



IS YOUR TECHNOLOGY READY FOR THE NEW DIGITAL REALITY?

By Karalee Close, Michael Grebe, Marc Schuurig, Benjamin Rehberg, and Matthew Leybold

FOR TODAY'S BUSINESSES, THE only thing that is certain is uncertainty. COVID-19 has cast a clear and somber spotlight on the urgent need for resilience and digital capabilities. More than ever, businesses must be able to react to sudden and dramatic changes—in their supply chains, in their customer interactions, in how and where their employees work. But many companies simply aren't there yet.

That's a problem not only for immediate responses to COVID-19 but also for the longer-term future. Expectations for businesses, employees, and consumers have shifted with remarkable speed. Although the situation is evolving very differently across geographies and industries, one common theme recurs: the need to sense and shape the new reality. What will it take to compete going forward? Three elements are key: a relentless focus on the outcomes that matter; new ways of working; and savvy use of digital and technology.

This isn't a secret recipe. Digitally mature companies embrace all of these principles,

and our research shows that they significantly outperform digital laggards. They're what we call bionic companies, blending human and technological capabilities to achieve superior outcomes. These companies spark innovation, efficiency, and growth. They have better visibility into their businesses and can more quickly make the radical changes that crises demand. Fundamentally, they are more resilient.

If your goal is to be like them, your aspirations are now table stakes—and you need a better hand. The new reality, which pushes digital channels and remote working to the extreme, has revealed the limits of many digital transformations. For all their plans, many companies are still not as data-driven, customer-focused, and agile as they need to be. They haven't yet fully embraced advanced analytics and AI as critical capabilities for adapting to new trends. They have long-term goals but must now deal with unforeseen and crucial near-term needs.

To help companies prepare for the new reality and develop the necessary resiliency,

we have developed an approach that centers on four key imperatives: ensure business continuity, reset the investment portfolio, future-proof the tech function, and build adaptable data and digital platforms. The steps involved in this approach may not seem like transformation as usual—but as COVID-19 has made all too clear, it's no longer business as usual, either.

Digital and AI Maturity Bring Greater Resilience

In a crisis, businesses must quickly answer and address some critical questions. What is selling? How do we best interact with customers? Where are the trouble spots in our supply chain? How do we support employees who are working from home? During the COVID-19 crisis, many companies have struggled with their assessments and responses.

Already, we've seen that digitally mature companies can reap a performance dividend. In a BCG study of more than 200 companies, digital leaders achieved 1.8x higher earnings growth than digital laggards—and more than double the growth in total enterprise value. (See the exhibit.) We've also found that digital leaders channel a larger share of investment to areas such as AI as well as to reskilling, upskilling, and new ways of working. Our findings suggest that these companies are

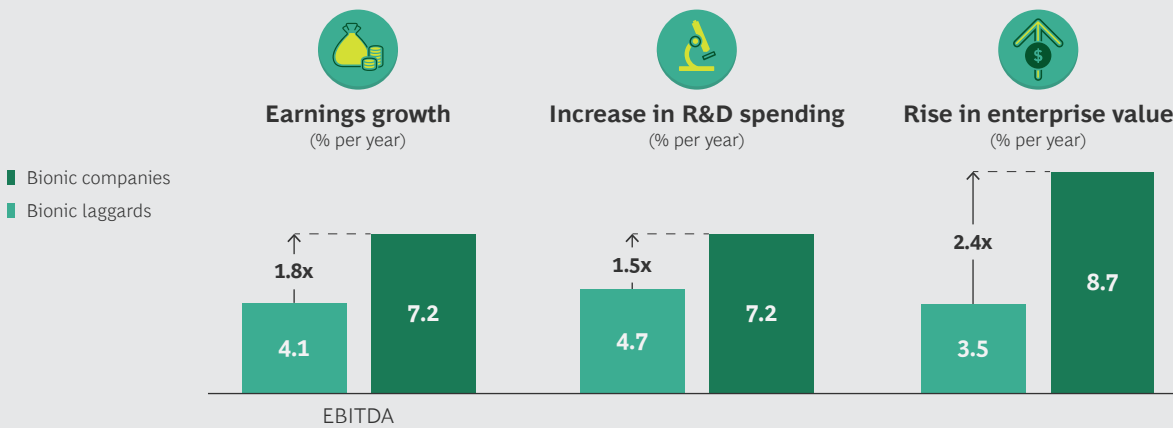
best situated to realize a “resiliency dividend” as well, by leveraging technology and digital capabilities to steer their business in real (or near-real) time, thereby strengthening their position in the midst of a crisis.

That resiliency could have important consequences in the global arena. Our study found that, overall, Asia—led by Chinese companies that act as the digital engine for the region—had the highest level of digital maturity. In the wake of COVID-19, Chinese companies are likely to accelerate their recovery at a pace that competitors in Europe and the US can't match.

