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The kinetic enterprise
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IT unbounded

The business potential of IT transformation

AS ORGANISATIONS MODERNISE THEIR IT OPERATING AND DELIVERY MODELS, SOME are creating multifunctional teams and breaking down silos across IT. They are also looking beyond organisational boundaries to explore the open talent market and to form new types of relationships with vendors, incubators, and academics. Finally, with technology dominating strategic business priorities, some companies are educating executives and staff to increase awareness and understanding of both core and emerging technologies. For many, embracing this multifaceted approach may require adjustments to org models, IT processes, and supporting systems. The good news is that irrespective of an organisation's legacy footprint, there are systematic approaches that can make the task more manageable. And the outcome may justify the effort: Services become "unbounded" and more efficient, transforming the IT organisation.

JUST as powerful technology forces such as cloud, analytics, and digital have profoundly disrupted business, so too have they disrupted IT's operations and, on a bigger scale, its very mission.

Over the last decade, leading CIOs have adopted dramatically different approaches to running their IT organisations. They have shifted IT's focus from maintenance and support of systems, to innovating and enabling business strategy. They've revitalised legacy systems to enable new technologies and eliminate complexity. Some have even borrowed from the venture capitalist playbook by managing IT as a "portfolio of assets." Looking back, the notion, circa early 2000s, that a CIO's job is simply to "keep the lights on" now seems quaint.

And while the evolution of IT and of the CIO's role has been both necessary and in many cases beneficial, it represents only one leg in a much longer IT transformational journey. The pace of technology innovation only accelerates, as does the disruption these innovations drive. Going forward, IT must be faster and more agile, be more responsive to the

business, and, critically, work not just to enable but to help shape the organisation's broader strategy.

Over the next 18 to 24 months, we may see the next phase of IT transformation unfold—a phase focused on the way IT operates, how it collaborates with business and external partners, and how its development teams work smarter and more efficiently to deliver services. The ultimate goal of these efforts will be to reimagine IT development, delivery, and operating models, and to enhance IT's ability to collaborate effectively within the enterprise and beyond its traditional boundaries. In short, in the coming months, forward-looking CIOs will likely begin building IT organisations that are *unbounded*.

Creating an unbounded IT organisation will require that CIOs think beyond their own experiences and domain expertise and begin viewing IT through a different operational and strategic lens. For example, they can take a look at the efficiency and effectiveness of current budgeting, portfolio planning, and vendor selection processes and try to identify procedural, administrative, and

other constraints that can be eliminated. Or they can work with business partners, start-ups, academics, IT talent, and vendors to explore non-traditional innovation, collaboration, and investment opportunities.

Likewise, they can help streamline their development processes by coming up with fresh approaches to testing, releasing, and monitoring newly deployed solutions. Important to development, IT organisations can work to replace bloated, inefficient skillset silos with nimble, multiskill teams that work in tandem with the business to drive rapid development of products from ideation all the way through to deployment.¹

Loosening the ties that bind

The traditional “bounded” IT organisation has for many years been structured around functional silos: infrastructure, application operations, information management, and others. IT’s operating model emphasises service catalogs, service levels, and delivery commitments. Though business analysts may have occasionally teamed with applications developers on projects benefiting the business side, ongoing, fruitful collaboration between IT and business leaders has been rare. Finally, IT’s traditional working and business relationships with vendors have been spelled out in rigidly detailed service contracts.

While the bounded IT organisational model served the enterprise well for many years, over the last decade powerful technology forces have begun diminishing its effectiveness. Cloud-based software-as-a-service (SaaS) offerings can now be procured and operated without any assistance from IT. Technology has become an integrated part of business processes, with CIOs assuming leadership roles in strategy development and execution. Importantly, automation is increasingly rendering some traditional IT roles and activities obsolete.

In the face of disruption at this scale, CIOs looking to transform IT operations and empower technology talent should consider taking one or more of the following steps:

Break down functional silos. In many IT organisations, workers are organised in silos by function or skillset. For example, the network engineering silo is distinct from the QA silo, which is, of course, different and distinct from database administrators. In this all-too-familiar construct, each skill group contributes its own expertise to different project phases. Frequently, projects become rigidly sequential and trapped in one speed (slow). This approach encourages “over the wall” engineering, a situation in which team members work locally on immediate tasks without knowing about downstream tasks, teams, or the ultimate objectives of the initiative.

