The Changing Role of the CIO: From Improver to Transformer

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EXECUTIVE SUMMARY

No department has undergone such profound change in recent times as IT. The platforms, the tools-of-the-trade and the skillsets required to do the job have changed. The IT function is now integrated into all aspects of an organization and is expected to operate as a business-within-a business. Overseeing these changes is the CIO, a role that is continually evolving to meet the new world of IT.

The shift in the nature of the CIO’s role is most influenced by digital transformation. With these profound changes, the CIO has the opportunity to move from traditional IT roles to become more involved in business strategy.

This paper examines the following:

- The fundamental shift in how IT provides services
- The new platforms behind digital disruption
- Running IT as a business
- The shift in CIO from improver to influencer to transformer
- The new sourcing landscape
- The talent shortage, skills gaps and knowledge leak
**FUNDAMENTAL SHIFT IN HOW IT PROVIDES SERVICES**

IT teams used to focus on providing products and services such as software design, in-house hardware and infrastructure, security, installation and maintenance. Now a significant portion of IT budgets are devoted to cloud-based applications, and IT is required to provide conventional technical services consistently, as well as innovate in a faster, more agile manner to stay competitive. CIOs are required to be at the forefront of industry change and able to successfully integrate the newest technologies in their organizations.

IT was formerly a back-end operation offering services and products to internal users. Today IT has rapidly moved to the front lines of business. In the past, IT departments never faced customers, but now, in many organizations, customers have become an IT priority.

The focus has shifted from technology and vendors to the end customers who buy and use goods and services. Today’s CIO must embrace innovation and customer engagement in order to stay competitive and drive the transformation of their organization.

**THE NEW PLATFORM**

In the past, taking stock of the platforms and devices used by an organization was as easy as pointing to all the computers used in-house, but today’s platform is much harder to identify. Instead of a single definable device, IT staff face an assortment of technologies, platforms, and services that encompass mobile, cloud computing, social and big data analytics.

**MOBILE DEVICES AND APPLICATIONS**

Mobile has catapulted in importance. In addition to providing satisfying mobile experiences, CIOs face the challenge of implementing solutions based on a wide array of devices that can be upgraded and replaced at a staggering pace. Within the organization, Bring Your Own Device (BYOD) policies greatly increase the burden on today’s IT teams.

**CLOUD COMPUTING**

One of the most significant platform changes affecting IT is the proliferation of cloud computing. In fact, “Gartner predicts cloud computing and services will be a $300 billion business by 2021.” Properly executed, cloud computing can reduce the burden of in-house systems and free up resources that can be dedicated to new opportunities in IT.

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1 “Hidden Cloud Growth Opportunities for Technology Service Providers.” Chris Pemberton, Smarter with Gartner, June 20, 2018.
The shift to cloud computing brings new challenges to IT teams. One of the biggest challenges is securing a cloud-based infrastructure to protect an organization's important data and intellectual property. Fortunately, today's major cloud-computing providers offer more secure environments than many in-house organizations can provide. Many analysts recommend a first step of taking some non-mission critical applications and moving them to a cloud-based infrastructure, learning from the experience, and then developing plans for moving more infrastructure and applications to the cloud.

**BIG DATA AND ANALYTICS**

Big data is getting bigger and more important to manage as organizations strive to glean real business value from their data. The challenge in housing so much information is no longer how to acquire and store it, but how to analyze the data to derive value for the business. CIOs need to take the lead in finding ways to show the value of analyzing data in meaningful ways that will help the business make better decisions that lead to quantifiable improvements. Strategies surrounding big data and analytics must be revised to manage information for business advantage and competitive gain.

**SOCIAL BUSINESS**

Social media and related technologies have given rise to “social business.” Many customer-facing and internal processes can be enhanced using social technologies. Social media has already revolutionized customer service, and has the potential to take it even further. It's become a core component of best-in-class organization's business strategies and gives clear data to measure ROI. Social business presents an opportunity for the IT leadership and teams to lead the way in creating metrics that help quantify the value of bringing more social tools to bear on improving processes and creating a closer bond with customers.