Many companies have seen their digital transformations stall or fail to deliver the expected results, owing to fragmented efforts, legacy technologies, insufficient capabilities, or other factors. At the same time, many companies have built large portfolios of IT projects, some of which will pay dividends years down the road. COVID-19 has increased the pressure on companies to reduce cash out and to accelerate return on investment. Leaders need to focus their efforts appropriately if they are to right the ship and navigate the prevailing uncertainty.

In practical terms, that means rethinking your approach to technology and to transformation—prioritizing actions that

Bionic Companies Outperform Bionic Laggards in Earnings, Innovation, and Value



Sources: Capital IQ; DAI Global Database.

Note: The study looked at 224 companies, examining annual earnings growth (measured as change in EBITDA), R&D spending, and enterprise value for the period 2016 through 2018.

let you tackle your immediate needs, prepare for recovery and the new reality, and build a foundation for advantage in adversity. Here's how to do it.

Ensure Business Continuity

Technology plays a major role in keeping things running during a crisis. But many of the steps that you take out of necessity will create new opportunities and lasting efficiencies. So you need to think along two tracks: prioritizing a rapid response to the disruption and change that you face right now; and fast-tracking initiatives that will help sustain business continuity.

The rapid response will ensure employee safety and identify immediate gaps and fixes. Generally this means adapting core infrastructure to support remote working and digital collaboration tools (and ratcheting up cyber resilience, as the larger number of people working from home leads to an increase in cyber threats). For many companies, it also means facilitating digital delivery to customers who can no longer visit physical locations and implementing technology in order to improve communication with employees and to comply with relevant health and safety measures. A digital war room approach can be invaluable here, assisting you in orchestrating and coordinating crisis management.

The COVID-19 crisis has also highlighted the link between business continuity and new digital-first approaches. Technology is proving to be a critical lifeline in efforts to solve numerous operational issues, and forward-looking companies are reaping tangible benefits from it. For example, IoT-enabled warehouse technologies have increased transparency in global supply chains, providing real-time data at every stage in the life cycle—enabling swift responses to shifts in demand. The ability to leverage data to support real-time decision making is critical when employee movement is risky and absenteeism rises. Business leaders should work with their IT counterparts to accelerate the assessment and implementation of technology to improve and sustain key business processes.

Reset the Investment Portfolio

After tackling the immediate issues of business continuity, you should start looking down the road. Crises tend to have common consequences: business needs change, the mantra becomes “do more with less,” and necessity drives a heightened level of innovation. Financial pressure often forces companies to reduce resources and yet accelerate value creation. Those dynamics might seem at odds with each other, but a savvy examination or reset of the IT/tech project portfolio can mitigate the impact of the crisis and lay the foundation for a faster, more successful recovery.

Now is the time to adjust priorities on the basis of value and cost. Most companies have seen their business context shift dramatically as a result of the pandemic, and they should shift their investments accordingly. This means focusing spending on near-term business outcomes and enterprise digital capabilities. And it means moving quickly.

A typical traditional project portfolio prioritization takes several months and requires the involvement of many stakeholders. But the COVID-19 crisis calls for a more focused approach. A small committee that maintains a laser focus on business value and pressing topics (such as remote access for employees, robust digital channels, and data analytics to improve forecasts and supply processes) should be able to complete the triage in two sprints of two to three weeks each.

In conducting the triage, the committee should pay special attention to four groups of projects:

- **Digital Projects.** Many digital projects are not delivering value. Others originated in a business environment that no longer exists. In the reset, the focus should be on a few high-value digital projects that are critical to ensuring cash flow and to rebounding. Examples may include new online distribution channels, dynamic pricing, and projects to leverage data and analytics for sales steering.

- **Long-Term Projects to Replace Legacy Platforms.** Most companies have at least one major system replacement project in progress—for example, enterprise resource planning (ERP) or customer relationship management. Programs that are near completion should continue, but those with a longer time horizon should be subject to careful review, with two critical questions in mind. First, does the project generate real business value, and can planners accelerate value generation (for example, by breaking down the project into a series of smaller initiatives that deliver value in the short to near term)? Second, can planners reduce the project’s run rate and future operating cost (perhaps by adjusting vendor incentive schemes to create more “skin in the game” on their side)? The world may look very different from the way it did when the project started. If you can’t still see the expected value, that’s another reason to hit the stop button.
- **Projects That Enable the Workplace of the Future.** The ability to support remote working on a large scale is no longer optional. Many organizations have a patchwork of projects in the works to upgrade user devices, establish collaborative platforms, renew video conferencing capabilities, and so on. It is time to consolidate those efforts in order to accelerate delivery and ensure adherence to the latest cyber and IT security standards.
- **Business-Critical Projects.** Strategies inevitably change during a crisis, so it’s crucial to examine projects from a strategic perspective. If they remain mission critical, continue them. If not, consider ways to retime and adjust them—for example, by temporarily reducing the team size to reduce your burn rate while protecting the knowledge capital you’ve built up. Some existing goals, such as expanding digital channels, may become more important than ever, raising the standing (and potentially changing the timing) of

related projects. Regulatory projects should continue, too; but evaluate their nonregulatory parts (if any), and consider whether to postpone them.