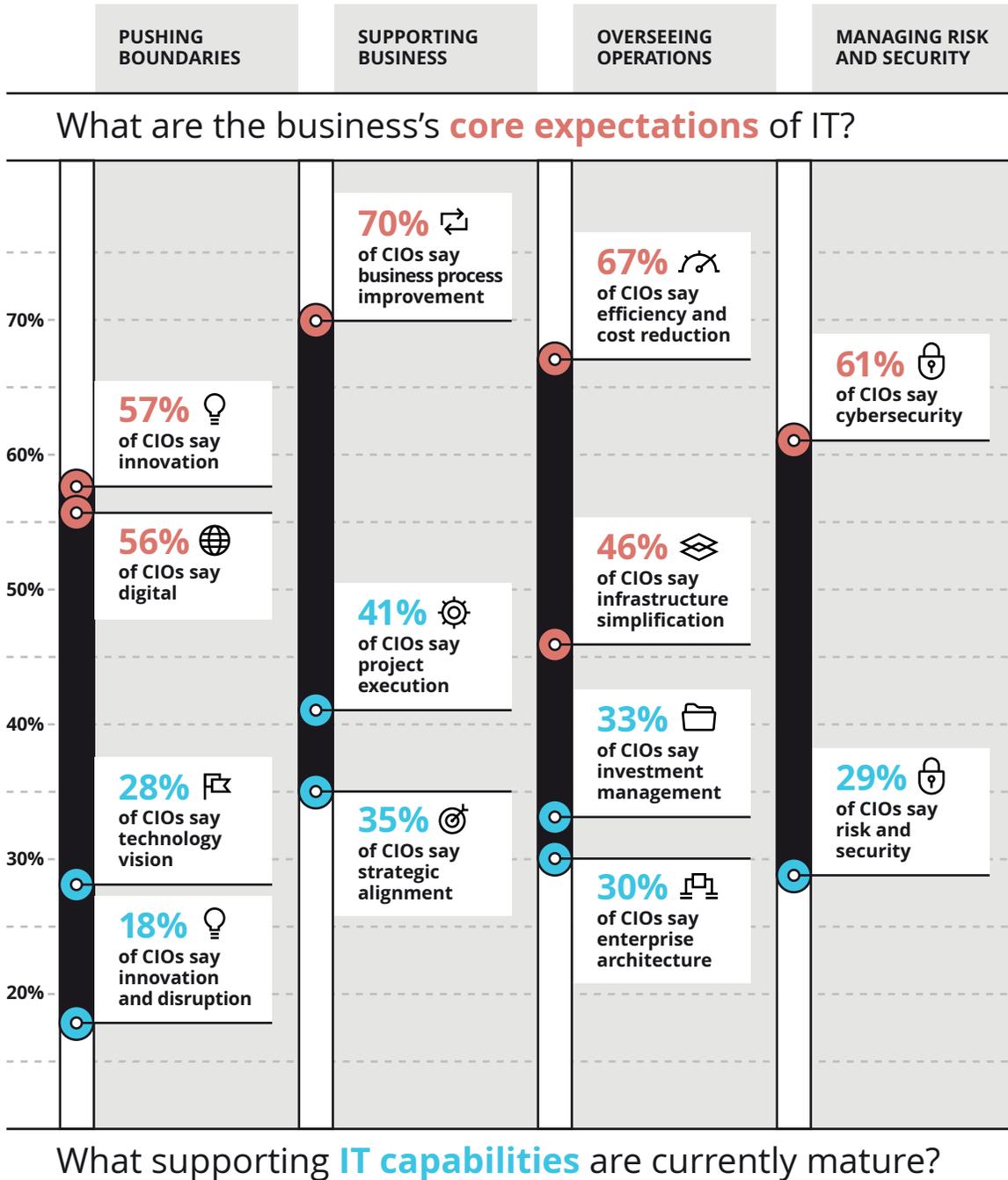
Transforming this model begins by breaking down skillset silos and reorganising IT workers into multiskill, results-oriented teams focused not on a specific development step—say, early-stage design or requirements—but more holistically on delivering desired outcomes. The team, working with product owners, becomes ultimately responsible for an initiative’s vision, for its design, and for day-to-day decision making. This approach can effectively sidestep the layers of decision rights, council-based sign-offs, and other procedural requirements that routinely kill project momentum.

