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Amelia Green
Former CDO, PwC Singapore

The CIO Mission: Driving Transformational Agility





Building Synergy The CFO and CIO Relationship



Carl Duckinson CIO, Aurecon

Measuring ROI
Is Digital Transformation Worth It?

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In the best of times or uncertain times, we must plan for the future to ensure business continuity. The original theme for the third edition of Smart CIO was centered around VISION 20/20 and future plans. In the midst of creating this issue, the world changed. A global pandemic has forced organizations everywhere to reconfigure global operations, further embrace digital solutions, enable employees to work from home, review finances and cash flow and plan for the second part of the year.

While the VISION 20/20 theme is still relevant, what recent events highlight is the importance of leadership and organizational agility to guide transformational change. This issue's articles remain on point as they highlight CIO leadership pushing massive changes. Transformational change is critical to business success and survival which is why leadership must embrace agility, especially in an era when business disruption happens quickly and globally.

Former Nissan Motors CIO, Celso Guiotoko, understands the importance of leadership and organization agility. Now CDO of Nishimoto Wismettac Holdings and non-executive board member at Coca-Cola Japan, he has 15 years experience in the tech world and has guided business through disruptions before, most notably the 2011 Fukushima nuclear accident.

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Former PwC Singapore CDO, Amelia Green, shares her thoughts on Innovation 2020; highlighting digital upskilling, a culture of innovation and diversity as key considerations. Amelia is now Managing Director at consulting firm AlixPartners but led the PwC digital journey to enable every employee to be an agent of transformation.

When it comes to digital transformation - how do you measure return of investment or ROI? That's the question we asked Carl Duckinson, CIO at global engineering firm Aurecon. Unsurprisingly, the equation is a tricky one but Carl found a unique way to determine ROI when he undertook a massive digital transformation project.

As more business operations and services move online, data security becomes paramount. Our regular columnist Bryce Boland, former Asia Pacific CTO at FireEye, looks at the areas that businesses need to consider so their digital security can keep up with their Vision 2020 plans.

Finally, how does the relationship between the CIO and CFO ensure business outcomes can be reached? Kerrie Parker, CFO at Deakin University, discussed the importance of synergy between tech and finance.

To be true to the times, we also asked our guest CIOs on the role of IT during global business disruptions. Their answers are an insightful and helpful guide in today's environment.

Planning is crucial for large scale business success. Today's CIO plays a vital role in innovative planning. We hope this issue can inspire you in your digital journey whether in the time of disruption or innovation.

Jennifer Alejandro

Editor-in-Chief

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Celso Guiotoko is what you might call a busy man. Having left the car giant Nissan in February of 2019, a company he spent 15 years working with, he now balances his role as Board Member and Chief Digital Officer (CDO) of the food company Nishimoto Wismettac Group, Non-executive Board Member of Coca-Cola Bottlers Japan Holdings with advisory positions for firms including, Coats PLC, the world's leading industrial thread manufacturer, and Tricentis, a provider of automated software testing tools for Agile and DevOps environment.

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Today, much of his work involves acting as a CDO for new industries, and he sees many similarities between this position and the work he conducted as a Chief Information Officer (CIO) at Nissan and Renault-Nissan Alliance.

"I see my key role as driving the digital transformation of the foodstuff trading industry in a way that creates added value for customers, employees, or other stakeholders, and raises corporate value in the process," he said.

Guiotoko admits to having been "blessed" with great superiors throughout his career and believes that the key to managing Chief Executive Officers (CEOs) and other C-level executives is having personable relationships with a range of actors within the company, where issues and challenges can be discussed openly.

As an example, during his time at Nissan, Guiotoko said the person he reported to changed on a regular basis, and included the Chief Financial Officer, the Executive Vice President in charge of supply chain and manufacturing, the Executive Vice President in charge of new markets in sales and marketing then later the Executive Vice President of Corporate and Product Planning.

"This had the effect of increasing understanding across the company of the role of the CIO and increased the digital literacy of executives in each reporting Currently CDO of Nishimoto
Wismettac Holdings, Celso
Guitoko's tech experience
and vision is highly sought
after. Also serving as an
Outside Director at Coca-Cola
Japan, he spent the previous
15 years in various tech
focused leadership positions
at Nissan.

division," he said. "And the way I was provided with opportunities to connect with various executives empowered me too."

An added benefit of such a structure was that he was able to learn about critical aspects of the business including engineering, purchasing and Information Technology, which enabled him to be more effective in his work, he said.

Changing mindsets

Based on his decades of experience, Guiotoko believes it is crucial for companies, especially those in his home country of Japan, to adapt to different approaches to business in the future, and that CIOs play a crucial role in instigating those changes based on their knowledge of a company's operations.

