

IDC BLOG

Digital Transformation: The CIO's Skills Imperative

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We can see it coming. Research by IDC has confirmed that organizations are increasingly committing to hybrid cloud architectures. And, by 2020, the heavy workload demands of next-generation applications and new IT architectures in critical business facilities will force 55% of enterprises to modernize their IT landscape. Digital transformation of IT infrastructure is coming.

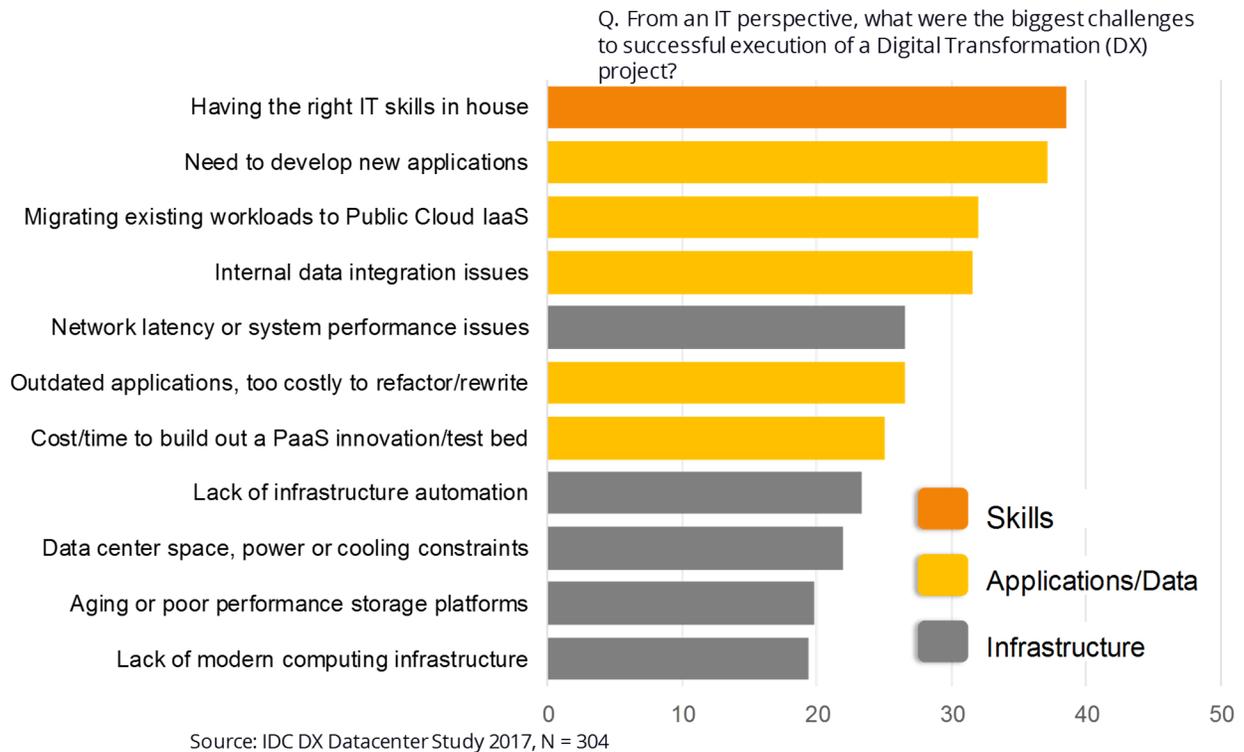
And this isn't yesterday's IT infrastructure: To enhance the digital experiences for their customers, by 2021 over 50% of companies in consumer-facing industries will spend more annually on upgrades to their network in edge locations (including both compute and storage resources) than on upgrades in their core datacenters.

However, while most IT organizations will commit to hybrid cloud architectures, only 40% of organizations that have implemented cloud say they have the IT skills to use cloud to drive innovation, agility, and competitive advantage.

Public, private and hybrid clouds will change and reprioritize the skills CIOs need. The IT organization will need to be able to design and orchestrate a full stack of services to support a rapid time to value of new applications and services. It will need to provision infrastructure, multi-tiered platforms, and application services across the enterprise service ecosystem. A skilled organization will be able to plan, build, and operate cloud services to reduce management complexity and lower operating costs. This will ultimately reduce risk, increase compliance, and deliver business value. But success is not guaranteed.

