Dear reader

connected CIO
‘No man is an island.’ Nor is any system, organization or industry. The CONNECTED series dives into this new reality of ‘everything connected’. It gives you the latest insights on digital transformation.

Also available:
In a connected world, CIOs should be connected, pushing an IT, Workforce and Security Transformation forwards.

**EXECUTIVE SUMMARY**
We’re going through an unprecedented period of change and there is no sign of things slowing down. These changes are also board-level challenges rather than merely IT ones, driven by forces crucial to the Connected Chief Information Officer (CIO): technology and digitization.

The 4th Industrial Revolution

The World Economic Forum describes the 4th Industrial Revolution as ‘a fusion of physical, digital and biological systems’. We’re increasingly entering a merged reality of physical and virtual worlds. Technologies like wearables, Internet of Things (IoT), cryptocurrencies, artificial intelligence and machine learning are changing businesses and industries. The outcome?

An increasing number of traditional businesses (and business models) are turning into digital businesses (and models).
A CLOSER LOOK – SMART AGRICULTURE

WITH JOHN DEERE

Agricultural giant John Deere has already rolled out smart agriculture solutions in 35 countries around the world.

- **Sensors** in seed planters accurately set planting depth and separation in order to optimize crop growth
- **Steering systems** autonomously guide 120-foot-wide farming equipment with 1-inch accuracy to maximize crop yields
- **Unloading** harvesting machines can be fully automated 24/7, reducing manual labor
- **Drones** are used to survey fields and determine when harvesting can start
- **Analytics programs** are used to compare future markets, to evaluate optimal usage of fertilizers and pesticides, and more

Closing the innovation & agility gap

The competitive landscape is changing, with companies facing fiercer competition from 2 sides:

1. **The incumbents** - the traditional competitors that have always been on the radar
2. **The newcomers** - the startups and big technology companies entering the market

Especially the latter have more freedom to innovate and to become true disruptors, not just of businesses but of whole industries. They’re fueled by digitization and have no legacy technology or legacy production capabilities to hold them back.

As the Connected CIO, you therefore have to look beyond the technology and begin embracing new and different business models:

- **The sharing economy**: consider shared cloud-computing infrastructures and adopt more public cloud technologies, which can give you the agility you need to innovate faster while reducing costs;
- **The co-creation economy**: use digital co-creation platforms to leverage external intelligence in your innovation projects;
- **The experience economy**: explore technology such as augmented reality as a way of enriching the customer experience, even in B2B contexts. With a heads-up display, for example, smart helmets not only improve safety but also provide real-time job assistance and training.
Digital Darwinism

The Connected CIO plays a crucial role in creating the safe, collaborative and agile environment that is needed for the seamless merging of technology and people. Unhindered by technological or cultural obstacles, the potential to create growth remains enormous.

Such a solid digital foundation is based on:

1. Reliable, real-time data
2. Smart analytics and insights that drive operational excellence forward
3. A continuous optimization of IT and operational technology costs combined with increased agility
4. Connected experiences between employees, customers and partners
5. A culture of innovation among the entire workforce

“The biggest risk is not taking any risk... In a world that is changing really quickly, the only strategy that is guaranteed to fail is not taking risks.”

Mark Zuckerberg
Facebook CEO

KEY TAKEAWAYS ON THE INEVITABLE SHIFT TO DIGITAL

- Technology and digitization are creating an era of unprecedented change
- New business models – sharing, co-creation, experiential – are disrupting the current models
- A solid digital foundation is based on reliable and real-time data, analytics and insights; an IT optimization to decrease costs and increase the agility; connected experiences and a culture of innovation.

1 in 2

10 YEARS FROM NOW, HALF THE COMPANIES ON THE S&P 500 WILL BE REPLACED.

Source: Corporate Longevity: Turbulence Ahead for Large Organizations, Innosight Executive Briefing, 2016
The strategic CIO

The role of Chief Information Officer (CIO), first introduced in the early 1980s, is not an easy job. Nowadays, the CIO is a senior decision-maker who must oversee people, processes and technologies within a company’s IT organization so that the IT outcomes support these business goals. While the role has steadily grown in importance, it could be argued that today’s CIO is too inundated with operational duties to truly drive the necessary business transformation.

