White Paper

Business Value of Digital Transformation and the Contribution of a Growth Mindset in IT

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Cushing Anderson
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IDC OPINION

The success of business increasingly relies on the IT organization supporting business requirements and often implementing new and evolving technologies. New research from IDC demonstrates that IT professionals who have achieved a relevant technical certification are more likely to have a self-belief that competence can be developed through dedication and hard work and a willingness to leverage tools and learnings of others – what is called a "growth mindset." A growth mindset creates a capacity and resilience essential for great accomplishments. This is particularly important for organizations and their IT professionals responsible for implementing technology transformation in support of critical business objectives and implies a need for continuous professional development and represents another value of IT certifications to the enterprise.

SITUATION OVERVIEW

Technology has moved out from the IT department to the desktop, to tablets, and to a phone in every pocket. In fact, there is more "digital transformation (DX)" happening outside the IT organization than within it. (This is provocatively asserted in the HBR article Digital Transformation Is Not About Technology.) As an organization senses an opportunity, it deploys a new approach, or improves an existing approach, using technology to help streamline, automate, discover, or connect. These innovations are often incremental and sometimes disruptive but always attempt to solve a business need. Digital transformation is ushering in a new era of digitally enabled customer-facing products, services, and experiences in an environment of rapid change and uncertainty. Organizations as diverse as Hasbro, Home Depot, and Frette leveraged technology, yes, but transformed their business operations and the finance organization to enable their own digital transformation. In detail:

- **Hasbro**: In 2012, Hasbro realized it needed to change almost 90 years of corporate culture: instead of focusing its marketing and sales efforts on children, it must market to their parents who make the purchase. The company leveraged data to create targeted marketing campaigns on multiple channels, including a larger push on social media. The data helped the company better understand its customers and recommend relevant toys and games to parents. This was an effort to improve marketing leveraging analytics and sales data.

- **Home Depot**: In 2017, Home Depot began a three-year program to improve and combine its physical and online shopping experiences. It wants contractors and homeowners to shop online and pick up in store. By tracking local trends, it can also ensure the right items are in stock without excess inventory. The investment has helped build up the back-end operations and distribution channels to consistently deliver products and resources to stores and customers.

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- **Frette**: Italian luxury linen purveyor Frette is a small company with a global reach and revenue that belies its head count. Based in Italy, the company sells its products online and in retail outlets around the globe. The company's growth beyond Europe created coordination challenges caused by different currencies, languages, and systems. The digital transformation of its financial systems helped it gain greater insight into its business and streamline customer service – reducing monthly closing time by 40% and freeing management to focus on growth. It also lowered shipping and freight costs and transformed reporting.

Technology is at the center of business growth for all companies, new and old. While the business is driving change, ultimately, transformation requires an IT organization with the right skills.

**People and Skills Are Critical to Transformation Success**

People are the make-or-break element of a high-performing IT organization. There is simply no replacement for people with the right skills, attitudes, and traits. As technology evolves, CIOs don't have the luxury of hiring a totally new roster of skilled IT professionals. They must leverage the talent and training resources available to build the teams that will help drive their digital transformation. At the same time, the skills IT professionals need are continuously evolving because IT professionals are assuming new roles, new systems are installed, new configurations take fuller advantage of solution capability, and solutions deploy new features to overcome vulnerabilities. The continuous evolution of skills requires a conscientious program of continuous learning and development.

A director of worldwide support readiness at a large technology firm explained that in the ever-changing technology environment, adaptability is essential. "To address the fast-paced change in technology requires good subject matter understanding," she told IDC. This puts a premium on understanding the skill requirements by role and makes role-based technical certifications an effective approach for upskilling and reskilling IT professionals.

As the Hasbro, Home Depot, and Frette examples show, DX doesn't need to be built on robotics, AI, and edge devices: Most DX is deploying and effectively using core capabilities – better collaboration, integrated applications to improve communication, and improved data analytics and reporting. And these core capabilities represent both the foundation of what most businesses require to succeed and a performance benefit to the IT organization itself. IDC estimates that trained and certified teams responsible for core IT activities are almost 20% more productive than less proficient staff.