"Japanese companies need to expand globally moving forward, which means that embracing diversity will be critical," he said. "Cultures also differ according to country, and global companies need to develop a thorough understanding of different markets and communicate accordingly. CIOs should focus on communicating to ensure that everyone in the company is aware of its Vision."

His advice for the next generation of CIOs is to ensure they are thinking not only about the latest technological advancements, but specifically what benefits they can bring to customers, suppliers and internal workforce.

"Moving forward, CIOs and CDOs will likely serve increasingly as advisors to board members on boosting investment in digital

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"Moving forward, CIOs and CDOs will likely serve increasingly as advisors to board members on boosting investment in digital technologies, and I think that more and more of them will become directors themselves"

technologies, and I think that more and more of them will become directors themselves," he said. "Digital technology and cybersecurity will become increasingly important, so I feel that demand is sure to grow at the director level too for people with CIO/CDO skillsets."

Naturally, CIOs need to aid their companies in adapting to technological changes, as advancements become increasingly important to the way a business operates. That is particularly the case in Japan, he said, where companies can be incredibly resistant to moving away from the "Please don't change anything" mindset, which he argues exists from the frontline of a business right up to the executive level.

"How [do] you change the kind of mindset that insists on doing things as they've always been done, avoiding risk by not changing anything?" he said. "You may well need to transform the mindset of top management before implementing DX [digital

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transformation]. Changing the way top management thinks is really important."

Also, important he said, is managing the mindsets and expectations of people from different generations, including the varied viewpoints of Millennials, Generation Z and Generation Alpha.

"I've come to appreciate how each generation of consumers is looking for different things," he said, adding that in the automotive industry many people didn't understand this changing dynamic. "The era in which cars would sell if they were well-made is over. This generation in particular aren't buying them. You need to provide a delightful customer experience." he said, a reference to Millennials.

Because CIOs work with various sections of a company, they tend to know more about its operations, and thus can make important decisions regarding its future, said Guiotoko, but added that technology will also inevitably change that role.

"When I was a member of the Board of Auditor at Nissan, I would be handed reports on various operations, and I could tell there were many gaps between what management and those at the front line were thinking. However, as technology evolves and communicating information becomes easier, those gaps will be closed and decision-making will speed up," he said, adding that digital transformation brings with

it the benefits of creating a flatter organizational structure, which in turn empowers employees.

Unexpected developments

The ability to adapt will be crucial for businesses globally in the future, an example of which can be seen in the way the spread of the COVID-19 coronavirus has had a major impact on global economies since the first reported case on the last day of 2019. Companies around the world have had to adapt to an outcome that nobody saw coming just a few months prior.

Guiotoko believes that technology can help companies combat some of the impacts caused by the coronavirus. For example, after a 9.0 magnitude earthquake struck Japan in early 2011, disrupting large parts of the country, the use of internet infrastructure with cloud technology allowed the companies to remain connected.

"Nissan was able to use the video conferencing functions to communicate with the world and exchange information on the situation in real-time. I think you could say that an easy environment to work in with simplified processes are the ones that enable productivity to be maintained even in the event of such major disruption," he said, adding that when he worked at Nissan during the flu pandemic that lasted from January 2009 to August 2010. remote working infrastructure was in place to handle the workforce to work from home. And the technology has drastically improved since then.

"Now all sorts of companies are promoting remote working. It's better and more affordable now than before to enable remote collaboration by using clouds together with videoconferencing and other remote collaboration tools. Doing that kind of thing was difficult in the past, but it's easy now," he said.

As the global economy moves forward in this changing world, the ability to embrace transformational agility will be vital to success and a company's survival. No one can accurately predict the future. But what the COVID-19 situation has proven across the globe is that AGILITY is MISSION CRITICAL. The goal of the CIO is to create an environment where the business can quickly transition in the face of major changes or challenges.

What role does IT play in business continuity disruption or when unexpected events happen? Have you experienced any of these situations? What did you do?

The SARS outbreak occurred while I was at Nissan, just around the time that we were deploying teleworking technology, so we had the infrastructure in place for enabling working from home. Now all sorts of companies are promoting teleworking. It's cheaper now than before for companies to enable remote collaboration by using their clouds together with video conferencing and other remote collaboration tools. Doing that kind of thing was difficult in the past, but it's easy now. I think it boils down now to using the cloud effectively. An easy environment to work in is one that enables productivity to be maintained even in the event of such major disasters.



The fast-evolving nature of technology is transforming the world around us. To keep up with the swift rate of change, it's not enough for businesses to employ traditional digital transformation models. Instead, they need to think differently and challenge the way digital transformation is done today.