CHAPTER 2

Evolving towards a hybrid role

It has recently become recognized that an understanding of business, rather than just IT, is required if IT is to align with the business goals. Besides managing the IT infrastructure – including policy and practice development, planning, budget, resourcing and training – the CIO is also expected to contribute to higher profits and business transformation.

Introducing the hybrid CIO: someone who is both technology-minded and business-savvy.

“At local government, what I am doing now is blending the digital director and CIO functions around how we can embrace digital to change the way people lead their lives. That, for me, is the coming of age of the CIO as part of the executive team.”

David Wilde
CIO and director for digital at Essex County Council

This article was co-written by Doug Drinkwater, EMEA Content Director, IDG Strategic Marketing Services.
Moving away from back-office tasks

The CIO has undergone a fundamental shift over the past five years, moving away from an old-school approach – dealing with boxes, wires and data centers – to become a digital leader.

Transitioning to this hybrid role takes time, however, plus it requires new skills. Since most CIOs are hired from within the IT department, they need to develop softer skills to help them communicate and collaborate effectively with the business.

Besides that, the IT organization needs specific skills in order to take full advantage of the digital possibilities such as big data, analytics, information management and IoT.

Some companies and CIOs are already making the change, but there is still work to do for the following reasons:

- too many CIOs are still too focused on operational tasks,
- IT budgets remain under pressure, and,
- weak information security is an ongoing cause for concern.

"Operational CIOs face being outmaneuvered, much like IT was partially outmaneuvered by shadow IT – so end-users will simply work around you."

Andy Caddy
Former CIO of Virgin Active

The CEO drives CIO change

So, what is driving CIOs to become more strategic business enablers? IT leaders believe there are a number of factors, with digital transformation and CEOs at the forefront.

CEOs are expecting their CIOs to be ‘more strategic’ and ‘add value’. They want CIOs to build digital platforms that push the business forward, lead innovation and use emerging technologies to disrupt and reimagine IT rather than to simply optimize existing business processes.

Strategic CIOs build on the right combination of their own experience and that of external partners, while leveraging the board’s understanding of the importance of digital.

"Digital is a great vehicle through which the CIO becomes a leader of change in business. Digital is a change so central to technology it’s begging for a tech leader to step up, but that change is a business one."

Phil Jordan
CIO at Telefónica

31%

CIOs are increasingly able to devote time to strategic tasks, while maintaining oversight of IT operations. The time CIOs can spend on strategic tasks will increase from 27% in 2016 to 31% in 2017.


63%

More CEOs are now concentrating on IT projects that make money (63%) rather than saving money (37%).

Source: Harvey Nash/KPMG, CIO Survey 2016: The Creative CIO.
The strategic CIO is not a choice

In general, CIOs agree that to step up and transform themselves they must learn new skills, court relationships at the top of the business and gain a better understanding of the business challenges from a technological, operational and commercial perspective.

The CEO and the board will increasingly be asking the Head of IT to make this transition. Those that fail to do so may very well find themselves out of a job.

“There’s a danger being left behind, especially as Chief Digital Officers grow in prominence. If there’s a top-down change, you’re not going to exist. The CIO should be the person to leverage emerging technology and to take the business forward.”

Karl Hoods, CIO of UK-based charity Save The Children

**KEY TAKEAWAYS ON THE STRATEGIC CIO**

- Learn about the business, its pain points and how you can help as CIO
- Empower your own team to transition into strategic CIOs in the future
- Liaise with senior management, but also search for information lower down in the organization
- Be open to continuous learning, e.g., through business courses such as MBAs

**WHAT IS CHRIS MURPHY’S VIEW ON THE STRATEGIC CIO?**

**THE CIOs TOP CHALLENGES**

Chris Murphy is Vice President at Dell, IT Team Member Experience Services and EMEA CIO. He explains:

“The CIO is no longer leading a back-office support function, it is now about empowering employees to be more productive and to differentiate customer offerings through better experiences. The CIO is a crucial member of a company’s leadership team. CIOs have a lot on their minds these days. We sum up some of their concerns:

**Leading Transformation:** CIOs must be adept at leading true transformation. In order to transform into a truly digital business they need to lead and steer Digital Transformation, IT Transformation, Workforce Transformation and Security Transformation.