Embrace right-speed IT.² The speed at which IT operates should be as fast as possible, while balancing business value, risks, and technical feasibility. Organisations are recognising that they must be able to support a continuum of speeds in order to dial in the right approach for a specific initiative. These approaches frequently target release management, testing, requirements management, and deployment, all areas in which early wins can demonstrate meaningful impact.

Automate early and often. Increasingly, IT departments are leveraging DevOps and autonomic platforms to overcome traditional limitations of manual workloads and disjointed teams. DevOps utilises tools and processes to eliminate some of the waste embedded in legacy modes for operating IT. In a way, it also extends the software-defined-everything mission into the workforce by instilling abstractions and controls across the end-to-end life cycle of IT.

Figure 1. Aligning the gaps: Business expectations vs. IT capabilities

Deloitte's 2016 *Global CIO Survey* revealed that there are gaps between the business's core expectations of IT and IT's current capabilities. Closing these gaps will likely allow CIOs to modernise their IT operating models and support business strategy more effectively. Percentages represent survey respondents that selected each option.



Source: Khalid Kark, Mark White, Bill Briggs, and Anjali Shaikh, *Navigating legacy: Charting the course to business value*, Deloitte University Press, November 10, 2016, <https://dupress.deloitte.com/dup-us-en/topics/leadership/global-cio-survey.html>; Survey question: What are the core expectations from the business of your IT organization/CIO?; Survey question: How would you evaluate your IT organization's current capability across the following areas? "Mature" denotes respondents that selected "Leading" or "Excellent."

Autonomic platforms³ make it possible for IT to dynamically manage resources while integrating and orchestrating more of the end-to-end activities required to build and run IT solutions. Almost all traditional IT operations are candidates for autonomies, including anything that's workflow-driven, repetitive, or policy-based and requires reconciliation between systems. There are many approaches: robotic process automation, bots, cognitive automation, intelligent automation, and even cognitive agents. However, their underlying stories are similar—applying new technologies to automate tasks and help virtual workers handle increasingly complex workloads.

Erase boundaries between IT and the business. Deloitte's *2016 Global CIO Survey* of 1,200 IT executives found that 78 percent of respondents view strategic alignment as the organisational capability most critical to IT's success.⁴ This statistic may come as no surprise to those CIOs who, over the last decade, have become key partners to C-suite leaders in the development and execution of technology-driven business strategy.

As CIOs begin the next phase of IT transformation, they should take their collaboration with and support of the business to the next level. In a business climate where emerging technologies and rapid-fire innovation can quickly render established strategies and business models obsolete and, at the same time, give rise to potentially transformative opportunities, there can be no disconnect between IT and the business. It's no longer sufficient to jot down a business team's functionality wish list for a new tool and come back six months later with a beta product. Indeed, product development teams must work without boundaries between the business and IT.

Making IT talent essential members of business teams represents a profoundly different collaborative approach for two enterprise groups that, historically, have not always spoken the same language. Consider the matter of "shadow IT." When the C-suite viewed IT as a commodity service provider, business initiatives often procured needed tools and solutions from sources other than IT. The root cause of these actions varied, but it

was often either because IT's fixed budgeting and prioritisation process prevented its involvement or because top executives lacked confidence in IT's speed, cost, or ability to execute. From a business perspective, this may have seemed like an efficient way to acquire needed applications that IT couldn't or wouldn't provide. From IT's perspective, it was nothing short of rogue behavior. Not only did this risk the integrity and security of the IT landscape—it represented an existential threat to the future of the IT department. Conflict often followed.

The next phase of IT-business collaboration offers both groups an opportunity to dissolve the idea of shadow IT by fundamentally blurring the line between "business" and "IT." Going forward, they can be joint partners in the use of technology to operate a function or commercialise a product. With SaaS offerings, business analysts should be trusted to configure business rules and potentially enhance functionality that would have previously required IT to develop, test, and deploy code. IT should decide where it can relax its "ownership" of applications, while advancing platforms, reference architectures, guidance, and governance to balance the business's desire to move quickly with technology expertise to mitigate operational or security threats.⁵

Develop new approaches to driving innovation. Increasingly, IT finds itself competing against third-party IT service vendors to support internal customers. To help IT fulfill its core mission while pursuing new opportunities, CIOs can explore possibilities to work with business partners, vendors, academics, and start-ups in new ways. These organisations can be repositories of the kind of fresh ideas, unique perspectives, and untapped resources that can inform and inspire IT transformation efforts.

