

Envisioning World-Class Digital IT

By Richard Pastore, Scott Holland and Christopher Key

Executive Summary

IT organizations are either starting out or in the midst of a two-pronged mission to enable their business’s digital transformation, and to transform their own IT functions into customer-centric, innovative and agile operations. The missions are interdependent and their pursuit leads toward world-class IT efficiency, effectiveness and experience. While best practices to achieve these goals are still emerging, The Hackett Group has identified approaches associated with transformational top performance, and has amassed benchmarks for fundamentals critical to the capabilities that IT must improve and apply.

About this research

This report is a compilation of study data and benchmarks developed over the past 12 months by The Hackett Group. These include our Digital Performance Study and polls conducted on emerging technology innovation, accelerating service delivery, and project demand management.

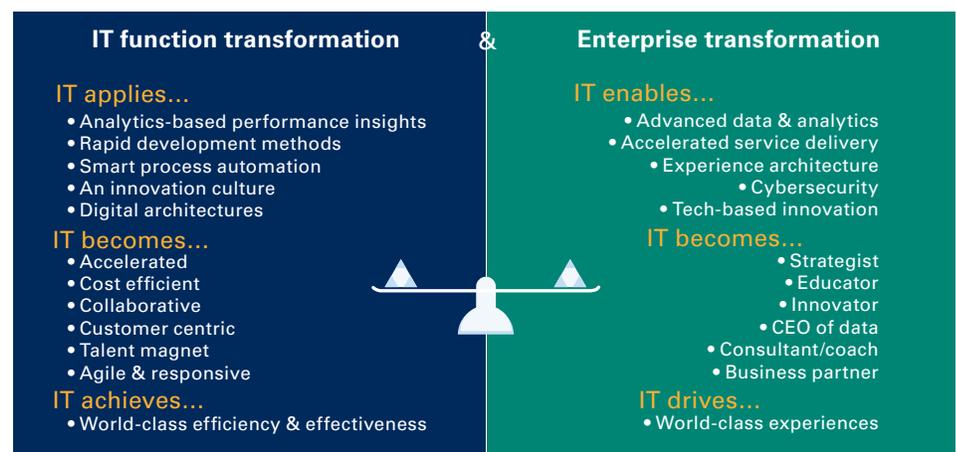
Coupled with emerging best practices as evinced in our ongoing IT benchmarking program, they describe a vision of how IT organizations will function at world-class levels in the era of digital business.

For more information on world-class digital IT organizations, contact The Hackett Group.

IT leaders face a future that must be achieved through two transformations. The first is the advent of the digital enterprise, in which a business applies digital tools to offer new customer experiences or goes to market with a new digital business model. In this vision, IT is the consulting partner to the business, guiding it toward competitive advantage through digital customer engagement. The second transformation is that of the IT organization itself, adopting digital tools, platforms and processes to set new standards for efficiency and effectiveness in the digital business era.

The two visions, and their enabling transformations, are interdependent; progress in one depends on success in the other. In practice, given the finite resources of time, talent and capital, IT organizations have struggled to strike a balance between the dual transformation missions (Fig. 1).

FIG. 1 IT’s dual digital transformation missions

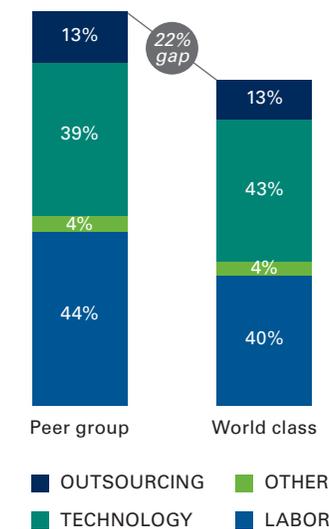


Source: The Hackett Group

IT leaders who aggressively support enterprise transformation but are unable to get their own house in order are likely to become the proverbial cobbler's children – going (digitally) barefoot while their customers get the new tools. Worse, an IT organization that is reactionary and lacks foresight, agility and customer focus will eventually lose credibility as a change agent. Therefore, becoming a world-class, digitally enabled IT function is both urgent and imperative.