Recognizing this, PwC Singapore is reimagining digital transformation through digital upskilling, establishing a culture of innovation, leveraging diversity of gender, experience, and cognitive diversity to transform everything they do. The professional services company has embarked on a transformational journey to digitally upskill every partner and staff member, enabling every employee to be an agent of transformation and innovation throughout the organization.

"The pace of change means we need to keep innovating at an unprecedented rate," said Amelia Green, former Chief Digital Officer of PwC Singapore and now Managing Director at consulting firm AlixPartners. "Creating an innovation culture and upskilling at scale are being recognized as differentiators. In light of this, businesses are adding measurable KPIs to their leadership teams to build, protect, and sustain a culture of innovation as a critical success factor for their future development."

Investing in digital upskilling

The organization has made significant investments that reflect the importance of upskilling in the age of digital transformation. Globally, the network launched its "New world. New skills." commitment, pledging US\$3 billion not only to train its own people, but also to support clients and communities



The first step in upskilling employees — improving digital and technology capabilities

in improving their knowledge and skills for the digital economy.

In Singapore, PwC is committing an estimated S\$10 million over the next two years to develop the digital skills of the company's more than 3,500 employees. In line with the global initiative, PwC Singapore's program includes curated classroom and virtual training sessions on automation, data analytics, and data visualization; a Digital Fitness Assessment app, and e-learning platforms and materials, to name a few.

Continuous learning for the future of work

One of the main objectives of digital upskilling is to bridge the rising digital skills gap — the mismatch between the skills people have and those needed for today's digital world and the future workplace. To reach this goal, they have adopted twofold approach.

The first aspect of this approach entails equipping employees with digital and technology capabilities, or what's more commonly referred to as "hard" skills. The second aspect focuses on what Green calls

"Scalability is key. Upskilling employees creates a tsunami of innovation at all levels and functions. Every touchpoint of an organization has the potential to be innovated, simply because every employee has the ability and skills."

"harder" skills – the interpersonal skills that drive the adoption of the aforementioned capabilities. For instance, learning how to collaborate helps employees redesign and refine processes across organizational boundaries.

Yet upskilling is not time-bound. Consistent innovation requires constant learning. "Perhaps the most important aspect of digital upskilling is incubating a culture of continuous learning — teaching employees how to be curious, to learn, to explore, and to try. This requires a culture that fosters a growth mindset," Green said.

Upskilling as a catalyst for innovation

More than an investment, PwC Singapore views upskilling as a crucial element that drives innovation. To truly make an impact, however, they believe upskilling must be done at every level.

"Scalability is key. Upskilling employees creates a tsunami of innovation at all levels and functions. Every touchpoint of an organization has the potential to be innovated, simply because every employee has the ability and skills," said Green.

Upskilling primarily involves people, but process and technology must also be considered to maximize the benefits gained from upskilling. "You can't put digital onto an analog structure," Green said. "Creating a sustainable momentum of innovation requires

Amelia Green brings her passion for data to her role as former CDO for PwC. Having driven more than 200 business innovation projects over the past 20 years, she has enabled business transformation by embracing technologies like blockchain, AI and automation.

the organizational structure to support adoption, the delivery of new client interactions, provide business models, the processes to ingest, qualify, and assure new capabilities – and most importantly, the measures and metrics that promote the behaviors that drive adoption and a culture to contribute."

This culture of contribution is vital. Once employees are equipped with the necessary digital skills, they apply their curiosity and courage to build upon these skills to generate innovative ideas. Listening to and valuing these ideas, and how leaders respond, directly influences and supports employees to have the courage and take the risk to propose something new.

"We unleash ideas," said Green.
"An individual's idea may also
be relevant for other parts of

the business, so the impact that every individual can have on the firm can be tremendous. I think this is a hugely motivating factor for an employee to know that wherever they are, regardless of their role or title, they can be part of the transformation – locally and even globally."

Women at the forefront of digital transformation

Reimagining digital transformation also means rethinking a company's organizational structure – from the teams that make up a company to the leaders involved in decision-making. This is where diversity comes in.

A 2019 analysis by Korn Ferry found an increase in the number of women in CIO and CTO roles, with the percentage of women holding these roles rising from

16 percent in 2018 to 18 percent in 2019. Sectors with the highest percentage of women CIOs/CTOs include finance, energy, healthcare, and retail.

"Women tend to excel at some of the key skills required in these roles, such as the ability to build relationships, bringing different components together to form a cohesive solution, communicating with and managing multiple stakeholders, and driving efficient processes," Green said. "At PwC Singapore, we have strong, diverse leaders bringing in different voices to create solutions that reflect the diversity of the world we live in."