**Talent and Diversity:** success depends on your people. The pace of change is breathless. If the technology changes so quickly then so must the skills of the people working in that sector. A key challenge, therefore, for any CIO is to ensure that your employees skills are apace with the changes. Be that through continuously learning, influencing third-party bodies, etc.

**Budget:** this is another key challenge for every CIO. IT budgets tend to be flat or are being squeezed. The vast majority of those budgets are dedicated to support functions that don’t move the revenue needle or add perceived value—functions like system maintenance, upgrades and security patches—while also maintaining security and regulatory requirements. That leaves a lot less of the IT budget for the innovative, boundary pushing work that helps a company differentiate itself and become a revenue changer. Automating, Standardizing, Virtualizing and Rationalizing your services are some of the ways to address this challenge.

**Shadow IT:** most certainly one of the IT phrases of 2016 and 2017! Typically this happens because there is a gap in your services, so it is best tackled by providing ‘as-a-Service’ offerings and matching the needs of your business.”
CHAPTER 3

Transforming IT

With the proliferation of mobile services, smart devices, connected sensors and big data flows on the one hand, and the need for real-time insights on the other, IT has moved from the back office to the heart of the organization. Or, in other words, in today’s digital world CIOs hold the key to unlock business value through connecting the dots.

Leaders of this digital transformation are delivering new customer experiences thanks to software that makes their products smart or takes their services online. They are expanding the number of customer touchpoints and interacting – increasingly proactively – at precisely the right moment. Yet, only 5% of businesses are currently differentiating their customer service and product offering in this way. Many CIOs clearly still have work to do.
A challenging task

Companies and governmental entities that want to create new business designs by blurring the digital and physical worlds, and thus make optimal use of the Internet of Everything, have to transform their IT organization. That requires a long-term commitment. Companies usually encounter difficulties in making their existing (legacy) systems digital-proof.

Today’s CIOs have to strike a balance between optimizing their operational model, their applications and their infrastructure. How can we optimally support the business? Which applications should we migrate? Which new, rapidly developed apps should we introduce? And which applications can be delivered as a service? The forward-looking CIO is seeking answers to all these questions (and more!).

“IT includes digital transformation, which is all around new modern Applications. It includes IT transformation which involves automating and modernizing your data centers while also focusing on people and processes. It also includes security transformation. The perimeter doesn’t exist anymore so you have to leverage advanced security operations to de-risk the business.”

Chris Murphy,
Vice President at Dell, IT Team Member Experience Services and EMEA CIO

Why IT transformation is a good thing

In 2016 the Enterprise Strategy Group, commissioned by Dell EMC, performed an elaborate study of organizations’ IT transformation maturity. Based on the input from 1,000 respondents worldwide, it was found that achieving IT transformation leads to:

1. **Increased IT agility and responsiveness**: specifically in the areas of infrastructure provisioning, on-time and on-budget project delivery and on-time application development.

2. **Enhanced IT spending efficiency**: organizations that are more mature in their IT transformation spend more on IT, but they spend the least per mission-critical application supported.

3. **More IT funding for new projects and innovation**: organizations that are further evolved in their IT transformation spend less on maintaining existing systems and thus have additional budget for innovative projects.

4. **Higher levels of internal stakeholder satisfaction**: organizations that are transforming their IT believe that IT transformation is mostly about using IT to speed up innovation and time to market. Automation and ‘IT as a Service’ are also key to them.

5. **Improved competitiveness and business outcomes**: achieving IT transformation success is important to ongoing business viability. In other words, failure to undertake the journey can put an organization out of business.