Is there a way to expand your network of partners to include venture capitalists, academics, and incubators? And what about investing directly in start-ups and other emerging technology players? Ford Motor Co. recently made a \$182.2 million investment in Pivotal, a cloud-based software platform company, to further enhance its software development capabilities and deliver innovations to customers more quickly. The move is part of Ford's effort to redefine itself in the marketplace as

a company that delivers data and analytics as well as connectivity and mobility.⁶

With vendors, consider creating new categories of engagement that can be deployed against efforts beyond simple fixed-scope and traditional service-level agreements. Consider value-based arrangements in which vendors are compensated based on outcomes, potentially along with co-investment scenarios involving joint solution development and go-to-market arrangements beyond traditional supplier/vendor or contractor/consultant relationships.

Finally, few IT organisations have all the talent and expertise that they will need to meet ever-evolving demands for new systems, tools, and capabilities. Large companies may have the luxury of pursuing talent where it lives, which is what General Electric has done. The company recently announced it will be establishing small IT offices in Atlanta, Miami, and Providence to tap into talent pools in those areas.⁷

However, for IT organisations that need specialised skillsets for only short periods of time, it may not make financial sense to bring these skills on payroll permanently. To satisfy evolving skill and talent needs, CIOs may want to participate in external talent ecosystems. A crowdsourcing strategy can help guide the usage of crowd platforms to solve an organisation's short-term staffing problems. HR can also become a differentiating capability in the talent search by shifting its focus from people and policy administration to talent attraction and development.

To be clear, creating an unbounded IT organisation does not mean reinventing the IT wheel. Indeed, much of the transformative work CIOs have done during the past decade now serves as the bedrock upon which future initiatives can be grounded. Rather, it is more about evolving IT's focus, and expanding its reach in order to learn, grow, and pursue future opportunities.



Banking on a digital future

As digital innovation disrupted the banking sector and gave rise to a host of new channels and customer experiences, Capital One Financial Corp. recognised that to win in the future of banking it needed to reimagine its IT organisational model, development approaches, and delivery processes.

Capital One began with the assertion that if the winners in banking are going to master digital channels, machine learning, and real-time analytics, the company needed to invest and invent like the leading technology companies in those fields—it needed to operate like a bank that a technology company would build. This meant making a commitment to developing its own software, attracting and growing software engineering talent, and reimagining its IT operating model.

The effort, which began in 2010, commenced with a ceremonial rebranding of the tech organisation: IT's official name became Capital One Technology. "This was more than a name change," Capital One CIO Rob Alexander says. "It was a declaration that we would no longer be a traditional bank IT shop. From that day on, we would be an organisation working to transform Capital One into a technology company."

At the same time, Alexander and leaders across the bank's lines of business worked to develop a roadmap for building competitive advantage in digital banking. "It became clear to everyone that

the future of banking would be different," he says, adding, "The stakes were high. The landscape is littered with companies that didn't understand that their industries were being disrupted."

The transformation initiative that followed embedded agile deeply in the business. Moving beyond the rhetoric of "business and IT alignment," Capital One business executives have agile teams dedicated to their products, services, and broader business strategies. Together, they work to deliver results on a much different time horizon than that of traditional waterfall development. They also actively manage priorities and the backlog of new services, features, enhancements, and user stories.

As the initiative progressed, it became clear that talent would be critical if the bank hoped to execute on its development goals. Capital One approached operational transformation with this question in mind: "How do we work in a way that allows great talent to do great work?"

The resulting operational vision features the following principles:

- **Agile:** True agile development focused on building Capital One's own customer-facing digital experiences, evolving products and services, and enabling solutions for reinventing how employees do their work.
- **DevOps:** Capital One Technology moved operational team members upstream in

the software development lifecycle to work more collaboratively with developers, while investing in tools and processes to automate software delivery.