**RUNNING IT AS A BUSINESS**

As a driver of organizational change and innovation, the IT team must operate as a strong, capable, multi-disciplinary business within the larger company. Most IT leaders and staff, however, have technical backgrounds and have little business skills training or experience. Team members may have been recruited from outside the company and have limited knowledge of the organization or its issues, overall strategies or goals. IT teams often struggle to provide a basic level of business, communication, business analysis, project management, management, leadership and other “non-technical” skills to their teams.

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2 “Getting Big Data Right.” Charles Araujo, October 2, 2017.
This is what makes collaboration with other business units, as well as strategic hiring and training practices, of the utmost importance. If CIOs don't put time and resources into establishing relationships with leaders and teams outside of IT, they will find themselves marginalized and compartmentalized. Business units have many cloud-based service offerings that they can use to “build their own solutions” without IT’s help, so IT needs to get ahead of the curve and seek out relationships through the company. And CIOs cannot afford to neglect their relationships to the rest of the C-suite and other senior executives and to help them understand the value that IT can bring to their organizations.

FROM IMPROVER TO INFLUENCER TO TRANSFORMER

The migration of IT to the C-suite is now well-established. Today’s CIO is “less focused on operational tasks and more focused upon guiding the board on how to leverage IT strategically.”4 IT department budgets continue to rise or are being maintained5, and IT leaders see their roles as becoming increasingly transformational6.

Far from the IT engineer formerly associated with the role, the CIO and top IT management report directly to the CEO and are business engineers who are actively leading efforts like digital transformation to strengthen how the company does business. With IT established as a valued, competent business, the CIO has the potential to become a transformer, using the rise of digital technology as an opportunity to drive the digital strategy of their organization.

Leading CIOs’ sharp business acumen has earned them a central role in creating corporate strategy. Well versed in business goals, the best CIOs understand how to configure tech departments around these goals and create innovations to shape their organization’s digital strategy.7

To become a transformer, CIOs need to develop a deep understanding of their company’s customers—what they buy, how they buy, and perhaps most importantly, why they buy. The CIO should work with the CMO and the sales teams to learn who the best customers are and work towards developing new ways to engage and retain customers. Data analytics should be used to review customer databases to identify hidden trends and buying triggers that could be exploited using the array of tools available to IT.

Another key element of moving from improver to influencer to transformer is to find ways to minimize the time-consuming demands of traditional IT operations. For example, moving to cloud-based from on-premises datacenters, taking advantage of “as a service” offerings for as much as possible, and making sure you have a good management team to handle day-to-day issues are all ways to free up time to focus on transformational activities. And make sure to find ways to collaborate with peers in other organizations to create partnerships that will energize IT and the entire organization.

NEW SOURCING LANDSCAPE

In the last decade, there was a massive amount of IT that was outsourced. That trend has slowed down significantly, and in many cases, has reversed as companies found that they had outsourced too much of the IT function and it was affecting their ability to compete and innovate effectively. We see many companies trying to bring talent back in-house, which is adding to the IT talent shortage in many parts of the world.

FACING A NEW REALITY: STAFFING SHORTAGES AND SKILL GAPS

As companies look to fill more in-house IT openings, they are faced with a staffing shortage. CIOs looking to transform their business cannot get far without the right talent—but demand for certain skills often greatly exceeds supply. For example, of those surveyed for ISACA’s The State of Cyber Security 2018, 30% of respondents said less than 25% of candidates were qualified and only 31% said 25-50% of candidates were qualified.8