Green envisions the growing trend of women CIOs/CTOs to continue, with a culture of diversity fuelling innovation and enabling companies to achieve their goals in 2020 and beyond. "A team with diverse perspectives enables people to challenge each other and creates better solutions for clients," Green



The percent of women in CIO and CTO roles is increasing

said. "More diversity pays off in the value and relevance of the solutions we create."

This culture of innovation is what attracted Green to the field of technology. "Somewhere in my early 20s, I became determined to make an impact, to contribute something with my life. When I looked around at the raw

potential of everything we can achieve, change, and improve through digital, I was inspired," she said. "Digital provides me with the biggest opportunity to make an impact, and is in line with PwC's purpose to build trust in society and solve important problems. I wanted to make a difference — and this seemed to be the best way to do it."

What role does IT play in business continuity disruption?

As many of our companies have shifted to Work from Home models, IT is helping us keep the lights on. Our experience highlights how IT can mitigate the risks of these events, such as Industry 4.0. Trends we predicted to take 10 or more years will be accelerated in the next three.

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Digital Transformation by the Numbers: Measuring ROI

Carl Duckinson, CIO at Aurecon

Investing in new technology is expensive and there's one thing everyone involved naturally wants to know: is it worth it?

For Carl Duckinson, CIO at global engineering firm Aurecon, answering that question required a novel approach.

Return on Investment isn't always a simple equation – in business as in life some things can't be measured and often the qualities we value most are intangible.

So it proved during Aurecon's recent digital transformation.

With a background in Australia's resources sector, Duckinson was accustomed to leading change in large, capital intensive mining operations where IT formed a small percentage of the overall investment budget. As a service provider, however, Aurecon's situation looked a little different.

"I'm actually sitting in a business that's professional services," Duckinson explained. "We are consultant engineers, very smart people, and digital transformation is one of the core business strategies in our business blueprint."

A larger IT investment

While many of Aurecon's staff and senior executive team were already digitally savvy, the relative scale of investment was greater than anything he had attempted before.

"The amount of capital I was asking for in a mining company was far in excess of what I was asking for here," Duckinson explained. "And yet what I've asked for here in this project is probably one of the biggest financial decisions that the business has ever made."

Aurecon delivers planning, design and management services on a consultancy basis to government and corporate clients, supporting major infrastructure projects around the world.

Duckinson's role was to help its employees improve those services with technology, while also generating efficiencies across the business.

Transforming, not changing business

In other words, it was about transforming the way Aurecon works, rather than creating an entirely new digital offering. This, too, held its challenges.

"When you start talking about digital maybe it does get a bit easier because you start talking about bringing a new product to market or entering a new market or creating a new revenue stream,"

Duckinson said. "You can measure [that] on an ROI basis because the initiative will either work or it won't. You either create a new product or service that has a positive P&L or you don't.

"When it's more internal to the business it's a lot harder to get a monetary value on it because so many things change throughout the course of time."

Pinpoint problems first

When dealing with clients, one of Aurecon's distinctive design principles revolves around problem solving.

"We're trying to help clients understand their problems and then co-create the solution. So we feel that being a problem finder rather than a solution provider is really something that's going to make us stand out and be different from the crowd." Duckinson said.

"We're trying to help clients understand their problems and then co-create the solution. So we feel that being a problem finder rather than a solution provider is really something that's going to make us stand out and be different from the crowd."

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Applying this idea to Aurecon's own digital transformation journey involved close analysis of the company's existing business practice in the context of technological change.

After all, like most firms, Aurecon wanted to be, as Duckinson put it, "the disruptor, not the disrupted".

"I think it goes back to asking yourself why. Many, many times," he said.

Understanding the problem made it possible to contemplate a solution. "Why are we doing this? Why are we doing that? ... Okay, I kind of get the why, now tell me what we're doing and how we go about it."

Buy-in through storytelling

To describe that solution, Duckinson relied on another, distinctive Aurecon technique: storytelling.

"We use storytelling as a really effective way of communicating things about us, whether it's what we've done well or what we're trying to achieve," he said.

The company uses digital tools to construct stories around various engineering options, for example, providing a different perspective that enables clearer decision making.

"I used the art of storytelling to really help the executive committee and the board As CIO at Aurecon, Carl
Duckinson specialized in
turning tech strategy into
successful implementation.
His 25-years of IT experience
has been put to use across
the mining, logistics, and
steel manufacturing sectors.

understand what we were doing and why we were doing it.