- **Business-agile development alignment:** Agile teams assigned to executives are responsible for developing solutions and services in the executives' business spaces.
- **Re-use:** The bank standardised on RESTful APIs, a microservices architecture, and containerisation in the cloud.
- **Open source:** Capital One takes advantage of open resources to expedite development. Moreover, it encourages its engineers to contribute back to open source projects. This approach has informed how Capital One manages shared platforms across lines of business—contributions from people across the organisation now help extend and improve core services.
- **Cloud:** The bank has adopted a cloud-first mind-set. According to Alexander, cloud makes it possible to keep up with the pace of innovation; as such, he has forged strategic relationships with leading cloud vendors.
- **Human-centred design principles:** Capital One views great design as central to every development project—a competency that should be appreciated and nurtured. To that end, in 2014, the bank acquired Adaptive Path, a design and user-experience consultancy.
- **Ecosystem:** Capital One has industrialised its sensing, scanning, and incubation function through engagement with venture capital firms and start-ups, prnt investments with academic institutions, and through an active acquisition strategy designed to add talent and differentiated technology to the bank's arsenal.
- **Tech college:** The bank has established a learning organisation to help employees from both the technology and business sides increase their understanding of existing and emerging technologies.

Since Capital One's IT transformation journey began seven years ago, many of the original operational and development goals have been met and surpassed. "We are a fundamentally different organism today," Alexander says. "We build our own products and release them on a regular basis. We have hundreds of applications in the cloud and are creating innovative products for the marketplace. We are a much larger and more capable operation."

But, he adds, the journey is far from over. Recognising that banking services will likely be integrated ever more closely into people's lives, Capital One Technology is now working to develop a branded yet personal customer experience. "We start with the way customers want to interact with their banks, and work backward from there," Alexander says. "By designing and delivering experiences that exceed customer expectations, we will be defining the digital bank of the future."⁸

Reinventing the IT wheelhouse

When Marcy Klevorn was appointed to the position of CIO at Ford Motor Co., the storied automaker was successfully harnessing the forces of technology disruption to become a pioneer in connectivity, mobility, and autonomous vehicles. Moreover, the company was developing new business and customer-engagement models along with new product design and engineering approaches, a process that continues unabated.

Klevorn recognised that to better support the kind of nimble, accelerated product exploration and development that Ford was embracing, the 11,000-person IT organisation would need to work differently. "We want IT to be Ford's unfair advantage," she says.

Her solution was to add a new development group to complement the existing core team. The "core" team focuses on critical capabilities like design, manufacturing, and service, areas where risk needs to be fiercely managed; and a new "emerging technologies" group supporting high-velocity development for projects such as FordPass,

connected vehicles, and autonomous cars, where there is greater tolerance for risk, experimentation, and learning.

“Since the emerging group was a separate, new team, it wasn’t bound by all of the same rules that applied to the rest of IT because the things they were working on didn’t exist yet,” Klevorn says. “We encouraged them to take risks, fail in the process, and move on quickly to the next idea.”

Klevorn leveraged the company’s infinity symbol to describe the relationship between the core and emerging groups. “It is a symbol of synergy,” she says. “These two groups have different approaches and priorities, but you can’t have one without the other. The emerging group grew faster than anticipated. But what really surprised us was how much the demand for core initiatives grew as well, and we are now expanding these methods across IT.”

The emerging team started with agile development, quickly adding operations staff and architects who helped the group become more self-sustaining. IT staffers can now rotate between the emerging and core groups so the benefits and opportunities are open to all. Now the lines between the groups are becoming increasingly blurred as many emerging products are grounded in core systems and are deployed in ways that augment core operations.

To further speed ideation and remove obstacles from the emerging team’s path, a group of senior leaders held an hourlong “triage meeting” daily, in which team members presented problems and worked with senior management to find solutions before the meeting was over. Ford initially thought the process would primarily benefit emerging projects but found it benefited everyone: Emerging projects may have been surfacing items because of their rapid pace, but 90 percent of the improvements ended up affecting the core.

To nurture a culture of continuous improvement and unbounded innovation, Ford has implemented “Power Up” time, a weekly block of four hours during which all IT team members are encouraged to get creative, innovate, explore ideas, and fix problems. Employees have identified many innovations since Power Up time began and it has become so popular that other teams across the business are

adopting the practice as well. This cultural shift has empowered employees to think creatively and play to their strengths.