In brief, both the IT division and the entire organization benefit from a well-managed IT transformation, with advantages ranging from an improvement in organizational speed and agility to enhanced customer experiences, both internally and externally.
A new role to play: ITaaS broker

To help the business grow in the digital age, CIOs have to reinvent their IT as a Service (ITaaS). But it won’t be the cloud or IoT solutions themselves that will make organizations more digitized and agile. To win legitimacy, CIOs must shake off their image of ‘tool providers’ and become ‘business strategy facilitators’. As an ITaaS broker, the IT department will need to use its professional knowledge and experience to support the business in properly assessing their needs, shop for the best value and help with specific events or questions.

It’s not about delivering a high-tech Content Management System, but about creating a better customer experience.

This requires a mindset shift and a focus on an ITaaS management activity, demanding:

- **New IT business models**: IT has to become more service-oriented towards its internal customers and more market-driven towards the end customers; never lose sight of the P&L, and become a broker and builder of services to all internal and external customers.

- **New technology architecture**: CIOs should consider the cloud as a plausible solution and should explore self-service and automation technology. Adoption of the modern data center pillars – flash, scale-out, software-defined and (hyper-)converged – should also be on the agenda. Furthermore it will be increasingly important to create financial transparency and to also offer an application service platform.

- **Skills, roles and organizational alignment**: IT employees should develop front-office capabilities towards their colleagues. They must learn to speak the same language as the business. Besides that, they have to be held accountable for the service they deliver and they must constantly update their own knowledge to have sufficient technological breadth.

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A CLOSER LOOK – ATOS GETS MORE FROM CLOUD SERVICES

Atos is an IT giant that offers companies, among its range of other services, end-to-end enterprise cloud computing services through a joint venture.

1 The situation – To gain critical mass quickly, Atos set up cloud centers across three continents. This base would allow cloud services to be extended into new geographies with a hub and spoke data center model.

2 The challenge – Atos wanted to ensure that its customers could access its cloud services whenever and from wherever, from whatever type of device. The task of integrating and managing a complex infrastructure had the potential to divert resources from strategic business objectives.

3 The approach – “What matters is bringing value to your end users. And that’s all about doing imaginative stuff with applications—not exerting time and resources managing hardware,” says Jacques Pommeraud, the joint venture’s CEO at that time. As such Atos opted for an end-to-end Dell EMC setup – where Dell EMC standardized the infrastructure platform and delivered consulting services – to lay the groundwork of its customer offering across all of its data centers.

4 The result – The joint venture has managed to reduce its data center footprint by 50%, and the setup’s hassle-free, resilient cloud environment allows its employees to create value instead of managing systems. “80,000 Atos employees worldwide can capture collective knowledge,” says Pommeraud. “When a customer selects us they know we’ll be with them every step of the way.”

A stepwise & 2-track approach

No two businesses are alike, and neither are their IT transformations. Nevertheless, each transformation process involves more or less the same phases.

To ensure operational continuity while making great strides in the digital transformation, a 2-track approach is advised. This entails the IT organization working at two speeds:

- improving in better-understood areas on the one hand, while
- experimenting to solve new problems on the other.

The first is about the going concern. The second is a kind of ‘turbo mode’ enabling the rapid testing of new ideas, which benefits the organization’s agility.

**KEY TAKEAWAYS ON TRANSFORMING IT**

- IT transformation is a long-term commitment
- It demands CIOs to balance the going concern with innovation and agility
- Both the IT division and the entire organization benefit from a well-managed IT transformation
- IT should become ‘as-a-service’ towards the business
- A 2-track approach, which entails the IT organization to work at two speeds, can help CIOs and the IT department to reach their goals
CHAPTER 4

Transforming workforce

As a result of digitization and the increasing demand for agility, the IT specialists need to develop different skills. They have to understand whom – rather than what – they are supporting. In addition, companies expect their CIO to help ensure that all employees feel at ease in the organization, e.g. by providing the right technology and training. Furthermore, CIOs should keep their finger on the pulse of external customer needs: every organization is striving to utilize the far-reaching possibilities of new technologies to offer authentic customer experiences.