Forrester Research’s 2017 Global Business Technographics Priorities and Journey Survey found that “65% of CIOs said that the skills shortage was holding them back” and the need for skills was the second highest priority among the CIOs surveyed. “And over the next 10 years, the Bureau of Labor Statistics estimates that we’re going to need about 500,000 new developers to replace those who are retiring or to support net growth as more companies want to build software as part of their go-to-market models.”9

In addition to a limited pool of candidates, organizations are experiencing a significant gap in skills when it comes to the new platforms. Competition for individuals who are skilled in AI, security, blockchain, and data science creates talent gaps and highlights the need for companies to use forethought when planning their hiring and retention strategy.10

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As the new platforms rapidly develop and expand in possibilities, even workers who have necessary skills will see them degrade in value over time. IT teams need ongoing, continuous learning to ensure employees have skills required for the future.

**HOW SKILLSOFT CAN HELP**

Given the current fundamental shift in IT, the CIO and their teams have the potential to transform business, as well as the ability to drive the digital strategy of their organization. Increasingly, IT professionals expect access to relevant learning the moment they need it—ideally as part of their daily workflow—so they can acquire in-the-moment knowledge to tackle the immediate task at hand.

To combat skill gaps and staffing shortages, Skillsoft offers an engaging learner experience that enables IT pros to fulfill their roles from a business and technical perspective. As organizations evolve towards a learning growth model that delivers against the demands of the connected generation, one thing is certain: learning within the enterprise is becoming a continuous process.

Skillsoft’s unique combination of practical IT and business content builds talent and helps team members develop and retain the skills they need now and in the future. Skillsoft’s coverage for key skills such as vendor certifications, project management, business analysis, current and emerging technologies, as well as communication, management and leadership is available on demand, allowing professionals to access content at their convenience. The majority of the content is mobile-friendly and includes targeted videos, job aids, virtual live courses, self-paced courses, cloud-based practice environments, mentoring and digital books to support varying learning styles and preferences.

By offering a continuous learning environment, organizations can avoid knowledge leak and adapt to the transformation of the IT field. Whether it’s working with IT functions at rapidly growing start-ups or helping large enterprises, Skillsoft helps IT organizations implement continuous training solutions that drive business impact. Learn more about Skillsoft’s content here.
ABOUT THE AUTHOR

Jim Zimmermann is the Director of Skillsoft’s Solution Practice and the practicing Solution Principal for IT and Digital training solutions for North America and EMEA. Jim holds a BS in Natural Sciences from St. Thomas Aquinas College and leads a team of Solution Principals that support all of Skillsoft’s core training coverage areas including business and management, leadership development, IT and digital and compliance.

During his 40+ years in the IT and media industries, Jim has worked for the largest IT firms as well as SMBs and startups. Jim started his career as a scientific programmer for an environmental engineering firm where he ended up teaching programming to other scientists. Jim went on to hold positions in product management, product and corporate marketing and technical consulting.

For more than 13 years, Jim has worked for Skillsoft in a variety of capacities, starting in the Books business where he created the AnalystPerspectives collection, moving to directing the Product Marketing efforts for Skillsoft’s entire award winning IT and Digital Skills training product line. In his current role, he works with Skillsoft’s largest strategic customers to help them provide optimized solutions for training their leaders, managers and staff.
ABOUT SKILLSOFT

Skillsoft is the global leader in corporate learning, delivering beautiful technology and engaging content that drives business impact for modern enterprises. Skillsoft comprises three award-winning solutions that support learning, performance and success: Skillsoft learning content, the Percipio intelligent learning platform and the SumTotal suite for Human Capital Management.

Skillsoft provides the most comprehensive selection of cloud-based corporate learning content, including courses, videos, books and other resources on Business and Management Skills, Leadership Development, Digital Transformation, IT Skills and Certification Training, Productivity and Collaboration Tools and Compliance. Percipio's intuitive design engages modern learners and its consumer-led experience accelerates learning. The SumTotal suite features four key components built on a unified platform: Learning Management, Talent Management, Talent Acquisition and Workforce Management.

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