There is no tried-and-true prescription for fulfilling IT's dual digital mission of transforming the enterprise and itself. Achieving world-class functional efficiency and effectiveness, and enabling world-class experiences via the enterprise, requires a mix of emerging best practices and established disciplines that we have observed in top performers. The following sections highlight practices and benchmarks to help guide IT organizations on their path forward.

FIG. 2 IT spending per EUE as percentages of total



Source: The Hackett Group

The Digital IT Function: World-Class Efficiency

World-class IT organizations significantly outperform the average IT organization (referred to in our empirical methodology as the “peer group”), operating at 22% lower cost per end-user equivalent¹ (EUE) (Fig. 2). For a typical company with \$10 billion in revenue, attaining world-class performance can bring as much as \$41 million in potential savings annually (relative to the peer group) which could be reallocated to fund digital transformation and innovation initiatives.

The money to fund IT's digital transformation will largely come from the function's operational processes, which The Hackett Group categorizes as the “Run” stage of IT's process lifecycle (Fig. 3). This includes infrastructure management, end-user support, application maintenance and risk management.

FIG. 3 IT process lifecycle

Plan	Build	Run	Manage
<ul style="list-style-type: none"> IT business relationship management Enterprise architecture IT demand & portfolio management 	<ul style="list-style-type: none"> Infrastructure development & deployment Application innovation development & deployment (new/innovate) Application update development & deployment Information data sourcing & integration 	<ul style="list-style-type: none"> Data center management/storage & compute Network management IT operations management Service desk End-user device support Application support Risk & security management Information & data management 	<ul style="list-style-type: none"> IT oversight IT procurement support

Source: The Hackett Group

¹ The Hackett Group defines end-user equivalents based on a formula that averages light and heavy end-users and accounts for outside constituents such as suppliers and customers who access core systems.

World-class IT organizations consistently spend less on labor and outsourcing for Run processes. Historically, they have also maintained this category as a smaller percentage of their overall process cost versus the peer group (Fig. 4). In fact, the greatest spending differences between two comparison groups occur with Run processes. World-class IT organizations spend 51% less on infrastructure management, 43% less on end-user support, and 25% less on application maintenance per EUE.

FIG. 4 IT process cost allocation



Source: The Hackett Group

Managing complexity is another way that IT organizations can reduce Run costs and generate funds for reinvestment. Although digital investments in new platforms and tools will add to complexity in the short term, IT leaders should strive to simplify and move closer to the world-class benchmarks shown in Fig. 5.

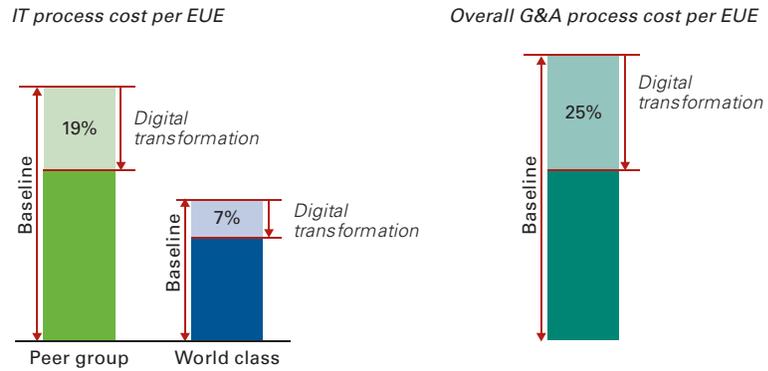
FIG. 5 Complexity differentials: Peer group versus world class instances per 1,000 EUEs

Technology	Peer group instance count exceeds world-class instances by:
Applications	4X
ERP platforms	2X
Customer databases	2X
Data centers	5X
Data warehouses	6X
End-user computing platforms	14X

Source: The Hackett Group

Fully implementing digital tools to automate IT's service delivery lifecycle has the potential to reduce operating costs further for the peer group and even for companies that are already at the world-class level in cost. The potential for corporate G&A functions overall is even a substantial 25% (Fig. 6). Savings projections provided here are based on our empirical analysis and study data as well as benchmarks conducted in other business services functions (e.g., finance, human resources, procurement).