“We have placed a lot of focus on communications and being transparent which has helped the employees with our transformation,” Klevorn says. “It helps them cross silos and feel comfortable talking to anyone. The person in the room, who has the information, no matter what their level, is the most important person in the room.”⁹

From “do it yourself” to “better together”

Faced with the challenges of shrinking budgets, retiring skills, and technical debt, Connecticut’s individual state agencies banded together to share IT resources across organisational boundaries. The result is an enterprise operating model that delivers shared services across the government and automated capabilities to its citizens.

“Connecticut had a do-it-ourselves attitude; each agency had full authority and stood alone,” says state CIO Mark Raymond. “We wanted to broaden our approach to support new systems and capabilities, but we knew we couldn’t scale to meet demand, so we began rethinking what our delivery should look like.”

To ensure strategic alignment of state organisations, the human services team established an executive steering committee composed of state agency leaders. This committee reviewed each agency’s needs, defined a statewide IT strategy, and identified how individual organisations could share resources to both speed up and simplify delivery of services. Next, they designed an enterprise operating model that outlined shared resources and responsibilities across several organisations. These steps kickstarted IT’s shift from being a trusted operator of agency IT assets to an agency-embedded co-creator of value.

The restructuring began three years ago when the state went live with ConneCT, a customer service modernisation initiative that provides the public with self-service and multiple online access points to the federal and state programs administered

through the Department of Social Services (DSS). While delivering the project, the multifunctional teams recognised that several of the project's baseline capabilities could be leveraged elsewhere. The new operating model and governance made it possible to expose and share capabilities that other agencies and projects could adopt or use.

In the first instance, Access Health CT, the state's health insurance marketplace, was built on the same foundational infrastructure as ConneCT. The DSS teamed with Access Health CT to revamp legacy systems in order to deliver single-point online access to the state's health care exchange.

Currently, the state is rolling out ImpaCT (Integrated Management Process and Accountability System for Connecticut), which will provide an automated eligibility determination process for citizens seeking DSS services. It replaces legacy systems and is designed to provide end-to-end fiscal management, improved operations and performance, and cost reduction by leveraging organisations' existing assets (both from within Connecticut as well as from other states).

"We recognised the do-it-yourself approach wasn't going to be sustainable," Raymond says. "The initial projects were run independently; as we reached the end of each project journey, we realised that

components could be reused and shared, which meant the teams could be shared as well."

Formalising this strategy to create shared or cross-functional teams that have a stronger DevOps culture and embedded mind-set has helped Connecticut agencies better manage demand, prioritise next steps, and coordinate multiparty tasks. It provides visibility into operations and enables more efficient resolution of defects. While the state is looking at multivendor support to broaden its capabilities, the IT team is utilising agile disciplines throughout the enterprise to enable quick delivery of benefits and greater flexibility in response to changing business environments. There are still challenges in modernising at a speed that fits all the agencies' varying sizes, cultures, and priorities, but the embedded IT team is crucial to help manage change and expectations while focusing on the organisations' business needs. Bringing ideas, shared services, and opportunities for reuse and other accelerators to the table helps IT help the agencies aid Connecticut's citizens.

"The structure we put in place has allowed us to generate new opportunities," Raymond says. "We are maintaining a citizen-centric view of our services. A holistic approach is the most effective way to meet their needs."¹⁰

MY TAKE

FRANCOISE RUSSO, GLOBAL CHIEF INFORMATION OFFICER TOLL GROUP

The logistics industry is in flux. Existing players are being challenged by new, nimble market entrants.

Not only are business models in the industry rapidly changing, but new technologies are completely redefining what we can do. Until recently, Toll has been operating in a legacy environment of multi-functional teams working independently across the organisation, each requiring considerable support.

This changing environment creates an unrivalled opportunity for the IT function to step up, and work alongside the business to rethink what we are doing, how we are doing it and how we can deliver break-through performance.

A two speed model of change

Toll is embarking on a journey to become a completely new organisation, but at the same time, has the legacy of old systems and processes to be updated. This is creating a model of operating at two speeds of change: one agile, and the other transformative.

The first speed of change is still all about managing and transforming legacy systems, updating existing systems and integrating change into the broader business.

