Changing role of the CIO

July 2017
The shifting business landscape

Increased competition, constant changes in consumer needs and the explosion of digital offerings are all affecting the way in which we do business. Organisations find themselves having to adapt continuously to new market demands and constraints. Central to an organisation’s ability to compete in this new world is the successful application of technology, and this is seeing the mandate of the IT function changing rapidly.

In our fast-moving world, the winners will be those businesses that can quickly recognise and understand change and adapt their operating models to respond appropriately. Whilst the pace of business change keeps increasing, many leaders are still unhappy with their ability to respond accordingly, due in part to a lack of enterprise agility\(^5\) and flexible IT platforms. New ways of working are required to enable flexibility and responsiveness in the digital world.

Business leaders are cognisant of the change, as evidenced by PwC’s 20th annual CEO survey, which highlighted the rate of technological change and changing consumer behaviour as the two biggest concerns for the c-suite\(^2\).

This new business context is seeing technology finding its way into the heart of the business agenda. Increasingly, CIOs will hold the key to unlocking competitive advantage, business benefits and relevant customer engagement, and with this shift comes growing pressure on, and higher expectations of, the IT function\(^1\).
Rise of digital business and technological advancement

Regardless of industry, every company is likely to grow ever more dependent on a variety of mature and cutting-edge information technologies to connect with customers, suppliers and employees; to stay competitive; and to succeed. Digitisation is a fundamental part of the new business model, affecting supply chains and operations, marketing and sales, and interactions with current and potential customers\(^{(1)}\).

You don’t have to look far to see how digital business and technology are impacting the marketplace:

- **At the intersection of the financial services and technology sectors, technology-focused start-ups and new market entrants are innovating the products and services currently provided by the traditional financial services industry – a disruption, enabled by technology, known as Fintech\(^{(6)}\).**
- **With advances in big data, open-source software, cloud computing and processing speeds, more firms are using cognitive computing and artificial intelligence to perform everyday tasks, predict events and engage clients\(^{(2)}\).**
- **3D printing is becoming a competitive advantage, evidenced by the fact that companies such as Adidas are moving to fully automated assembly plants that use 3D printing and robotics\(^{(10)}\).**
- **Banks are favouring online engagement over branches, utilising biometric authentication to reduce fraud, selling products through apps and ditching call centres for service chatbots.**

All this is happening at a faster pace than ever before. Just look at the advent of self-driving trucks to make deliveries or Amazon’s new Go store, which uses technology to track what customers put in their shopping carts and bill them automatically when they walk out, eliminating the need for human cashiers\(^{(4)}\).

Ignoring the rise of digital business now carries the risk of businesses becoming completely irrelevant.

**IT becoming a Board agenda**

The new King IV\(^{(11)}\) report acknowledges the rapid advances in technology and its potential to result in significant disruption, opportunity and risks, while also recommending practices to assist the governing body with technology governance\(^{(12)}\).

The governing body is expected to adopt a more hands-on role, with Principle 12 stating that the body should govern technology and information in a way that supports the organisation setting and achieving its strategic objectives\(^{(12)}\).

The recommendations include that the body take responsibility for IT governance, set the direction for IT, delegate accountability within the organisation, and oversee key IT functions.

**New demands on IT**

IT’s role in maintaining and delivering traditional IT priorities such as cost efficiency, employee productivity and legacy system support is not going anywhere. As a result, IT’s ability to respond to the change in business expectations has come under pressure, and the business is not going to wait for IT to catch up before they start moving on their own.

As the business’ expectations and demand for new IT capabilities increase, so the gap between business and IT is growing wider\(^{(3)}\). This is evidenced by an increase in the amount of IT spend falling outside the CIO’s budget (47%) – a symptom of IT’s lack of ability and flexibility to respond to the requirements of the business.
To counter the divide between business and IT and stem the creation of shadow IT capabilities and platforms, the CIO must adapt their operating model, capabilities and IT architecture to be responsive to the types of requests coming from the business. Without this vision and without adopting new ways of working, IT runs the risk of being migrated to the back office for the long term.