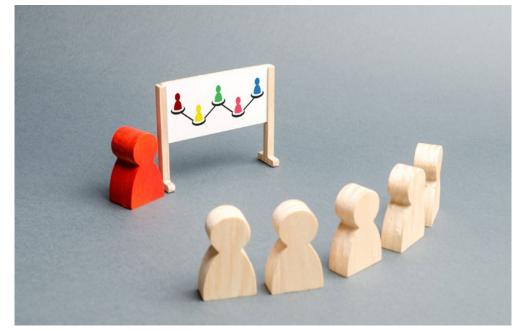
"Before I did that, I was struggling with a business that wanted to change but that couldn't afford the change and they were certainly not capable of the change.

"Through storytelling ... I was able to get the business to understand what we were doing and why and to convince them that it was not just needed but needed now."

A wider view of ROI

The decision to invest in Workday Financials and Professional Services provides a neat example of why this process worked.

Although the platforms offered opportunities for savings, they also involved transforming the daily routine of key staff and improving their access to data, an outcome



Storytelling provides a different perspective for decision makers

which, although desirable, was hard to quantify directly.

"The ROI for that project was a combination of some cost efficiencies around finance and IT. It was [also] about changing the focus of the project manager – and we're a project management organization – from being internally focused back to serving corporate, to serving the client. So, it was very much about client experience.

"It was also about the employee experience, implementing a modern workplace that keeps pace with business change, providing data across the integration of HR, projects and finance."

For Aurecon, ROI become a story about resourcefulness in the face of change: how could it use the tools available to stay competitive and meet the challenge of a shifting market? In true Aurecon style, the answer lay in fully understanding the issues at hand.

There were four business problems that Aurecon tried to solve with this project.

- 1. The organization felt the way in which they were driving behaviors wasn't aligned to its three-year strategy, it was more aligned to financial performance over six to nine months.
- 2. The business was asking all of its client-facing people to spend

- time doing internal activities.
- 3. The business was too complex and a new platform combined with a simplified mindset could give employees time back in their day.
- 4. Finally, the organization took a long time to make decisions because it had a lot of difficulty getting to its fact base.

All good stories need a satisfying conclusion. Duckinson's ended with one that neatly tied these various strands together.

"When we got to the conversation about why we needed to change... it all suddenly started to click together."

smartCIO SmartCIO Cybersecurity Column

What role does IT play in business continuity disruption or when unexpected events happen? Can you share how you have executed agility at Aurecon?

IT has a critical role to play. It is at the center of everything we do. Our success or failure in times of crisis depends upon:

- The decisions we've made in the past that increase our readiness, e.g., cloud strategy, mobile strategy and SaaS strategy.
- Our ability to innovate in the face of adversity, e.g., do we have the skills to pre-empt, react and respond to a crisis in a timely manner?

At Aurecon, we made the decision some time ago to transition to cloud based platforms, such as Workday. These environments support our company objectives to be inclusive, such as enabling flexible work arrangements for all our employees.

During the current COVID-19 crisis we've had to:

- Stand up a work from home environment for 6,000 employees in 10 days. We were already well progressed because of our strategy, and because our IT teams are skilled in modern technologies we were able to scale up our platforms from 600 users to 6,000 users working from home in less than 10 days.
- Move all internal meetings business-wide from Skype to Teams.
- Move hundreds of Terabytes of data from file servers to SharePoint Online.
- Stood up a number of "virtual" (software based) VPNs to uplift capacity tenfold.
- Deployed mobile timesheet capability.
- Publishing numerous apps security to the web.
- Our Workday platform is already supporting HCM, recruitment, and learning. As such,
 we are able to continue supporting our People function seamlessly, and we are fully
 leveraging learning platforms to raise awareness and educate our business users about
 how to leverage the newer ways of working.





For many businesses, the digital transformation agenda has been and remains a key driver for their technology investments. The creative disruption this brings provides many new opportunities to change the way you protect your assets, improve your customer experiences, and secure your business. Here are some new security goals for 2020.

SmartCIO Cybersecurity Column SmartCIO Cybersecurity Column

Protect your APIs

As more and more of the world runs on APIs, one business imperative is opening up your APIs to the world, to facilitate access to customers and data, and creating new business models to monetize both. APIs are the new business front door, where your customers and business partners come to transact with you at Internet speed with low cost and high value creation. Protecting your APIs increasingly becomes a key to maintaining the value of your business.

A key security goal for 2020 should be to ensure you understand all your APIs, both internal and external, and to have a sensible set of technical controls around them. These APIs facilitate access to many of your businesses' most important assets - your data, your intellectual property, and to the supply chain you manage with other businesses. Knowing what you have, who can access them, how they are used, by whom, and for what purpose is key to protecting them as well as to optimizing how you monetize them.