FIG. 6 Cost savings opportunities from full digital implementation



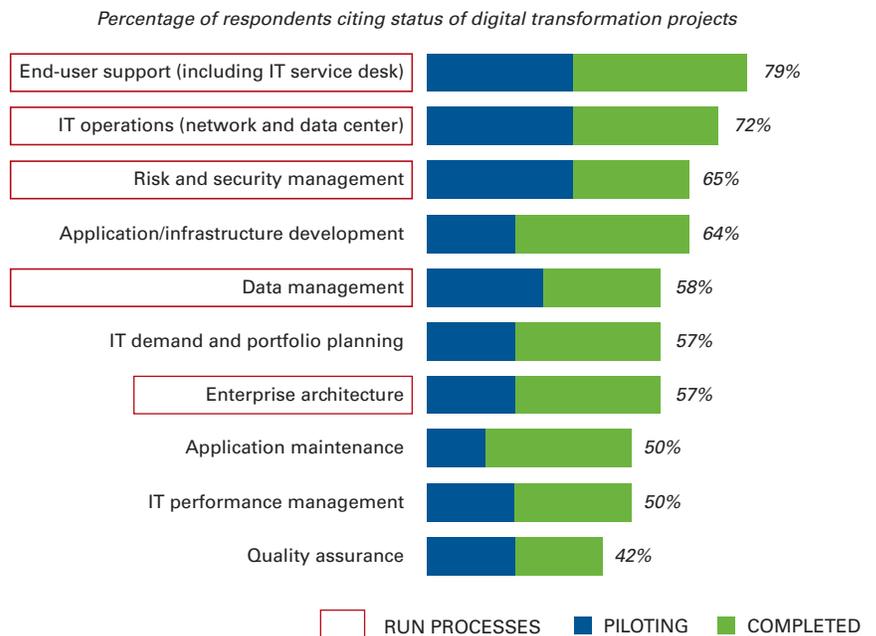
Source: The Hackett Group

For most businesses, the greatest savings opportunity – both in percentage and in volume – is available in the Run stage of the IT process lifecycle. The savings stem from fully automating IT processes, including smart process and user self-service automation. The potential percentage savings are lower for world-class IT organizations because they are already more highly automated and streamlined than the peer group.

The second-largest opportunity for savings is the Build stage. Here, much of the reduction in labor (and thus cost) comes in development and code writing, as companies adopt pervasive software and infrastructure-as-a-service (IaaS) models. Instead of writing code, IT professionals are freed to manage the integration of architecture, systems and services.

Hackett Group data shows that IT organizations have focused most on transforming their Run-related processes (Fig. 7); overall, they have piloted or completed digital transformation projects in Run processes than any other. This dominant focus is likely because the potential rewards are greatest, and because the processes to be changed are relatively low-hanging fruit.

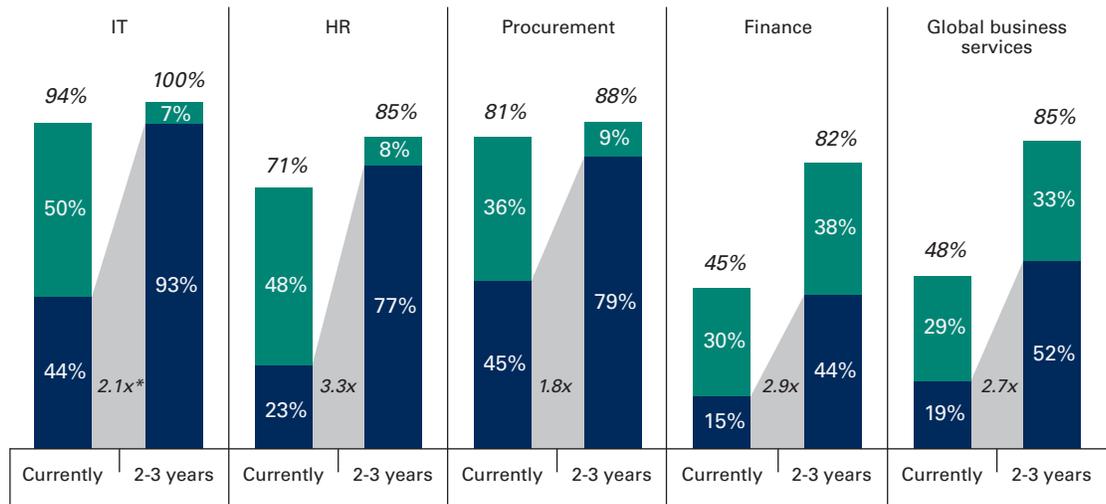
FIG. 7 Digital transformation projects piloted or completed in IT function



Source: Digital Transformation Performance Study, The Hackett Group, 2017

Cloud-hosted applications are not necessarily cheaper than domain-hosted applications. In fact, over time, spending on SaaS subscriptions may outweigh the capital costs of traditional software. But the overall paradigm of cloud generates economy through the elimination of coding, applying upgrades and maintaining the hosting hardware. Migration to the cloud-first architecture model will be broad and inevitable, and IT leads the way among business services functions (Fig. 8).