By the end of 2019, 70% of companies engaged in datacenter transformation efforts will struggle to translate business needs into effective IT investments and operations plans. That is likely because they don't have the skills they need to build and execute an effective transformation. In other IDC research, 304 IT leaders report that "having the right skills in-house" is their biggest challenge to successfully completing datacenter transformation. Other challenges exist too - developing new applications, migrating workloads to the public cloud and data integration issues. But each of those are impacted by the skills of the IT professionals in the organization.

Challenges to Datacenter Transformation



Recommendation: Leverage Certifications for Skill Identification and Development

Cloud will continue to be a highly disruptive force, reshaping datacenter and application architectures and transforming the way IT resources and applications are created, bought, and managed. Enterprise IT teams cannot ignore the challenges and opportunities created by cloud in its many shapes and forms. CIOs face two essential talent imperatives with digital transformation - ensuring their IT teams have the right people and that their teams have the right skills.

Selecting IT professionals has never been straightforward. And in this period of very low unemployment in IT (some estimates put it at less than 3%, Monster.com even reported 0% unemployment for cybersecurity professionals recently), it has never been harder. Recognizing or validating specific competence in available candidates can be a challenge. IDC believes that leveraging relevant, well-constructed IT certifications from significant technology vendors can help IT leaders identify appropriate candidates for openings.

Certification programs can also be part of a reliable development roadmap to help organizations build skills during every phase of a transformation journey. IDC analysis has determined that IT professionals should get at least of 10 hours of job role-related training every year to remain current. And additional training is necessary when projects, like cloud migration, are being planned. For significant roles, IT leaders should seek advice from their technology and tool providers to identify the

specific skills and training paths necessary to upskill the role to meet future needs. Technology vendors are in a unique position to support the skills requirements of a range of IT and business. For example, the newly released Dell EMC Proven Professional certifications help:

- IT and business professionals understand the fundamentals of integrated infrastructure and cloud strategies
- IT infrastructure teams identify the business drivers, imperatives and opportunities; and architect secure, enterprise-wide ITaaS solutions
- IT infrastructure and management teams manage and migrate workloads across multiple private and public cloud environments
- IT administrators take a security-first approach to infrastructure across the data center and cloud

Migrating to the cloud is complicated and requires new skills – both to complete the migration and to run the new cloud-based infrastructure. According to the data analyzed from IDC's *Cloud-based Enterprise Application Performance Survey*, more than 1,000 IT leaders worldwide report the impact of valid skills on cloud migrations and cloud solution success is profound.

- Well-trained cloud migration teams meet nearly 90% of their business and project milestones compared with less than 50% of milestones met by cloud migration teams with only "average" skill level.
- 80% of the organizations with sufficient skills to deploy automation and orchestration tools prior to beginning the migration report being satisfied or very satisfied with the business impact of the move to cloud. Only 20% of the organizations without sufficient skills report being satisfied with the impact of cloud.
- Nearly all (90%) of the organizations with well-trained teams are satisfied or very satisfied with their ability to monitor, forecast, and optimize server, storage, and network resources. Less than 10% of the organizations with insufficient skills report being satisfied with their ability to optimize resources dynamically.

By taking full advantage of cloud, IT decision makers can help their enterprises become more agile, reduce IT operational costs, and improve business performance. The digital transformation of the business and business models only increases the need for a well-skilled IT organization. Certification programs and good development plans can help IT leaders be ready.

Sources:

- IDC FutureScape: Worldwide Datacenter 2018 Predictions (Doc #US43152417, Oct 2017)
- Changing Skills in Cloud Environments (Doc #US43038517, Sep 2017)
- Digital Transformation: Impact on the Datacenter – Are You Ready? (Doc #DR2017_T4_LD, Feb 2017)
- "This tech field just hit an astonishing 0% unemployment rate"
<https://www.monster.com/career-advice/article/tech-cybersecurity-zero-percent-unemployment-1016>, accessed February 16, 2018

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