Transformation is about empowering your employees to achieve more with technology.

Chris Murphy
Vice President at Dell, IT Team Member Experience Services and EMEA CIO
Satisfying rising end-user demands

The way people are working is changing. Work is no longer a location, it’s an activity.

Employees want to work whenever and wherever it suits them, and technology plays a crucial role in this. Moreover, end-users are – without doubt – becoming increasingly demanding when it comes to technology. An ongoing dialog with employees is crucial; they are the ambassadors of the company and their enthusiasm will largely determine the organization’s success. On the other hand, the fluidity of data transcends the notion of physical boundaries. With the majority of security breaches originating from the end point – such as the end-user’s smartphone, laptop, etc. – this should be an important area of focus for CIOs.

In brief, to satisfy the internal customers, a CIO must:

1. Attract talent and maximize productivity by providing innovative devices that employees love to use
2. Enable the workforce to work where they want, when they want
3. Simplify device management while delivering security

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44% of employees think their workspace isn’t smart enough.

58% of employees regard IoT and augmented reality/virtual reality as job perks.

2/3 of employees work from home to some extent.

95% of security breaches originate at the end point.

Source: Our transformation message, Jeremy Burton, President Products & Marketing at Dell EMC
The emergence of functional buyers

Not only are the devices and technologies we work with changing, but who does the sourcing is changing, too.

Technology choices are made more and more in a collegial way.

HR, Operations, Engineering, Marketing and other business departments are increasingly choosing the terminals their users need. According to Gartner, the impact of HR on IT choices has even tripled.

There are several ways to approach innovative technology and Workforce Transformation, regardless of the audience:

- **C-suite**: technology can enable a company to adapt its entire organization more quickly in the face of fast changes in the economy
- **HR, Operations and Engineering**: purchasing technology to unleashed workforce productivity
- **HR**: applying technology as a strategic advantage for attracting and keeping top talent
- **IT**: emerging challenges from ‘work anywhere’ and multiple devices
- **End-users**: expecting the best technology at work

To be able to meet all the expectations of the different functional users, it is important that CIOs have good solutions at their disposal for heterogeneous device management, including multi-sites deployment, migration, and maintenance.
**Reskilling the IT workforce**

To deliver high-quality service to the end-users, the IT workforce needs new skills. Up until now, most IT organizations have been built to provide reliable computing resources and services, and they are neither culturally nor structurally built to enable disruptive change. To stay relevant for the business, the IT workforce must develop:

- **Strong relationships with the lines of business (LOB):** Being fully responsive to LOB requirements is a first crucial step to improve the performance of the IT workforce. It will also constrain shadow IT. For this, IT employees need to expand their business skills.

- **A strong service orientation:** Ultimately, all organizations want to achieve outstanding customer satisfaction. The IT workforce can contribute to this overall goal by optimally supporting the LOB. This requires IT employees to see the bigger picture, develop their communication skills and identify new ways of using technology to move the business forward.

- **An increased focus on financial management:** Leveraging a chargeback method for IT – i.e. assigning direct costs for IT services and passing them on to the LOB – will improve the prioritization of business issues and needs from a technological perspective.

Training is an important aspect in developing the much-needed soft skills such as business and communication competences, but it is also necessary to keep pace with the rapid technological changes. Besides that,

**IT employees increasingly have to cope with a two-speed organization**

in which they are tasked with leading innovative, high-potential projects. The new emphasis on ‘failing fast’ and the need to identify suboptimal paths quickly demands a huge shift in mindset for today’s IT workforce, who are traditionally used to working on long-term projects!

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**80%**

ENTERPRISES IN WHICH THE IT ORGANIZATION WORKS PROACTIVELY WITH THE BUSINESS REPORT 80% MORE REVENUE GROWTH FROM ESTABLISHED PRODUCT LINES.