In a fast-moving digital world, the winners will be organisations that can sense change and respond accordingly. Organisations striving to become agile can consider three drivers of change:

1. the operating environment that might radically reshape their business environment;
2. strategic responsiveness or the soft levers they can pull in response;
3. and the organisational flexibility that invariably affects their capacity to respond quickly.

Businesses are more dependent than ever on technology to connect with customers, partners and suppliers. As such, technology has become a competitive lever that is linked to success and growth, causing business and IT strategy to become more closely connected than ever before.

Furthermore, in this digital age it’s the customers that have the power, and this is driving a customer-centric business model and IT platform. It has become crucial to understand and meet the needs of the customer and to enable the business to reach and serve that customer, fast. Consumer preferences are constantly changing, which is seeing the transition from a focus on business processes to one on customer experience.

Coupled with this is the new expectation of early delivery of benefit. Healthy returns within one year are becoming the new norm, thanks to the integration of the start-up / ‘running lean’ culture and the sustained economic pressures facing most markets. Lengthy, complex IT roadmaps are making way for agile delivery across the organisation, short-term planning and responsive portfolio management.
The evolution of the CIO’s role

What does the new IT function look like?

PwC sees IT taking on a broader and more strategic role within the business that does not speak to technology alone but entails a fundamental change in the role that IT plays in the business. This includes significant changes to the CIO’s mandate, processes, architecture, organisation and IT governance. 

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<thead>
<tr>
<th>New IT Model</th>
<th>Traditional IT Model</th>
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<td><strong>Role</strong></td>
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<tr>
<td>Broker of Services</td>
<td>Principle provider of IT with focus on development and operations</td>
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<tr>
<td>Broker and orchestrator with focus on innovation</td>
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<tr>
<td><strong>Process</strong></td>
<td><strong>Process</strong></td>
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<tr>
<td>Assemble-to-order</td>
<td>Linear plan-build-run methodology</td>
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<td>Fluid and iterative assemble-to-order approach</td>
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<tr>
<td><strong>Architecture</strong></td>
<td><strong>Architecture</strong></td>
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<td>Integration fabric</td>
<td>Application centric with ‘white space’ integration an afterthought</td>
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<tr>
<td>Integration fabric for secure interoperability across ecosystem</td>
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<tr>
<td><strong>Organisation</strong></td>
<td><strong>Organisation</strong></td>
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<tr>
<td>Professional services structure</td>
<td>Sliced application or business unit driven with single-skilled functionaries</td>
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<td>Professional services with versatile generalists</td>
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<td><strong>Governance</strong></td>
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<tr>
<td>Empowering Governance</td>
<td>Overt and controlling</td>
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<td>Intrinsic and empowering</td>
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(3)
How is the role of the CIO changing?

To reinvigorate the relationship between the CIO and business unit leaders while at the same time reducing the fragmented IT spend outside the CIO’s office, CIOs need to redefine their role. Rather than being the controller of technology spending, they should orchestrate the availability of modern IT services that the business needs to meet its goals, compete effectively and respond to the demands of the market.

**From support service to business leader**
Due to the reliance on technology to grow and succeed, the CIO will become a fundamental part of the business, have a seat at Exco / Board table and report directly into the CEO. They will be expected to guide the board in the use of IT (aiding King IV™ compliance) and contribute to business performance at a strategic level, seeing the role becoming less technical and operational.

**Focused on value and business growth**
The CIO will be expected to prioritise IT effort and spend on outward-focused value-generating business initiatives, while reducing inward-focused effort and simplifying IT operations. The latter can be achieved by leveraging IT services and strategic sourcing partnerships such as SaaS and cloud computing.

**Expansion of the role of the CIO**
Due to their relevance and importance to the business, various key technology roles now form part of the CIO’s mandate, e.g. Chief Digital Officer, Chief Technology Officer, Head of Digital Security and Chief Data Officer.

**Entrepreneur, ideator, disruptor**
Rather than the CIO reactively meeting business requirements, business stakeholders are looking to them to be visionaries and entrepreneurs who are able to identify opportunities for business growth, efficiency and differentiation using their knowledge of the available and upcoming technologies.

