm people build upon that energy and want to be part of this new revolution."

No wonder then that employee engagement scores went up from



below 70% in 2015 to 91% in 2017 – helped by the abandonment of hierarchy in favour of self-motivated teamwork. Much more important than the awards Ford has received are the accolades he gets from long-service employees who tell him that the simple ability to get problems solved make these the most exciting times they have known. "I am so proud of the teams," he enthuses. "I love my work anyway but it's very warm-

ing to come into the office in the morning and feel their energy and enthusiasm."

WALKING THE WALK

The IT building just across the road from SAPN headquarters in Adelaide is an environment Ford is proud of because it nurtures initiative within the group. In a traditional organisation, change is often resisted. "I wanted to show the team what a different way of working



might look like. I believe that together we've brought about a cultural transformation because people have found the confidence to try something different; to experiment and to not be afraid of failure and to be confident to challenge one another and be challenged in return."

The boss sharing an open office is not unheard of perhaps, but five years ago it was a breath of fresh air for SA Power Networks, as was the invitation to people to do their own thing. The staff introduced spontaneous lunchtime slots where team members can run a session on something of interest to them. For example, one person with an interest in meditation started a regular 20-minute meditation and mindfulness slot, while others might focus on aspects of professional development. "People are becoming teachers as well as students," he says.

Around the edge of the office there's an open track to make it easy for people to move around, and meet and collaborate with others. The track inspired one of the team's more engaging efforts – a collaboration to produce a robot that could navigate the walking track. "The Rise of the Robots was fun and at the same time brought out so many brilliant

ideas. One outcome I hadn't anticipated was how it brought into play the diversity of the team." With some 40 different countries of origin represented, there's no lack of different ways of approaching problems, he adds.

All that is good fun – but it's fun that benefits the business. Inclusion is at the heart of Ford's approach. "In developing the digital strategy we took a codesign and co-create approach, getting people across the organisation to work with us and share their vision of the business's future so we could work out how digital technology could support them in achieving those goals. It is as much about business future as about technology. After all, our objective is to reduce organisational costs so that customer bills are kept as low as they can be."

With a positive approach to ethnic diversity, Ford is also passionate about giving equal opportunity to women, as well as girls who are considering a future career in the utility sector. Members of his leadership team speak in local schools about succeeding as a woman in the industry and encourage girls to take up STEM subjects. As well as mentoring women within the organisa-









tion, he is himself 'reverse-mentored' by one of his young female field workers, a process which he describes as inspirational. All this has led to a transformation his entire team can be proud of, he concludes. "Being named Digital Utility of the year for Energy in 2019 is the culmination of five years of hard work: it really gives us feeling that we're getting it right."