Source: IT Organization Imperatives: Key Behaviors to Drive IT Transformation, IDC Market Spotlight, 2017

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**140%**

ENTERPRISES THAT HAVE A STRONGLY SERVICE-ORIENTED IT ORGANIZATION SEE A 140% BIGGER IMPROVEMENT IN THE TIME EMPLOYEES SPEND ON SERVING CUSTOMERS THAN THOSE THAT DON’T.

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**55%**

ENTERPRISES THAT LEVERAGE A CHARGEBACK METHOD REPORT A 55% BIGGER IMPROVEMENT IN CUSTOMER SATISFACTION COMPARED WITH ORGANIZATIONS THAT DON’T.
A CLOSER LOOK – ONBOARDING 145K PEOPLE TO TRANSFORMATION

Dell Technologies itself must practice what it preaches in terms of transformation. To lead with vision and from the frontlines, it took a critical look at its own IT department.

Dell’s EMEA CIO Chris Murphy explains how Dell used workforce transformation as a showcase on how external customers might also use technology to forge ahead in IT leadership:

1. **The situation** – Dell’s workforce is diverse and highly mobile, and the business recognized that IT needed to adapt and evolve to address the needs of its workers.

2. **The challenge** – Dell’s IT solutions and services were optimized for a traditional office-based workplace, and that led to some specific challenges: tools and apps designed for desktop computers, oversubscribed meeting rooms, difficulty sharing and collaborating on documents and less-than-frictionless access to the wireless network. Working at home or on the road was a big challenge...

3. **The approach** – “We realized that transforming our workforce meant that we really needed to understand our workforce. This meant taking a user-centric approach, with a sharp focus on building IT around the needs and challenges of our team members. So we met with hundreds and surveyed tens of thousands of our colleagues, and we found out who they were, how they worked (Enterprise Personas & Work Styles) and how satisfied they were with specific IT capabilities (IT Pulse Survey). The knowledge we gained from these research efforts drove our transformation roadmap,” says Chris Murphy.

4. **The result** – Dell Technologies now enjoys a persona-based, work style specific technology roadmap for its 145,000 employees. “Our aim with this is a consistent experience from anywhere on any supported device” – adds Mr. Murphy. The IT department has become a “company within a company”, completely focused on its sole customer.

KEY TAKEAWAYS ON TRANSFORMING WORKFORCE

- CIOs must be inspirational leaders and have to connect at different levels. Therefore they need analytical skills and people skills in equal measure.
- To satisfy the internal customers, a CIO must provide innovative devices that employees love to use, enable the workforce to work at any time and from everywhere and simplify the device management while delivering security.
- To stay relevant for the business, the IT workforce must develop their soft skills, while keeping pace with the fast-moving technological and digital evolution.
In our digital, connected world, companies have a wealth of data at their disposal. Information is the new gold. However, to protect its value, data must always be stored securely, wherever that may be.

CIOs are best-placed to overview the specifics of the company’s IT infrastructure and application services, and they have a unique insight into the possible operational implications of security issues. Besides that, CIOs often have ultimate responsibility for protecting data and guaranteeing business continuity.

With more than 4,000 ransomware attacks occurring per day, according to an FBI report from June 2016, built-in security is a necessity rather than a luxury. And as the digital, IT and workforce transformation create a new architecture, there’s also a need for security transformation, with simplified, more connected and more efficient IT security as an enabler for the business strategy.

458% 

YEAR-ON-YEAR INCREASE IN THE NUMBER OF TIMES HACKERS SEARCHED INTERNET OF THINGS CONNECTIONS FOR VULNERABILITIES.

The growing pressure to transform

Cybersecurity threats are growing in frequency and severity. On top of that, data security-related legislation is being tightened. But even without stricter regulation on the horizon, such as the European General Data Protection Regulation (GDPR), data security should still concern all organizations.

According to a Deloitte study, 80% of consumers 'somewhat to strongly agree' with the statement that they are more likely to buy products from companies which they believe protect personal data in an efficient manner.

Add to this the increasingly complex infrastructure, limited security budgets, shortage of skilled resources and a siloed security architecture across strategic IT pillars including cloud, mobility and the data center, and all the ingredients for a security transformation are in place.