**Beyond technical capability**
Due to the importance of technology in business, the new set of expectations and the increased scope of business engagement, the CIO will be expected to develop strong soft skills such as leadership, communication, building effective relationships and being able to inspire. Managing the millennial workforce will also demand focus, and the CIO will be expected to mould the traditional approach to attracting and retaining talent, in order to meet the demands of this new generation of employees.

**Embracing agility**
The rate of change and quick deployment of new technologies will make speed-to-market and agile delivery key elements in the bid to compete and meet customer needs. This will see the CIO becoming an organisational advocate for agile methods, continuous integration and simplified governance.

**Chief information advocate**
Making use of data assets and becoming a data-driven organisation holds significant value. While this capability is fractured between business and IT, though, the CIO must take accountability for data movement and exploit the value of data by providing vision, submitting opportunities and proving value.

**The rise of the female CIO**
PwC’s research shows that only 6% of CIO positions are held by women. The Fortune 500 companies fare only a little better, with 15% employing a female CIO(11). With the increased focus on workplace diversity and equality, and the rise of women in the workplace, this number can be expected to increase.
Changing role of the CIO

What does all of this mean for your business?

The role of technology in business is more critical than ever before. Key to remaining competitive in the new digital world will be the application of the right technology in an agile and flexible way. This will mean shifting the role of the CIO from the back office into the very heart of the business and executive leadership, and ensuring that IT and digital transformation is a collaborative exercise between business and IT.

The CIO will be expected to take a seat at the Executive table and provide strong vision and leadership around how the business uses technology to compete and succeed within their market. The value side of IT, as opposed to keeping costs down and ‘keeping the lights on’, must become the focus for the CIO.

Strong business partnerships combined with visionary leadership will be key ingredients for the success of the role. An appreciation for the role of technology, and active support from the CEO and executive leadership team will be key to ensuring that the CIO is successful in positioning the use of technology so it can help the organisation grow and remain competitive. 

Defining what success entails will also require careful thought. PwC Strategy&’s CIO Success(ion) Study (60 CIOs across global industries) found that cost-effectiveness remains the most important measure of success for most IT organisations. Yet while cost management is a critical concern in an age when IT absorbs such a large portion of companies’ budgets, it’s not necessarily the way to get the most business value out of IT.

Key reflections for executives should be: Do we appreciate the impact of technology changes and digital business? And are we developing and positioning the CIO to play the required role in using technology to succeed?
What is PwC doing to assist CIOs?

**Digital business enablement and advisory**

Digital is not just about the technologies. It’s about new ways of solving problems, creating unique experiences and accelerating business performance.

In the past, digital business meant ecommerce. But the landscape has changed; the rapid rise of social media, smart devices, big data and cloud computing has opened up new avenues of potential. Customers are changing too through demographic change, increased expectations and empowerment. Technology and social media are making customers better informed, more connected and more vocal. The forces at play for organisations are extremely powerful. Digital technology has disrupted the business models of traditional organisations at a rate never experienced before.

We help our clients to harness the potential of innovative new technologies by assessing their current use of digital tools and suggesting ways of working to transform both what they do and how they do it.

**Enterprise agile transformation**

In our fast-moving world, the winners will be companies that can sense change and respond accordingly. Moving away from cumbersome, extended delivery and transformation processes towards enterprise agility is an ongoing process that requires strategic responsiveness and organisational flexibility, supported by a cross-functional approach.

PwC’s deep capabilities with agile frameworks, including architecture-driven agile (ADA), scaled agile framework (SAFe) and others, combined with our business domain, technical and industry-specific experience, enable us to work with organisations to develop and implement a holistic agile approach that is customised to the specific needs of your business.

**PwC’s New IT Platform**

Market disruptions are causing leaders to step back and look at all aspects of their business. Top of mind: Transforming the IT function to meet the growing needs of the business and its stakeholders, including customers, employees, partners and suppliers.

PwC’s New IT Platform is a strategic roadmap that helps organisations transform their IT function to meet the needs of the business in a digital age. An underlying principle is greater collaboration between IT and the business to harness technologies in order to drive business value and increase competitive advantage, across people, process and technology.
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Endnotes:

9. PwC Strategy& CIO Success(ion) Study http://www.strategyand.pwc.com/uk/home/what_we_think/uk_campaigns_events/display/cio-succession