**Business Leaders Feel IT Capabilities Are Important to Business Success**

In IDC's recent *Drivers of DX Success in the Line of Business Survey*, we asked nearly 300 leaders in operations, finance, sales, and marketing about what digital transformation meant to their organizations. We discovered that the capabilities that those leaders believe would most benefit their success aren't "rocket science." In most cases, using the existing tools and capabilities better would be a vast improvement in business satisfaction with IT and lead to greater business success.
We examined several capabilities related to operations and financial processes and found that the processes that lines of business (LOBs) believed were most important were also the areas where their IT organizations didn't perform well. For finance and operations leaders, the three capabilities that would make the most difference aren't radical transformations. Their greatest benefits are as straightforward as supporting, reporting, and visibility (see Figure 1):

- **Supporting**: Both finance and operations felt their ability to support their stakeholders was very important. Supporting stakeholders is also an area where they believe they could perform better. The finance leader expects to be able to reorient financial discussions from static views focused on historical data to dynamic views of future trends, opportunities, and innovation. The operations organization wants to be able to perform maintenance before failure occurs and avoid costly downtime of business-critical equipment.

- **Reporting and visibility**: For many organizations, the greatest benefits of DX would be from improved dashboards and reports – more than two-thirds of finance and operations leaders felt they needed improved reporting and dashboards. Finance and operations leaders also expect improved visibility into operational or financial performance. These leaders want to be able to assess the health of their business and make strategic decisions faster to drive growth by using real-time and unified financial or operational reporting. The operations group expects to be able to leverage a real-time view into production and stock to manage shop floor activities and improve uptime, throughput, and quality.

We also examined many priorities related to the critical processes within marketing and sales and found the important issues that are essential to successful identification and closing of opportunities:

- **Combining data**: Commonly important to both marketing and sales leaders is the ability to combine historical and real-time information. Many marketing and sales leaders believe integrating data from different sources is important. Unfortunately, nearly all organizations think they aren't particularly good at it. Marketing and sales organizations want to be able to build customer profiles that connect data from multiple applications.

- **Customizing reports**: Similarly, the ability to customize reports and dashboards is important to both marketing and sales leaders. Similarly, less than 10% of organizations believe they are good at these priorities. Marketing and sales organizations believe it is important to accurately identify new audience segments and trigger workflows based on customer and segment signals.
Drivers of Success: Line-of-Business Perspective

Q. How important to your organization is being able to …?
Q. How well does your organization …?

n = 150 finance and operations leaders and 120 marketing and sales leaders

Note: Percentage of respondents selecting 4 or 5 on a 5-point scale is shown.

Source: IDC’s Drivers of DX Success in the Line of Business Survey, 2020

To Transform the Business, Transform IT

Across all of these examples, business transformation requires the IT organization to enable DX initiatives and DX evolution within the LOB. It is the IT organization’s capability that will drive DX success. IT is typically a profession that thrives on change and embraces new opportunities. But DX success doesn’t happen by accident.

It will require a change in IT – sometimes new ways of working and often new skills in IT. But more than that, it requires a desire to change: A willingness of the IT professionals to put in the effort to learn new skills and apply those new skills to new problems.
**Growth Mindset Influenced by IT Certification**

LOB seems to recognize this: The line of business seems to believe that the most important factors in successful evolution in IT isn't a new technology or a new consultant. It's a willingness to put in the effort, time, and training to become knowledgeable and skilful with new technologies.

Individuals who believe they can develop their capability through effort, time, and training have what researcher Carol Dweck calls a growth mindset. These individuals achieve more than individuals who believe their talents are innate gifts, what is described as a fixed mindset. IT professionals with a growth mindset are less concerned with being the "smartest person in the room" and put energy into learning and using new skills.

When IT organizations embrace a growth mindset, IT professionals report feeling far more committed to the organization and empowered to put the organization's vision into practice. By contrast, people in organizations that are primarily fixed mindset rate higher in only one organizational characteristic: more deception between employees.

Interestingly, Dweck and other researchers have discovered that a fixed mindset isn't static. Individuals can nurture a growth mindset through the process of developing new skills. In IDC's recent *Drivers of DX Success in the IT Organization Survey*, more than 650 IT leaders across a variety of roles described a strong correlation between growth mindset and IT professionals who have learned a new skill recently or have been certified in a challenging domain.