Making the business case

CIOs can find allies for their security transformation business case in some notable places: the C-level and the customers.

Nearly a third of CEOs in KPMG’s 2015 global survey identified cybersecurity as the issue having the biggest impact on their companies today.

Your increasingly demanding external customers reward firms that invest in sufficient security. In that sense, a thorough security transformation will help you to beat the competition.

Another conclusive argument is that aligning security with the new, digitized architecture is more efficient and thus saves money.

“There are only two types of companies: those that have been hacked, and those that will be. And even that is merging into one category: those that have been hacked and will be again.”

Robert Mueller, former FBI director.

80% OFF CHIEF INFORMATION SECURITY OFFICERS WILL BE REEVALUATING THEIR SECURITY STRATEGIES IN THE NEXT YEAR.

Source: Security: why you should care. FRS Leadership, DellEMC.

49% OF COMPANIES SAY THAT THEY ARE FULLY PREPARED FOR A CYBER EVENT.

Three domains to tackle

When embarking on the transformational security journey, it’s important to focus on three key areas:

1. **Secure infrastructure**: Integrate security into your endpoints, network and data to ensure that your infrastructure is proactive rather than reactive.

2. **Advanced security operations**: The security stance must evolve from one focused strictly on protection to one focused on an automated response to intrusion. The IT department can either do this themselves, opt for a Software-as-a-Service (SaaS) model or choose to completely outsource the security services.

3. **Risk management**: Change the approach to risk management, because technology is the business today. Risk Management specialists have to evolve to assess the risk to the business itself.

‘In this era of digital business and mobile workforces, it takes more than hardware and software to avoid cyberattacks. Stay secure with holistic strategies that protect data, identify fraud, and manage risk at every touch point and threat vector.’

Chris Murphy, Vice President at Dell, IT Team Member Experience Services and EMEA CIO
A CLOSER LOOK – CITY OF FRANKFURT ENABLES SECURE HOMEWORKING

The City Council of Frankfurt am Main in Germany enables flexible working hours and homeworking for its employees with the help of secure and user-friendly two-factor authentication software.

1 The situation – To support its ‘Family and Work’ initiative, the city council needed a solution that would simplify homeworking and make it safe.

2 The challenge – The IT department placed particular emphasis on the authentication solution and its integration with their Active Directory. Apart from that, like most public authorities, the City Council of Frankfurt am Main is under pressure to work as efficiently as possible.

3 The approach – Mobile users can log onto the city’s network using their software token codes, which are available for a wide range of platforms. The tokens associate user names and passwords, making the process simple and secure. “Our Dell contact proactively supported us, responding quickly to our questions. We’re still waiting for answers from some of Dell’s competitors,” says Frank Müller, Team Lead in the City of Frankfurt’s Department for Information and Communication Technology.

4 The result – The City of Frankfurt’s solution is highly flexible and cost-effective. The employees now have access rights that they manage without compromising security.

KEY TAKEAWAYS ON TRANSFORMING SECURITY

• A security transformation is a necessity, not a luxury
• A security transformation makes CIOs more relevant to the business, helps to beat the competition and leads to long-term profit.
• Focus on three key areas: secure infrastructure (end points, network and data), advanced security operations (switching from automated response to intrusion) and risk management (assessing the risk to the business itself).
About our consulting services

Accelerate your transformation journey with partners who can rapidly evolve your business through technical expertise, proven planning, tools and execution. Our services update today’s platforms to tomorrow’s technologies and solutions. These will decrease costs, reduce risks and drive innovation in the new digital economy.

Dell EMC Consulting Services delivers strategic guidance and expert integration of Dell EMC products and solutions to help customers transform their business and achieve optimal business outcomes.

Bring in the experts to ensure you get it right from the start.

The proof of the pudding is in the eating

At Dell EMC we are so convinced that a profound transformation – in line with the company’s strategy – is the only way forward that we’ve gone through a transformation exercise ourselves. From digitally transforming to implementing modern applications and platforms, revamping and automating the infrastructure and adapting the operational model, people and processes. In other words, we drink our own champagne! Our consultants gladly share their experiences with customers all over the world and help them throughout their journey to modernize, automate and transform their IT environments and build their digital future.