FIG. 8 Cloud-based applications/SaaS adoptions rates, current and projected, by function



*Growth rate for broad adoption; average = 2.6X

Source: 2018 Key Issues Study, The Hackett Group

■ LIMITED ADOPTION
■ BROAD ADOPTION

World-class IT organizations are further along in cloud deployment than the peer group. Their portion of technology cost that is cloud-based (SaaS, IaaS and PaaS, or platform-as-a-service) is 15% greater. For new software and systems deployment, the mantra for IT needs to be “cloud-first,” in the same way that platform development has become “mobile-first.”

To date, IT has been slow to apply robotic process automation, but this appears to be changing. IT organizations are now evaluating using RPA to automate routine function processes and tasks. Fifty-three percent of IT organizations predict broad or at least limited adoption of RPA within two to three years, and 67% expect the same for RPA’s more cognitive cousins – virtual assistants and AI technologies encompassing machine learning, natural language processing, speech recognition, expert systems and augmented reality.

Within the IT function, the following processes and tasks are among those suitable for automation using RPA:

- Server provisioning and de-provisioning.
- Server shutdown and restart; backup and restore.
- File and folder handling.
- Network configuration settings, operating system upgrades and patch deployment.
- Application deployment and testing.
- Security processes.

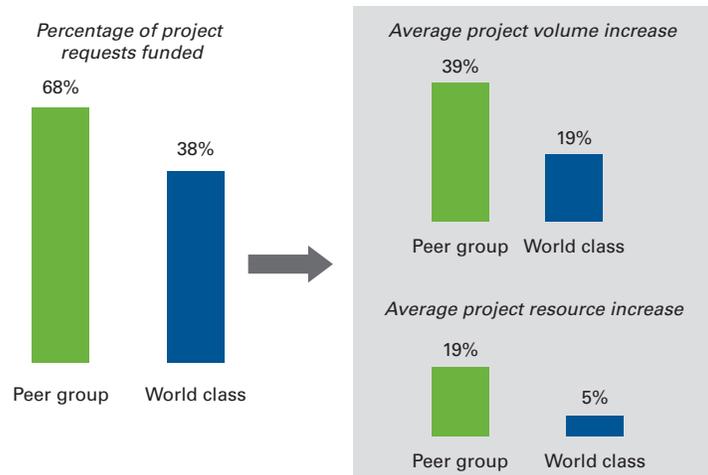
The Digital IT Function: World-Class Effectiveness

In the digital business era, world-class IT delivery means more than the percentage of projects delivered on time, on budget and to final specification. Although these benchmarks are still relevant, metrics indicating the agility with which IT executes project delivery are ascendant. Top performers in Hackett Group assessments are delivering core functionality of high-profile, high-value applications in 60 to 90 days. That compares with an average of 12.5 months for the peer group.²

Rapid-development and iterative methodologies (agile, DevOps) are de facto approaches for top performers. Three out of four IT organizations now use some form of rapid development, and three times as many use it as their primary development methodology, compared with the peer group.³

One of the major differentiators in successful project delivery is IT's level of demand-management effectiveness. Using streamlined but inclusive governance, up-to-date business-case templates, and transparent project-request logs and tracking, top-performing companies green-light 44% fewer IT project requests than the peer group. This upfront discipline in determining which projects get funded has had a cumulative impact: Top performers' growth in project volume over the past two years has averaged 19%, compared with the peer group's 39%. Resources required to service that demand have also been far more tightly controlled (Fig. 9).

FIG. 9 Percentage of project requests funded and impact on volume and resource growth over past two years



Source: Taming Project Demand Poll, The Hackett Group, 2018

The benefits of excellence in demand management extend all the way to delivery, elevating the traditional metrics of effectiveness. In 2017, top performers exceeded the peer group by an average of 18 points in the percentage of projects they delivered on time, on budget, and to final specification.