Start with the inventory - do you know what all your APIs are, and how do you ensure new APIs and updated APIs are tracked? While you might start with external APIs first, don't neglect your internal APIs - these are often exposed more than you realize, and APIs are easily eternalized when business opportunities arise. Then move on to access control

Bryce Boland is an information security executive and technologist with over 20 years of international experience in security solutions and financial services industries. Former Asia Pacific CTO at FireEye - one of the world's premier global security providers.

- ensuring that the entitlements to access your APIs are well managed is the natural extension of the application entitlement management processes many businesses already run. Your goal with access control should be to limit your attack surface and prevent abuse by unknown users.

Your external APIs may need protection from Internet-scale disruption - denial of service and application-level attacks. Consider what controls you need to provide a robust service, including leveraging cloud-based API filtering, rate limiting and filtering out unexpected traffic sources. Next, consider the issues of data protection - are you sure your precious data isn't leaking to third parties, or can be tampered with to disrupt your value chain? Finally, do you have the telemetry and visibility into your API ecosystem to spot security problems before they become security incidents?

Eliminate passwords

Another goal for 2020 should be to eliminate passwords as much as possible. It's easy to say that nobody likes passwords, but that's not entirely accurate. Criminals love passwords because they are easy to steal or guess, and often provide legitimate access to facilitate illegitimate activities. Getting rid of passwords makes the problems of credential phishing, password reuse, forced password changes, and tracking down password compromises largely irrelevant.

In practice, passwords remain necessary for many systems, but start with eliminating the need for users to provide them often. If you have a single-sign-on (SSO) solution, bring as many systems onto it as you can; make it a contractual requirement with suppliers to integrate through standard protocols rather than passwords.

If you didn't already, start using multi-factor authentication solutions, which take away many of the downsides of password compromise. In some cases, you can even eliminate passwords altogether with simple biometric authentication built into the latest hardware and operating systems.

For legacy systems that require passwords, consider leveraging enterprise password manager solutions that make it easier for users to automatically generate unique complex passwords for each system, and take away their need to remember them. While each of these may sound hard, your users will thank you for taking the password hassles out of the way of

their work, and your security will improve as well.

Security by default

My third recommendation is to start thinking about the transition from designing security into solutions to making security part of solutions by default. Most CIOs have started adopting agile techniques for software development, continuous integration and deployment, and DevOps operating models. These bring enormous benefits in improved levels of team engagement, aligning accountability, improving delivery cadence and reducing issue resolution time.

If you are on this journey already it may be time to start ensuring your critical security controls are embedded into your development workflows with code patterns that are automatically incorporated into every development project. This is a great way to relieve some of the security burden from developers, standardize and streamline security capability delivery, and enable all projects to rapidly benefit from improvements to the security solutions that you integrate.

Executed well, these three initiatives can improve your business security while making your users, developers and customers lives simpler and better!

What role does IT play in business continuity disruption or when unexpected events happen?

Whether it's a natural disaster, epidemic or a man-made crisis, technology has a critical role to play in both preparedness and operating effectively through the event. Many organizations must deal with the realities of all staff working from home, perhaps indefinitely; that can mean increasing remote application access capacity, moving users to cloud-based productivity solutions, and provisioning technology for home use. Data protection and authentication become even more technology dependent when users are operating remotely, as does voice, video and collaboration tools. Finding solutions for your customers can be part of the challenge, especially where traditional avenues of business interaction have closed down. Whatever the situation, preparation is key and testing your business continuity plan regularly to learn and improve is the real path to success when disaster strikes.

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CIO Leadership and COVID-19: Supporting a Suddenly Remote Workforce

Workday Staff Writers

The CIO plays a pivotal role in an organization's ability to respond, recover, and return to growth following this global crisis.

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The operating climate for businesses is complex and moving more quickly than ever before. Companies are reimagining all aspects of their operations to drive efficiency and revenue while seeking organizational agility. Natural disasters and global crises like COVID-19 increase this challenge exponentially. While every functional leader must think differently in this global crisis, massive changes face the CIO. CIOs are increasingly positioned in a leadership role to help their peers understand how they can effectively use technology to respond, recover, and return to growth.

Why is the CIO so pivotal in a response situation? As the organization's IT leader, the CIO, and their IT teams, are at the center of crisis response in a digitally enabled world—and their most critical priority should be business continuity in the face of unprecedented change. This post is the first in a three-part series exploring business continuity through three different lenses: employees, critical business processes, and data assets. Today we're focusing on employees.

The top priority for CIOs in a crisis is to address the large and sudden spike in demand for remote working capacity caused by the closure of offices and other facilities, while maintaining worker morale and productivity and managing operating costs. And, adds Workday CIO Sheri Rhodes, "Each employee's situation working

remotely is unique, and while standards are important, it's also important to meet the workmate where they are. This could be as simple as recommending noise-cancelling headsets so they can work in peace in what might be a noisier environment than they're used to."