The second speed is the agile model, focused on creating 'Centres of Excellence' or places where we can take advantage of disruptive trends quickly, and flow these innovations throughout the organisation.

“IT UNBOUNDED IS RESULTING IN TWO
SPEEDS OF CHANGE”

We are also seeing more convergence between IT and OT (operational technology). For example, telematics has now moved into the IT function. Because of this convergence, the IT role is evolving to include working with technology manufacturers to develop prototypes, discussing specifications, and communicating the flow of information to allow business decision-making.

The right business and regulatory framework

It is important to stay close to the changes that are happening in the logistics industry, but at the same time, some advancements appear to be a way off from becoming reality.

There are some exciting opportunities that have the potential to revolutionise our industry, such as autonomous vehicles and robotics, but many of these need large scale commercial models to be tried and tested before they can be adopted. In particular, the associated supporting infrastructure and regulatory environment will need to be established before it can be used.

We are in discussion with a number of engineering and IT firms to understand mutual areas of interest. Proof of concept activities are another area that has good potential in an unbounded IT environment.

The IT function needs to evolve from legacy platforms. We need to be better at adapting, particularly given the phenomenal pace at which organisational and environmental change is happening. In my experience, large organisations often find it difficult to move with speed, and it can be a challenge to bring staff along the journey where the future model involves significantly rethinking the way that they have built their careers and skills to date.

Toll has a five year time frame to transform its legacy landscape, but of course we have a clearer vision of the first two and half years. None of it will be possible without the substantial commitment and support of the executive team.



The customer is at the heart of what we want to do

At the heart of our unbounded IT strategy is the customer model. It is really important that technology and trends are not ends in themselves: the end game is to offer better customer solutions to meet and exceed customer expectations. Every innovation is motivated by the need to pass solutions and value to the customer, so our business can stay competitive.

The Toll logistics business model is changing; essentially it is simplifying itself so that it is easier for customers to do business with us. This means shedding the layers of complexity that we have inherited through our acquisitions history, and seeking to standardise services across the business while minimising disruption to our clients.

Running transformation alongside innovation – our people are the key

The big question for CIOs going forward is how to transform alongside innovation, and harness the different speeds, cultures and people effectively, taking them along on the journey.

An organisation's biggest asset is its people, so we have to integrate IT into the culture for the changes to be a success. This means engaging with our people; keeping things simple, communicating clearly and frequently, and finding role models to create grass roots change.

We hope that we can harness the team enthusiasm to be part of the solution, and develop them to make the most of the opportunities being created and be best equipped to build their future careers.

Efforts to maintain effective cyber controls can be undermined by two common challenges. First, in many organisations employees outside of IT view cyber as IT's exclusive problem. As such, they pay little mind to basic, commonsense security precautions. Secondly, in some IT operations, cyber considerations are an afterthought. IT leaders treat security and privacy as compliance tasks—required hoops to jump through to clear project stage gates. Security analysts are put in the difficult position of enforcing standards against hypothetical controls and policies, forcing an antagonistic relationship with developers and business sponsors trying to drive new solutions.

With these challenges in mind, the notion of erasing boundaries within IT and throughout the enterprise means that cyber risk should become everyone's concern.

Likewise, efforts to create a flexible IT ecosystem that is “unbounded” include overhauling IT systems and processes, breaking down organisational siloes that separate business from IT, and reorganising operations around service delivery. Each of these initiatives offers companies an opportunity to design risk management capabilities into new systems and processes on the front end.

IT organisations should take a proactive view of risk—particularly as it relates to strategic business initiatives. Potential benefits of taking this “risk first” approach include:

Acceleration: When risk and security capabilities are designed into systems and products up front, companies can avoid the expense and time-consuming effort required to retrofit these same systems and products down the road. The net result becomes an acceleration of the product development life cycle.

Completeness: By factoring in risk and compliance considerations during the earliest stages of project planning and design, engineers and designers can craft “complete” products that are effective and maintain security and compliance standards. Likewise, by taking a holistic design approach that balances risk, user experience, and performance considerations, systems will likely be more efficient. As CIOs work to blur the borders between the business and IT, as well as to integrate the development and operations teams within IT, they should make the chief information security officer and her team active participants throughout the project life cycle—from planning and design through implementation, testing, and deployment.