Featured services

Application profiling: drive out cost from your application portfolio.
Big data vision workshop: apply data science approaches to identify, prioritize and plan for the right big data use case.
Blueprint for backup architecture: enable backup infrastructures for hybrid cloud and application-centric initiatives.
Considering your workforce: Work is no longer a location; it’s an activity. Workforce transformation attracts talent by offering a work environment where people feel they can be productive and work with innovative technology, giving them the freedom to work where they want and when they want. Workforce transformation streamlines device management and also optimizes security. Dell EMC has innovative, solid solutions for heterogeneous device management that allow CIOs to meet the expectations of the different functional users.
Data Centre Strategy, Consolidation and migration: ensure a smooth migration with no downtime with our patented methodologies and automated tools.
DevOps Advisory and Lean Thinking: transform teams to use innovative and lean techniques such as Agile, Lean Startup, and DevOps approaches.
Hybrid cloud: build a hybrid cloud computing platform to broker IT services from internal and external resources.
IT operating model: create the organization and processes to deliver IT as a service, including service strategy and pricing.
IT Transformation Workshop: envision your transformed future state, validate business objectives and develop your high-level transformation plan.

“Dell EMC didn’t just come in, review our requirements and propose a solution. They invested in gaining a deep understanding of our entire digital transformation business strategy and the digital experience we wanted to deliver to brokers and borrowers.”

Jonathan Workman, Program Director, UK Mortgages, Bank of Ireland.
ABOUT DELL EMC

Dell EMC is a part of Dell Technologies, which groups seven innovative companies: Dell, Dell EMC, Pivotal, RSA, SecureWorks, Virtustream and VMware. Dell EMC enables (public) enterprises and governmental organizations to reinvent their business and services and become more digital.

Business transformation through IT requires changes in the following four key areas:

- Digital Transformation
- IT Transformation
- Workforce Transformation
- Security Transformation

Dell and EMC have joined forces. To deliver a huge breadth of capabilities and expertise that organizations of all sizes need more than ever before—and deliver it in ways no other company can.

Digital transformation

Digitization will soon affect every industry. New business players are entering the market and the products themselves are transforming too. In this new environment, a good software DNA becomes critical. Dell EMC supports you to accelerate improvement through agile development with continuous delivery, to transform your business with new applications and smart devices and to deliver new insights via data analytics.

IT transformation

Dell EMC enables organizations to modernize, automate and transform their data center using industry-leading (hyper)converged infrastructure, servers, storage, networking and data protection technologies. This provides a trusted foundation for businesses to transform IT, through the creation of a hybrid cloud, and transform their business through the creation of cloud-native software applications and big data solutions.

Workforce transformation

Where work gets done has changed. Many spend some portion of their day working from remote locations. Mobility is the norm – anytime, anywhere access on any device. The companies who understand and embrace these trends are turning personal technology into a competitive advantage that is allowing them to achieve real business outcomes, increasing workforce productivity and attracting and retaining the best talent. Dell EMC offers PC & device deployment that is a third faster than traditional processes and can cut user downtime in half. Once deployed, support services offering automatic issue prevention as well as priority access all contribute towards significantly improved internal net promoter scores.

Security transformation

Preceding transformations create a new architecture to secure, and hence a security transformation must be undertaken. Dell EMC manages security transformations with a broad portfolio of resilient, compliant business processes, applications, information and systems. From back-up, recovery and archive consulting to business continuity consulting and trusted cloud advisory services. Dell EMC provides end point data security, cloud data protection, authentication and threat detection and client virtualization data protection from device to datacenter.

“Dell Technologies provides the essential infrastructure for organizations to build their digital future, transform IT and protect their most important asset, information. Dell has the industry’s broadest and most innovative portfolio from edge to core to cloud.”

Vice President at Dell, IT Team Member Experience Services and EMEA CIO
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