Our research found that IT professionals who were certified were consistently more likely to believe they could learn difficult skills and learn more from others. 91% of certified IT professionals believed that effort strongly contributes to their DX success. The same proportion of IT professionals believe that training strongly contributes to DX success. Only a slightly lower percentage believe that time spent with a new technology strongly contributes to success (87%). Other factors also contribute strongly to success, including the technical material that accompanies a new technology, case studies, and other examples of successful adoption of DX and the support from technology vendors and consultants. Even leveraging AI to assist with the technical design and deployment of a technology can contribute to the success of DX. But, surprisingly, we found that certified IT professionals were more likely to believe each of these factors would contribute to success than IT professionals who were not certified (see Figure 2):

- **Effort:** Certified IT professionals were 2 points more likely to believe that effort contributes to DX success than IT professionals who were not certified (91% to 89%).
- **Time:** Certified IT professionals were 3 points more likely to believe that time contributes to DX success than IT professionals who were not certified (87% to 84%).
- **Training:** Certified IT professionals were 17 points more likely to believe that training contributes to DX success than IT professionals who were not certified (91% to 74%).
- **Leveraging AI:** Certified IT professionals were almost 40 points more likely to believe leveraging AI strongly contributes to DX success than IT professionals who were not certified (76% to 37%).

Certified IT professionals are more likely to believe their skills can be developed. They also believe that through hard work, good strategies, and input from others, they can succeed in their DX initiatives. This is the essence of a growth mindset. Therefore, we conclude that certified IT professionals embody a "growth mindset."
Contributors to DX Success: What Helps IT Professionals Implement Complex Technologies

Q. Please rate how much the following contributes to your team’s implementation of DX.

WHAT CONTRIBUTES TO SUCCESS?

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<th>Contribution</th>
<th>Certified</th>
<th>Not certified</th>
<th>Difference</th>
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<tr>
<td>Leveraging AI</td>
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<td>+18</td>
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<tr>
<td>Effort</td>
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n = 670 IT professionals

Note: Percentage of respondents selecting 4 or 5 on a 5-point scale is shown.

Source: IDC’s Drivers of DX Success in the IT Organization Survey, 2020

CHALLENGES/OPPORTUNITIES

By the end of 2019, up to 70% of companies engaged in digital transformation efforts struggled to translate business needs into effective IT investments and operations plans. That is often 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 digital transformation. Other challenges exist too – developing new applications, migrating workloads to the public cloud, and data integration issues. But each of those is impacted by the skills of the IT professionals in the organization.

Identifying IT professionals with the right skills has never been straightforward. And in this period of rapid change and economic disruption, it has never been harder nor more important. Recognizing or validating specific competence can be a challenge. IDC believes that leveraging relevant, well-constructed IT certifications from significant technology vendors can help IT leaders build a successful IT organization and effectively execute digital transformation initiatives.

Certification programs can also be part of a reliable development road map to help organizations build skills during every phase of a transformation journey. IDC analysis has determined that IT professionals should get at least 10 hours of job role-related training every year to remain current. And additional training is necessary when significant digital transformation projects are being planned. For important 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 with relevant certification programs are in a unique position to support the skills requirements of a range of IT and business professionals.

To effectively leverage IT certifications for increased DX success, it is essential that the certification program be a good fit for your organization. Consider the following seven criteria as a starting place for selecting an appropriate IT certification program:

- Is the certification program from a significant provider of your IT infrastructure? Or is the certification program so significant industrywide that it is an "industry standard"?
- Is the certification program aligned to roles that are relevant to your organization's current and future requirements? (Are you willing to be committed to these roles for the long term?)
- Are the skills represented by the certification program evolving with the technology?
- Does the certification program have progression that is sufficiently robust to grow with your staff?
- Does the certification program use performance-based exams?
- For appropriate roles, does the certification program validate business knowledge and skills in addition to technical competence?
- If you are going to use the certification program for selection or promotion, does the certification program ensure that the exams have not been compromised?

**CONCLUSION**

To successfully implement DX to support critical business objectives, IT organizations will need to adopt new skills, leverage new technologies, and continuously upgrade their skills to maximize the value the DX initiative delivers to the enterprise.

The willingness of IT professionals to leverage all of the resources that can help DX initiatives succeed will be critical and is the essence of a growth mindset. While research consistently shows that training and certification lead to greater performance, this research indicates another benefit of certification: certified IT professionals are more able to adopt new processes and skills and apply them to the benefit of their organization and have a growth mindset.
To leverage this finding to improve business success with digital transformation, it is essential that IT organizations:

- Align IT organizational requirements and development plans with DX strategy.
- Leverage IT vendor certifications as guides to IT professional development.
- Provide sufficient ongoing training and relevant certification opportunities to maintain and improve skills over time.
- Monitor DX projects and operational priorities for new/expanding skill requirements.
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