Digital Transformation for Competitive Advantage
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Your mission:

Bring IT to Life

The elevated role of technology in modern life means the impact and outcome of the services you provide have never been more visible or valued.
How many times have you heard that claim during your IT career? It’s probably one of the most overused phrases in our industry, but at the risk of crying wolf — we are in the midst of one of the most profound and far-reaching changes in the way digital technology is consumed, deployed, and owned.
Mobile devices and the apps they run have become part of the fabric of modern life. They’re fuelling new expectations of how we interact with each other and the services we consume. The rise of wearable technology is even helping to redefine our relationship with ourselves.

Cloud computing has steadily redrawn traditional boundaries within organizations, too: new models of procurement, deployment, support, and management are all posing challenges for IT organizations looking to broker the highest quality services to the business, while understanding their new role in the process.

Even business infrastructure and machinery, not traditionally considered information technology, are becoming smarter, network enabled, and part of an ever-expanding Internet of Things. The line separating IT’s responsibility and the domain of “the business” is rapidly dissolving. Increasingly, IT is the business.

Far from slowing down, this trend is accelerating on a worldwide basis. Organizations are racing to digitize more and more of the services they provide. This is the era of more: more people, using more technology, from more locations, for more of the time. If anything deserved to be described as a paradigm shift, the age of digital business would certainly be a strong contender.

As an IT management professional, you are witnessing the impact of digital transformation from a unique perspective: the proliferation of technology means there’s more to manage—the exponential increase in complexity means the scale of the task is unprecedented—and the elevated role of technology in modern life means the impact and outcome of the services you provide have never been more visible or valued.

Your mission is to make sure the very foundation of modern living and digital business meets and exceeds the expectations of those who depend on it—day in, day out: your mission is to bring IT to life.

In this paper, you’ll get an understanding of the scale and scope of the challenges organizations face in navigating digital transformation. Focusing specifically on the implications for IT management teams, we’ll also explore six key strategies for a successful approach.
Most of the people who depend on digital technology have no idea what it takes to deliver an experience that is intuitive, responsive, robust, and available wherever they go—and rightly so! The goal of effective service delivery should be total transparency from the consumer’s perspective.

From apps that deploy easily and rapidly with flawless performance; to mission-critical data that always seems to be available and updated; through to revenue-generating websites that consistently have just the right amount of resources to guarantee optimum performance with maximum efficiency: you can’t deliver on the promise of transparency without highly effective IT management.

In a very real sense, IT management is pivotal to the success of an effective digital transformation program. Yours is a discipline whose profile and significance has increased measurably in recent times—this could be somewhat intimidating, but viewed from the right perspective, it represents a real opportunity to take leadership and drive the right outcomes.

It’s critical to your future success that you help to define a foundation for digital transformation that allows you to manage the current and future complexities that this revolution presents. Sitting back and inheriting someone else’s vision will not be an effective strategy.

So, exactly how should you think about the demands of digital business from the perspective of IT management? What things should you prioritize? And what are some of the critical investments you’ll need to make? Before we dive into our recommended approach, let’s take some time to understand the context in which you’ll be making some very important decisions.
Where once you may have had the luxury of choosing a core strategy that favored one set of outcomes over another—e.g., focusing on operating efficiency at the expense of a more innovation-led approach—now everything matters.

With so much dependence on technology for the future success of the organization, IT finds itself in the challenging position of needing to excel in every dimension. **Innovative services that give the business a competitive edge also need to be rock-solid, cost-efficient to deliver, and extremely secure.**

They’re also expected to be accessible anytime, anywhere and instantly adaptable to changes in business conditions. They should also be simple to audit, a source of business insights, and they also need to improve—continuously.

Just for good measure, when your business users need to interact with you—perhaps when something breaks, or they want something new—you need to be extremely easy to do business with. Your own shop front needs to be every bit as good as the online experiences your users are used to, because they can (and will) go elsewhere.

These demands aren’t restricted to your internal customers either: to attract and retain IT operations talent, it’s increasingly important that your own workplace experience is equally compelling. IT professionals demand tools and solutions that match the ease of use and simplicity of the apps they use. They also want to collaborate and share information, have mobile access, and get a rich source of decision-support data.

This upending of traditional IT strategy and operational models will have profound effects on how we think about pretty much everything in IT, and this is just the beginning. There’s no escape from now on: everything is on display and mission critical.
The recent focus on the disruptive forces of social, mobile, analytics, and cloud (SMAC) systems has rightly drawn a lot of attention and investment. There has been a valid mandate to adopt these transformative technologies as they genuinely do create new ways of working and doing business.

But SMAC is not enough: Digital business still depends on a much broader spread of infrastructure—some of it highly innovative. However, a great deal of it is the less visible, less exciting machinery of service delivery: the switches, the servers, the storage, the workloads, etc. Most organizations will have some combination of physical, virtual, cloud, and hybrid deployments, too—each requiring subtle (and sometimes not so subtle!) differences in how they’re operated.