There are multiple IT processes and technology capabilities critical to flexibly scale and handle unplanned workloads. Below are three best practices for supporting business continuity for employees.

Support the IT Workforce

Ensure that IT workers have the ability to flexibly and effectively work from home, with the tools and support to manage an increase in IT workload from a newly remote workforce and customer base. And, encourage the whole of the workforce to remember this: IT workers are people, with their own families and other responsibilities outside of work.

Implement flexible working hours, and identify capable backups for the continuity of critical roles. Are call center staff supported with capabilities such as digital collaboration systems like Slack to workers at home? Ensure anytime feedback systems are in place to keep morale up among IT employees facing increased call loads and new challenges from remote work.

For IT and other workers, ondemand video learning is a powerful way to guide workers to set up and best use remote worker technology. For newer IT staff supporting remote workers, or to help prepare them for increased workloads, it's worth investing the time in role-playing activities to ensure they can handle new IT support calls. Testing is also critical to ensure that remote IT and other organizational staff have the proper tools, and that those tools are updated and secure. Also of vital importance is collaboration software to ensure virtual meetings

"For most corporations, 70% of the bandwidth requirement is outbound. But with the rush to remote work flipping that model, CIOs must assess whether they have the network capacity to handle increased inbound traffic."

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at scale through applications such as Microsoft Teams and Zoom.

We're encouraging Workday customers who need to quickly realign their workforce to use our flexible frameworks, such as Workday Org Studio, which can help model different organizational structures that might be needed to support a surge in demand in a part of the business. This is one of many Workday tools that can assist with rapid response, which some of our executives recently discussed in a webinar.

Build for Hyper- elasticity

With the shift to remote working, CIOs need to focus on

"right scaling" infrastructure capacity for VPNs and increased network bandwidth. Funding for transformational projects may need to shift, temporarily, to support the scale up of infrastructure for remote work.

Most people reading this blog post have probably already realized that the remote worker scale-up can't happen overnight. Obstacles likely include VPN capacity, VoIP capacity and remote number extension, and implementing stricter security measures such as multi-factor authentication (which we've been strongly recommending for a while). And, although many companies have been shifting their businesses to the cloud at an

incredible rate, some are learning the hard way that for cloud-based applications, the key is elasticity. Not having the ability to spin up additional capacity in real time to meet unforeseen spikes in demand is a nightmare made real.

For most corporations, 70% of the bandwidth requirement is outbound. But with the rush to remote work flipping that model, CIOs must assess whether they have the network capacity to handle increased inbound traffic.

"Hyper-elasticity preparedness and planning pays off big," notes Rhodes. "We run a largely SaaS IT ecosystem, so we make sure the basics around system redundancy and support are integral to the solutions"

For overall network bandwidth, CIOs must ensure they have enough bandwidth to handle the external traffic. For most corporations, 70% of the bandwidth requirement is outbound. But with the rush to remote work flipping that model, CIOs must assess whether they have the network capacity to handle increased inbound traffic.

And all this bandwidth is to make sure that employees can access any business tool they require to do their job at home, and conduct meetings without worrying about lag or technical glitches—on both computer and mobile phone, especially if remote workers are away from their home office to care for others in the family or support crisis response.

Communication, Not Technology, Is King

Ensure IT and the company have the digital solutions to effectively and empathetically communicate clearly and frequently, but remember that too much technology can make people feel even more isolated and alone. Use a variety of methods-chat, video, or even an old-fashioned phone call, so that you are not bombarding people (who likely already feel bombarded) with email. Most of all, make sure that communication with IT colleagues, employees, and customers is frequent and empathetic, using channels that are engaging and human.

And remember, sometimes less is more. "Simplicity and clarity of communications is important, especially to improve the success of adoption of new features or protocols that become time sensitive," says Rhodes.

Some of our teams have found success with informal weekly video coffee chats to help people feel connected. To support employees more quickly and naturally here at Workday (where there's currently no in-person IT help center, as the whole company is working from home) we launched an "Ask IT" channel on Slack to try to get problems resolved as quickly as possible, while also allowing others to see, in real time, the fixes to common problems.

We've also been encouraging our customers to take advantage of the Workday People Experience, which inherently supports multi-channel communication, natural workspace integration, chat, and mobile interaction.

Final Words

We know these are difficult times and we are all doing our best while striving to do even better. To see other articles from Workday about navigating the challenges of COVID-19, visit our resources page.

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CIO and CFO in sync for better business outcomes

Kerrie Parker, CFO at Deakin University

Universities have existed for over a thousand years.