IT is in a rare position to orchestrate awareness of and appropriate responses to cyber threats. With an integrated view of project objectives and technology implications, conversations can be rooted in risk and return. Instead of taking extreme positions to protect against imaginable risk, organisations should aim for probable and acceptable risk—with IT helping business units, legal, finance, sales, marketing, and executive sponsors understand exposures, trade-offs, and impacts.

Organisational mind-sets may need to evolve, as risk tolerance is rooted in human judgment and perceptions about possible outcomes. Leadership should approach risk issues as overarching business concerns, not simply as project-level timeline and cost-and-benefit matters. CIOs can force the discussion and help champion the requisite integrated response.

This is a lofty goal, but it can be achieved by making “secure by design” a fundamental requirement through the unbounded IT operation.

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Where do you start?

Given the lean state of many IT budgets, the term “IT transformation” may strike fear into the hearts of CIOs already struggling to do more with fewer resources. Yes, the ultimate goal of building an unbounded IT organisation is to reimagine IT development, delivery, and operating models, and to enhance IT’s ability to collaborate effectively within the enterprise and beyond its traditional boundaries. But to be clear, this goal is often best served when pursued incrementally, in a phased approach tailored to a company’s strategic and technology priorities as well as its available resources.

In the coming months, expect to see more organisations embrace the IT-unbounded trend by taking initial steps in what can and should be a manageable, deliberate journey toward a more efficient, flexible, and business-focused IT organisation.

As you begin your journey, consider how the following approaches could help you achieve longer-term transformation goals:

- **Earn business leaders’ trust:** Business teams can be hesitant to engage IT in development projects because they may assume that IT will abandon them within five minutes of a new product going live. For your next development project, consider creating an integrated agile team with the idea that a subset of this team will stay in place after launch to provide support on an ongoing basis and to work with users to continually develop needed capabilities. If you are implementing a SaaS solution, consider taking a similar approach: Put together an independent team that includes staff from both IT and the service provider to operate and enable the supported business function. Make sure to set aside funds to support ongoing evolution and improvement.
- **De-emphasise IT’s traditional focus as service provider to the business:** Convert IT SLAs to business KPIs, creating common objectives between business and IT. Instead of defining IT success by the operational and systems dimensions, try basing it in the function’s ability to support the business’s key objectives. This doesn’t mean that IT is no longer responsible for responding to incidents, maintaining uptime, and hitting project deadlines. Nor does it absolve IT from being stewards of enterprise considerations applying to the technology stack: reliability, scalability, availability, maintainability, and security. But in today’s kinetic enterprise, the “-ilities” are table stakes. IT should focus primarily on aligning with business objectives.
- **Liberate IT talent to focus on new tasks:** Refocusing IT talent on development or on innovative value-add tasks can help unleash creative thinking, boost worker morale, and break down inefficient skill silos. Yet augmenting talent in this way first requires freeing workers from the mundane care-and-feeding tasks that consume their workdays. Consider how moving to the cloud, automating back-end processes and workflows, and leveraging bots and cognitive systems to address user support can not only eliminate low-level work but also drive greater operational efficiencies.
- **Establish an innovation council:** While breaking down operational boundaries, it is also important to de-silo planning, particularly in the area of innovation. A cross-functional “skunk works” with membership representing IT, business, marketing, finance, and other enterprise groups can ideate and drive focused innovation. Though these groups often work exclusively with technology innovation, they don’t necessarily have to report to IT.
- **Escape your echo chamber:** It’s all too easy to get hamstrung by the status quo. When things operate the same way over a period of years, even the most creative IT leaders can struggle to come up with a new operational vision. A quick way to disrupt IT groupthink is to amplify voices of those outside the group. Consider involving your vendors more deeply as you develop new

goals, strategies, and processes. Or bring in non-IT experts from the world of academia, research, and business. Finally, try working with contract or crowdsourced talent with deep experience in a

given area. These free agents can challenge your thinking and expand your horizons—without driving up talent costs long-term.

Bottom line

In the midst of historic technology and market disruption, only the fleet of foot will survive. The important work CIOs take on in the coming months to liberate IT from operational constraints and reimagine development and delivery models is, in the current climate, mission-critical. When approached methodically, the work of “unbinding IT” can help technology organisations develop the speed and agility needed for the race ahead.

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ENDNOTES

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