All of it is critically important and all of it needs to be managed and optimized if anything is to work correctly. And as if that weren’t enough, the diversity of these technologies is increasing, while their degree of interconnectedness multiplies at an exponential rate.

For many, this introduces a tension between the need to transform the business through innovation, and the less glamorous work of “keeping the lights on” and having an effective operating platform.
Avoiding the Alignment Trap in Information Technology famously decried the approach of favoring business alignment over proper operating rigor, way back in 2007. You can’t, the authors argued, focus on highly innovative IT projects to better support the business if your own house isn’t in order. You need to have an efficient and repeatable set of services before you start aligning more closely with business demands. This makes perfect sense: there’s little point building an ultra-modern, super-slick app-driven environment if what you deliver only runs effectively 80 percent of the time, or is extremely expensive to operate, or more likely, both. However, in contrast to 2007, as we just explored in the previous section, now both alignment and efficiency must be pursued from the outset.

So how do you address these competing priorities? And what about all the other imperatives we now face in terms of security, compliance, and standardization?

The industrial model of production has a lot of best practices to offer IT management teams. A couple of hundred years of successive refinement and advances in technology have produced a hugely efficient means of tackling routine tasks with tremendous speed, efficiency, and consistency.

Manufacturers have long understood that if you want to free up resources to focus on innovation, and therefore stay ahead of the competition, your core operations have to be lean, mean, and automated.

The benefits of the industrial model go beyond the obvious outcomes of increased efficiency and repeatability, too. The standardization of processes tends to make things highly measurable, making them amenable to analysis and audit. They can also be controlled and tuned with clinical, split-second precision.

So how do you develop an IT management strategy that strikes the right balance between innovation and industrialization? And how do you make sense of the need to perform well in so many aspects? The answer lies in focusing your firepower in some carefully selected initiatives: each chosen to address the span of your current and future needs, but also designed to function as a balanced and cohesive whole.

1. Avoiding the Alignment Trap in Information Technology, MIT Sloan Management Review, Vol. 49, No. 1
Six strategies for Building your unfair advantage

In building an effective response to the escalating demands of digital business, it’s a good idea to pick projects that will have a disproportionately high impact and address multiple key requirements within each initiative. This will also drive a correspondingly higher ROI and make the very best use of constrained resources.

We’ve looked very carefully at the span of current and projected challenges you’re likely to face and have identified six strategic areas. We believe they form the most effective leverage points on which to focus your efforts. They are also intended to help build an approach that balances innovation with the need to industrialize.
We all now share an expectation of simple, easy interactions with technology and each other. We’re surrounded by digital experiences that are so intuitive and seamlessly integrated into how we live, that they feel like natural extensions of who we are.

From the way you provide support and share knowledge, to the applications your teams use to underpin effective service delivery— investing in a more human-centered approach is critical to your success.

**Steps to Success**

**Build a solid understanding of what it’s like to consume the services you provide:** Today’s consumers are in a position to choose their partners— your goal is to make sure they choose you.

**Focus on your own digital touch points:** How much more could you empower your business users while keeping the experience simple and intuitive? Are you taking full advantage of the context a mobile device can give to personalize your service? Are you facilitating peer-to-peer collaboration?

**Empower your IT employees:** Could your staff be more productive? Your objective should be to build a collaborative working experience that mirrors the ease and simplicity you offer to your consumers but is further enriched with effective decision support and process automation to extend their reach and impact.

Building intuitive experiences has a profound effect on productivity, employee satisfaction, and retention. You have a unique opportunity to drive innovation and help shape the modern workplace, while enjoying the benefits of a more standardized and efficient workflow.
Steps to Success

**Understand what the critical data resources are in your IT and management infrastructure:** How well do you understand the information and patterns in each repository? Where are you missing opportunities to improve decision support and automation?

**Focus on your model of your services and infrastructure:** Do you have an accurate and up-to-date model of what you have deployed and how it supports the services you deliver? Is the information used effectively in your support, change, configuration, and other critical processes?

**Use intelligence to get ahead of the game:** By proactively analyzing information being generated about the health, capacity, and utilization of your mission-critical systems, you will be able to take corrective action before the impact of any issues is felt and business performance is impaired.

The scale, complexity, and diversity of technology infrastructures are building with intimidating speed: effective use of data and analytics will be the decisive factor in your ability to understand and manage the sheer scale of the digital enterprise.
Agile Applications

Increasingly, businesses and brands are judged on the quality and usefulness of the apps and applications they provide—both from an external and employee perspective. While apps are fast becoming representative of the digital enterprise, they must also coexist with, and often integrate to, more traditional application and computing platforms.