Today, technology is having a colossal impact on how things operate and what we can offer our customers, shares Kerrie Parker, CFO, Deakin University. This calls for more synergy between CIOs and CFOs.

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CIO's have many solutions to pick from in today's digital world. But even the best technology doesn't always make good business sense, which is where CFOs step in.

Communication is key to making these seemingly contrary visions align, said Kerrie Parker, the Australian university's CFO.

"I think you've got to have open and honest dialogue. That means regular meetings, cross-team collaboration and having that common purpose clearly understood, among both the executive and our senior management teams," Parker said.

"We need to ensure alignment to the strategic goals of the University and contribution to the University's objective of enabling globally connected education for the jobs of the future, and research that makes a difference to the communities we serve. Therefore we have to ensure that our ambitious projects and agendas fit in. We do want to set that agenda for change, but we've got to do it within the constraints of our resources."

Deakin recognized the digital potential of modern online technologies and the contribution towards overall business strategy by creating a Chief Digital Officer role rather than a CIO to reflect its digital ambitions. William Confalonieri who was appointed as the Chief Digital Officer (CDO) in 2012, plays a critical role in strategic decisions and enablement across the University.

"We've worked hard to drive a change-ready culture and to help our people understand that as we transform there will be uncertainty, some ambiguity, but we have trust in our strategy and our leadership to get there."

In 2019 Deakin adopted Workday Financials, a cloud-based ERP solution accessible on a variety of devices that provides stakeholders with information rather than data, which allows the finance team to contribute to key business decisions.

"Workday allows us to drive continuous improvement, enhance the working lives of our staff and provide the University with a competitive edge in the delivery of finance," Parker shared.

"Without analytics and insights, universities are threatened by the sheer volume of information. Their inability to use it is actually a competitive disadvantage."

Deakin has also launched several applications for students. Deakin Genie is a digital personal assistant that issues reminders for lectures and provides them with other resources.

Meanwhile, Deakin Scout helps them to get around campus. The University holds the top spot in a yearly survey tracking student satisfaction in Victoria for 10 years now.

"Students are important when developing the University's tech vision because they have high expectations. If it's not digitally available they are not really interested, so it's crucial that we stay relevant," Parker said.

"You have to be really agile in this space, which is why we need a visionary CDO looking forward, surveying the landscape and predicting what the new horizons are going to be."

Staying current

The biggest challenge around technology investments, as far as Parker is concerned, is not just project risk.

She evaluates them like any big ticket item that goes towards teaching, research or infrastructure development. The University has a three-year rolling budgeting plan, that takes account of different priorities and agendas.

"All projects need to stack up. Technology is a critical business function and CFO's and CIO's must have a strong business partnership in order to secure the best outcomes. It's

always about good planning, strong project management, frequent monitoring and capable resourcing," Parker said.

What she finds most challenging is staying current, given the rapid pace of development in the sector.

"Our CDO brings vision, so I need to be able to understand the horizon. I then have to be able to connect that horizon to university outcomes and financial performance," Parker explained.

For that reason, she obtained a graduate certificate in IT some time ago. She also has broad operating experience outside of the Higher Education sector including manufacturing, agriculture and fast moving consumer goods.

Parker believes that executives should be open to learning beyond their specializations. "All my C-Suite colleagues know that we are becoming digital organizations. The question is not whether we do, it's in what form, where, how much, and how we prioritize the funding requirements.

Complementary role

The value of technology cannot be denied. Institutions can harness the power of big data through analytics, giving them a competitive edge over their peers.

Enabling technologies can also be extended to staff. These allow them to plan their schedules on-the-go and speed up administrative processes. The result is an enhanced experience for staff and students alike. "Technical innovation such as cloud computing, the mobility enablement, digital capabilities, all offer the ability to transform operations and improve the business model," Parker said.

"I think that the convergence of technology and investment strategy has elevated the importance of that relationship between the CFO and the CIO. It takes a strong collaboration between the two of us. I think the financial well-being of an enterprise is dependent on the health of our relationship."

So, what does she consider a good project pitch from a CIO or CDO?

"CIO's have the opportunity to create a strategic asset of technology by ensuring a clear line of sight from the tech investment to positive outcomes for their organization. They have to demonstrate what's in it for the university – that's often about student and staff experience. Then, of course, it still has to make financial sense. We could spend many dollars on exciting, leading edge technology but it needs to align with our strategic objectives to achieve results" Parker quipped.

Kerrie Parker has held CEO, CFO and Executive Leadership roles across a range of sectors, including agriculture, manufacturing, financial services and state government. She brings this expertise to Deakin University as CFO.