Innovation is another barometer of effectiveness in the digital era. While innovation has many definitions and degrees, The Hackett Group has assessed innovation capability associated with leveraging new and emerging technologies.⁴ World-class IT organizations invest twice as much in emerging technology as the peer group (21%

² Key Issues study, The Hackett Group, 2018.

³ Taming Project Demand poll, The Hackett Group, 2018.

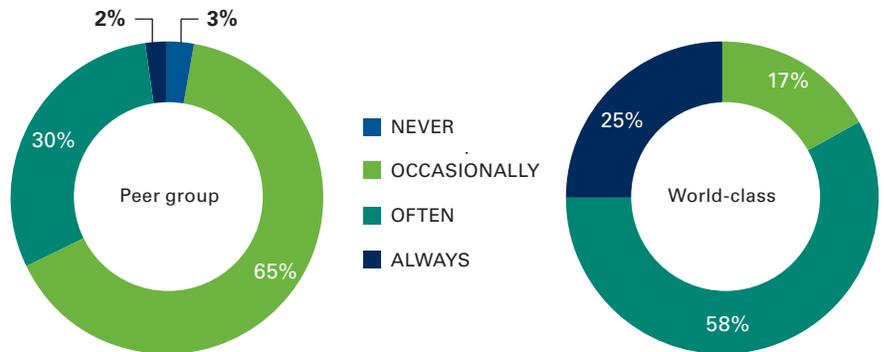
⁴ The Hackett Group characterizes emerging technologies to be those that are generally new to the marketplace and are perceived as capable of changing the status quo in business or industries. Current examples include advanced (predictive, prescriptive) analytics; artificial intelligence and cognitive computing; robotics and robotic software; internet of things; and cloud-based platforms, services and applications.

⁵ Emerging Technology Innovation Practices poll, The Hackett Group, 2018.

of total technology spending versus 10%). Further, 75% of companies with effective innovation programs have IT funds dedicated to emerging technology experimentation, versus 47% of companies overall.⁵

World-class IT organizations do a better job of educating their business colleagues about the innovation potential and limitations of technology; they are more than twice as likely to consistently communicate their knowledge and research findings on new technologies throughout the enterprise (Fig. 10). It's not hard to conclude that the higher amount of communication generates more interest in, and a greater propensity to fund, tech-based innovations.

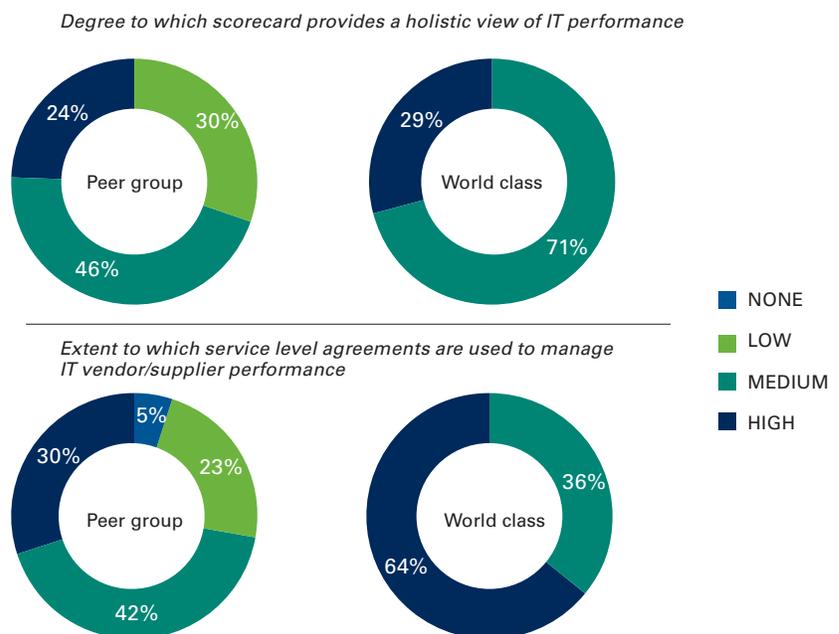
FIG.10 Degree to which IT's research and knowledge regarding emerging technology are shared with the rest of the enterprise



Source: Emerging Technology Innovation Practices poll, The Hackett Group, 2018

The act of measuring is in itself an effectiveness best practice, whether the performance under scrutiny is something as prosaic as project delivery or as intangible as innovation. Two-thirds of world-class IT organizations have formal, structured processes and centralized accountability for IT communications and performance reporting, compared with 39% of the peer group. World-class IT groups also formalize performance measurement of their suppliers to a greater extent, using scorecards and service level agreements more extensively (Fig. 11).