For both apps and applications, speed to market and agility have become primary competitive weapons. **Streamlining your ability to procure, develop, provision, and manage apps (and applications) will give you a huge advantage in keeping pace with rapid business change.**

**Steps to Success**

**Do a pragmatic analysis of the bottlenecks in your application strategy:** Are you embracing the latest lean and agile approaches advocated in DevOps? Where could you shorten the application lifecycle? Are you causing problems with a less than robust process?

**Use automation:** You can boost efficiency and maximize integrity, right across the application lifecycle, with solutions that automate the coordination of the entire software stack: from development to pre-production and deployment.

**Put yourself in your customer’s shoes:** Make it easy to commission, find, install, and update the apps and applications customers need. Your goal should be to make the whole process quick and easy, regardless of the platform.

Apps and applications are arguably the most visible and important of the services you provide. Any investments you make in reducing the time and complexity of the application lifecycle will pay significant dividends in terms of your perceived value, in addition to the benefits of a leaner, more industrialized approach.
Adaptive Automation

The success of your digital transformation program depends to a very large extent on the strategic use of automation. The ability to consistently accomplish critical tasks rapidly and with minimal use of resources is the very definition of industrial efficiency—giving you significant competitive edge.

From an IT management perspective, you can drastically reduce the time and resources needed to provision or update systems, or to manage data and schedule workloads—across diverse platforms—while enjoying new levels of control, standardization, and documentation.

Steps to Success

Assess how effectively you currently exploit automation: What is your IT process maturity? Where might automation have the greatest impact? Do you have the right roles and skills to fully leverage automation technologies?

Come to grips with best practice and start simple: Learn how to take proper advantage of automation by working with experts in the field and then trialing your efforts in one or two key domains.

Roll out a broader strategy: Target provisioning and configuration, patching and compliance, scheduled workloads, cloud management, and DevOps, specifically.

Automation has long been the key to freeing up critical resources to drive the organization forward in manufacturing and other industrial practices. By contrast, the use of automation has been somewhat haphazard for many IT departments. The age of digital business demands that we rethink the role and value of automation as core to how we operate.
Optimized Infrastructure & Cost

Despite the radically different way people are consuming and using technology in the digital enterprise, there’s no escaping the need to get the very best from the core systems that you manage. The demands of the business and the performance of the infrastructure have to be well matched at all times.

Situational awareness and control are everything. **Knowing what you have, what it does, how hard it works, and how well it’s performing gives you an extremely solid foundation for operational excellence and the ability to avoid unnecessary expenditure.**

**Steps to Success**

**Be honest about the clarity of your operational picture:** Do you understand the full lifecycle of the assets deployed? Do you understand patterns of capacity and utilization? Do you proactively manage service quality and performance?

**Build a centralized hub for command and control:** The mandate for an integrated IT operations management environment gets stronger as technology estates grow and diversify.

**Drive continuous improvement and optimization:** This is not a one-and-done exercise. Operational excellence is a process, so embrace ITIL® (and other) best practices that exist in support of continual service improvement.

It may be one of the less glamorous aspects of being the primary service provider to an organization, but ongoing operational optimization is what keeps the whole enterprise running with costs at a minimum.
Compliance & Risk Mitigation

You more than likely have a very good handle on most of the core activities associated with risk and compliance. However, as information systems become more pervasive in the modern organization, so too do the risks inherent in digital technology. There is a renewed impetus to protect your critical systems, data, and intellectual property.

It’s not just about the extrinsic threats, either: the intrinsic integrity and robustness of the infrastructure and processes you maintain are now of profound importance to the continuity of the enterprise. Your approach to compliance and risk mitigation needs to be holistic and continuous.

Steps to Success

Renew your vigilance and vision: Are your risk teams able to keep pace with the current and emerging threat picture? Or are they too busy in perpetual mitigation? Are you ready for an explosion of IP-enabled device types?

Take a closer look at your processes: Often overlooked and neglected, but now crucial, revisit the integrity of your IT service management processes, especially those relating to change and configuration management.

Use intelligent mitigation in the datacenter: You can make the process of staying compliant much easier, faster, and more cost effective by proactively monitoring system configurations and taking automated remedial action to counter threats.

Those seeking to exploit sensitive information will relentlessly probe at your weaknesses, especially as a broader array of internet-enabled “things” join your network. With stiff regulatory frameworks already in place and more coming, this is a discipline that will determine the survival of your organization for decades to come.
Are you ready to Bring IT to Life?

As you plan your response to the new demands of digital business and accept the mission to bring IT to life, we hope the strategies outlined in this white paper will be useful in shaping your approach.

Learn more about our solutions, expertise, community, and how we can help you build the best foundation for digital transformation at www.bmc.com
BMC delivers software solutions that help IT transform digital enterprises for the ultimate competitive business advantage. From mainframe to cloud to mobile, we pair high-speed digital innovation with robust IT industrialization—allowing our customers to provide amazing user experiences with optimized IT performance, cost, compliance, and productivity. We believe:

- Technology is the heart of every business
- IT drives business to the digital age

Bring IT to Life