The Changing Role of the CIO

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EXECUTIVE SUMMARY

No department has undergone such profound change 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 the changing technologies of social, mobile, cloud computing and big data and analytics. 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.

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, it was very easy to point to a device and say “that is a computer,” but today’s platform is often hard to identify. Instead of a single identifiable device, IT staff face an assortment of technologies, devices, and services that encompass mobile, cloud computing, social and big data and 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. Gartner predicts that by 2020, “cloud shift” will affect more than $1 trillion in IT spending: “IT spending is steadily shifting from traditional IT offerings to cloud services (cloud shift). The aggregate amount of cloud shift in 2016 is estimated to reach $111 billion, increasing to $216 billion in 2020.”[1] 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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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: “data volumes are exploding, more data has been created in the past two years than in the entire previous history of the human race.” 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. “For a typical Fortune 1000 company, just a 10% increase in data accessibility will result in more than $65 million additional net income.” CIOs need to find the best way to translate the value of big data to business in order to use it for fact-based decision making.

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 through the use of social technologies. Social media has already revolutionised customer service, and has the potential to take it even further.

Social business creates huge opportunity for IT leadership and teams, since businesses are only recently starting to understand and create metrics related to social business.

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

4 “Gartner Predicts Business Intelligence and Analytics Will Remain Top Focus for CIOs Through 2017.” Gartner. com, December 16, 2013
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.

This is what makes collaboration with other business units, as well as strategic hiring and training practices, of the utmost importance. CIOs need to put time into establishing personal relationships with business peers to take a truly multi-disciplinary, agile approach to running the IT business while they grow talent within their own units. CIOs must break down any existing barriers between themselves and the rest of the C-suite to show marketing, finance, human resources, and the other senior executives that IT services play a role in enhancing each of their respective business units.

FROM IMPROVER TO INFLUENCER TO TRANSFORMER

Today’s CIO has a central role in creating corporate strategy. 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. More than just an IT engineer, the CIO and top IT management are business engineers who actively discover how to “harness the power of disruptive technology... and pilot new technology in a way that other business units cannot.”

In building its own business, IT will forge stronger ties with both internal and external customers by:

- Engaging digitally-savvy customers by teaming up with the CMO. Using data to get to know customers better, identifying behavior patterns and predicting trends, analyzing profitability of products and services so they can be flexible in offerings.

- Mastering the basics before turning to focus on business strategy. Minimizing time spent keeping servers running and proactively managing IT risk.

- Boosting collaboration to not just boost efficiency or cut costs, but craft true partnerships at the top. The entire organization faces the digital disruption challenge. It’s up the CIO to provide leadership, decision-making, performance improvement and innovation.

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NEW SOURCING LANDSCAPE

In the last decade 43% of the IT sector was outsourced. In order to address the new expectations placed upon IT, organizations are now looking to bring more workers and skills back in-house. According to a recent study, 70% of CIOs plan to change their technology and sourcing relationships, including bringing IT functions that were previously outsourced or offshored back within the organization, known as “IT reshoring.”

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, 86 percent of ISACA members say there is a global shortage of skilled cybersecurity professionals.

According to David Foote, Chief Analyst and co-founder of Foote Partners, senior IT executives and CIOs see the following among the most prominent challenges in IT staffing:

• Difficulty in hiring specialized workers with multidimensional skills

• Inconsistency in job titles

• Tech “gurus” who prefer to stay hands-on, rather than transitioning to management roles

• Inaccurate job evaluations, inconsistent career paths and outdated job descriptions that don't keep up with the evolving roles

• Managing for big growth: finding the best organizational models, staffing optimization strategies and human capital practices to get to a point of successful people architecture

• Convincing senior business management of the value in investing in substantial changes in the IT workforce—design, budget and pay structure

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11 “Gartner Says 70 Percent of CIOs Will Change Their Technology and Sourcing Relationships in the Next Two to Three Years.” Gartner.com, March 19, 2014.
“Architecture isn't about tearing down the house and starting with a clean sheet of paper. That's unworkable. What it means is taking the structure that already exists and building a foundation under it,” says Foote.13

When rebuilding an IT team Foote recommends rethinking job descriptions, restructuring roles, assessing and consistently reassessing IT skills, investing in training for existing staff, building clear tech career paths, setting up a college recruitment program and breaking up silos and disparate roles to address the ever-growing complexity and rapid development of technology.

In addition to a limited pool of candidates, organizations are experiencing a significant gap in skills when it comes to the new platforms. Talent gaps most often creep up in big data, analytics and mobile, highlighting the need for companies to use forethought when planning their hiring and retention strategies.

As the new platform rapidly develops and expands 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 Skillssoft 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 cloud-based learning platform 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, 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.
ABOUT THE AUTHOR

Jim's responsibilities include communications and support of Skillsoft's IT eLearning offerings in addition to communications with customer subscribers. He has enjoyed a long and varied career in the IT industry. During his 40+ years in the industry, Jim has managed technical and marketing projects for a variety of companies including IBM, Fujitsu and Dun & Bradstreet, and he founded and sold three successful startups. Jim started his IT career as a scientific programmer for an environmental engineering firm. Jim is also a successful technology analyst, editor and writer. Jim graduated Magna Cum Laude with a degree in Natural Science and Math from St. Thomas Aquinas College in Sparkill, NY.

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ABOUT SKILLSOFT

Skillsoft is the global leader in eLearning with a long history of innovation. We train more professionals than any other company in the world and are trusted by the world's leading organizations, including over 50% of the Fortune 500.

We currently serve over 6,700 customers and more than 45,000,000 learners worldwide and provide continuing, hands-on support to assist them in maximizing their ongoing success.

Skillsoft has grown rapidly, with 2,500 employees across multiple locations in North America, EMEA and APAC. For more information, visit www.skillsoft.com.