FIG. 11 Extent of IT's use of formal performance metrics with vendor suppliers



Source: The Hackett Group, 2018

⁵ Emerging Technology Innovation Practices poll, The Hackett Group, 2018.

IT does not have primary accountability for defining project business requirements or business-case realization. But as a key collaborator and digital enabler, it will increasingly bear some share of the responsibility for outcomes. Among world-class organizations, 73% review projects to validate the original business case (both costs and benefits) and lessons learned to at least a moderate degree. Only 53% of peer-group IT functions do so.

IT's key performance indicators have matured well beyond basic server uptime and email availability, which are now taken for granted to be 100%. Effectiveness KPIs are evolving to focus more on strength of capability and the quality of results. Over time, this will inevitably extend to business value enabled by technology, and even business customer satisfaction with technology-enabled experiences such as mobile connectivity. This is happening already with technology-driven innovations. Thirty-eight percent of IT organizations measure their innovation performance by the business value generated by the innovative system.

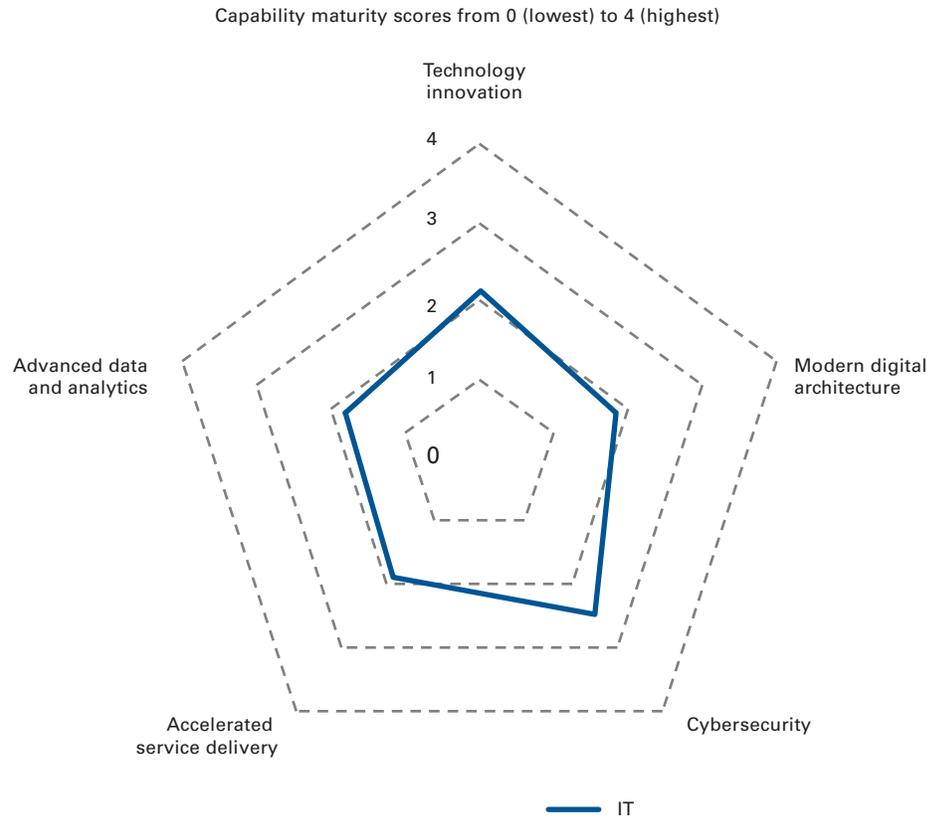
The Digital Enterprise: World-Class Experience

In the emerging business era, enterprises provide world-class customer experiences by leveraging digital engagement methods and tools. Going hand-in-hand with customer experience is employee engagement: Workers' ability to leverage knowledge to enhance customer experience is crucial to competitiveness. IT's mission is to act as a strategic partner to the business, helping it to envision experiences and apply technologies to bring about their fruition. To do so, IT must help the business transform its processes, products, delivery channels, and decision-making insights. For this, IT must apply its five core enterprise transformation capabilities:

- 1 Technology innovation:** Development of processes to effectively manage the conversion of innovative technology into business innovation.
- 2 Modern digital architecture:** Design of data, application services and customer engagement platforms that enhance agility and the customer experience.
- 3 Cybersecurity:** Management of cyber risks through use of technologies, processes and practices designed to protect information systems and data from attack, damage or unauthorized access.
- 4 Accelerated service delivery:** Adoption of service development and delivery models that ensure the business operates in an agile and responsive manner appropriate to digital business.
- 5 Advanced data and analytics:** Deployment of infrastructure and management processes that facilitate the enterprise's strategy for deriving insight from data and information.

None are particularly new or foreign to the IT function, and most are already applying or attempting to apply these capabilities to some degree. However, IT's maturity level in these capabilities, as measured by The Hackett Group's Digital Readiness Assessment, shows a need for improvement (**Fig. 12**).

FIG. 12 IT digital capability maturity levels



Source: Digital Transformation Performance Study, The Hackett Group, 2017

World-class KPIs for these capabilities are still being defined and refined, as are best practices. The Hackett Group has been tracking the relevant differentiators that provide a solid foundation on which to build these emerging best practices and increase capability maturity. These are presented for Hackett Group Advisory clients in our new Briefing Book, titled *Mastering IT's Digital Transformation Capabilities*.

Strategic Implications

To accelerate progress on the journey to world-class efficiency, effectiveness and experience, IT leaders should forge a strategic approach to improving their enterprise and functional transformation capabilities. The Hackett Group has devised a Digital Readiness Assessment, available to our Advisory clients, that rates maturity levels in the five enterprise-enabling and five function-transforming capabilities listed in Fig. 1.⁶ The output from these assessments is a digital readiness index score that compares the individual company's overall capability versus Hackett Group baselines, which include peer-group companies and top performers, and offers a roadmap and plan to close the gaps.

⁶ Contact The Hackett Group to learn more about this offering.

About the Advisors

Richard Pastore

Senior Research Advisor, IT Executive Advisory Program



Mr. Pastore develops and delivers research and related resources for The Hackett Group's advisory programs, including IT. He has over 25 years of experience working with CIOs and their teams to apply thought leadership and best practices to help them extract the maximum business value from strategic investments in technology. Mr. Pastore has spent the last 10 years designing, implementing and managing IT and business transformation leadership programs, including best practices research, seminars, workshops and conferences, assessment tools and frameworks for Fortune 1000 companies. He is former editor of CIO magazine and vice president of the CIO Executive Council.

Scott Holland

Principal and Global IT Executive Advisory Practice Leader



Mr. Holland has over 30 years of experience and accomplishments in information systems, business operations and strategic planning. He aids executives at large, complex companies in designing information systems in a way that increases productivity, maximizes efficiencies, drives business value and reduces operating expenses. Mr. Holland has both management and hands-on experience in the design, development and implementation of state-of-the-art business programs designed to optimize IT.

Christopher Key

Director, IT Executive Advisory Program



Mr. Key has over 14 years of consulting and professional services experience, specializing in IT and shared services center operations. He also has significant benchmarking expertise for global companies with complex organizational environments. During his tenure with The Hackett Group, Mr. Key has been responsible for providing client services, assessment and advisory expertise its within IT and Global Business Services Executive Advisory Programs. Previously, he worked as a recruiting and placement specialist in the IT and business sectors.

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The Hackett Group has completed more than 15,000 benchmarking studies with major corporations and government agencies, including 97% of the Dow Jones Industrials, 89% of the Fortune 100, 87% of the DAX 30 and 59% of the FTSE 100. These studies drive its Best Practice Intelligence Center™ which includes the firm's benchmarking metrics, best practices repository and best practice configuration guides and process flows, which enable The Hackett Group's clients and partners to achieve world-class performance



Email: info@thehackettgroup.com

www.thehackettgroup.com

Atlanta +1 770 225 3600 London +44 20 7398 9100 Sydney +61 2 9299 8830

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