In many instances, adjustments to the project portfolio will have vendor implications. You’ll need to identify affected vendors and work with them to define new targets and approaches. And don’t be shy about negotiating. Crises change your landscape, your resources, and your needs. Vendors have a stake in your recovery, and they must be flexible in helping you achieve it. Among the many possibilities in this area are stretching utilization over a longer period, terminating parts of the scope, and revisiting financial terms.

A portfolio reset can have an immediate impact, as halted and scaled-back projects reduce cash out. Meanwhile, by prioritizing value-adding projects, you set the stage for near-term recovery and longer-term gains.

Future-Proof the Tech Function

Resiliency is also about how you work and what skills you can draw on. Digital and technology talent is a critical asset, and the COVID-19 crisis has reinforced that reality by sparking rapid change in business needs. But the crisis has changed the playing field, too, as budgets and priorities shift. In short, it’s time to retool your tech talent strategy. The key is to make your adjustments as precisely as possible, using a three-prong approach: pivot, accelerate, and stop.

Pivot. You’ll want to build off your existing talent plans to emphasize future-ready capabilities and to support business strategies while reducing costs. The top two pivot levers in this regard are sourcing and location.

In a crisis, your first priority is to keep your providers’ wheels turning. (See the sidebar, “How Resilient Is Your Sourcing Setup?”) But thriving in the new reality also requires a deeper dive into your sourcing model. The idea is to foster internal talent and spark innovation (by insourcing the

HOW RESILIENT IS YOUR SOURCING SETUP?

Vendors typically account for a substantial portion of a company's workforce. So resiliency depends in large part on how providers and clients act and interact. In the COVID-19 crisis, enterprises have worked with vendors to address initial threats to business continuity—for example, by procuring assets to support work from home. But that's just the top of the to-do list.

As markets stabilize and recover, businesses should focus on a few key areas to boost resiliency and to reduce risk in their vendor relationships:

- Train your retained organization as a backup workforce. Tighten collaboration with vendors to improve training and knowledge transfer.
- Develop a governance structure with vendors to support rapid alignment of ongoing operations and recovery. As market ramp-ups evolve, companies need to adapt their capabilities.
- Revisit contingency plans with providers to identify and close gaps in business continuity and third-party

risk plans; this may entail scaling back operations, stopping or delaying projects, and temporarily relaxing service-level agreements, among other things.

- Define and implement a plan to reshape the IT infrastructure environment to address demand growth.
- Explore the viability of other service delivery options such as software-as-a-service alternatives, AI-powered tools, and robotic process automation.
- Incentivize vendors in areas that are crucial during recovery—for example, by defining new metrics and redrafting contractual terms to incorporate service delivery flexibility and sourcing resilience.

All of these actions require cooperation between companies and providers. Crises will end, but close collaboration shouldn't. Sourcing is truly resilient only when both parties are in it together.

work closest to your intellectual property) while reducing costs in areas less closely linked to competitive advantage (by outsourcing more commoditized work). By leveraging new ways of working (such as agile and DevOps), along with AI and machine learning, many companies can accomplish the same work as their contractors with 20% to 40% fewer employees.

Location can be another powerful lever for balancing talent access and cost. In the wake of the COVID-19 crisis, many companies will fundamentally rethink their location strategy, looking to ensure possession of sufficient talent and services across geographies. This is a great opportunity to go beyond a typical shared services center—with its low-paying, low-level jobs—and in-

stead create a tech hub that develops and benefits from local talent, providing leadership, career paths, and mentoring.

Although pursuing recruiting and retention during a crisis may seem counterintuitive, these are key pivot levers. Other companies, including many startups, may be shedding key talent. And in many markets, competition for critical talent will quickly heat up again during recovery.

Accelerate. You should also accelerate efforts that build key skills, capacity, and efficiencies. At the top of the list are talent plans for digital, AI and analytics, the cloud, and cyber resilience. Now more than ever, mastering the fundamentals of digital transformation and company data is a

source of competitive advantage. Consequently, in addition to insourcing critical expertise and hiring top talent, you'll want to double down on training and upskilling the people who know your company best: those who already work for it. The most successful talent strategies aim to find the right blend of hiring and developing employees.

Upskilling should not be about classrooms or traditional learning and development programs. In our experience, the most effective way to learn is through hands-on work on real projects, with a specific focus on skill building. Upskilling programs are most successful when they follow the 10/20/70 rule: 10% academics, 20% mentoring, and 70% delivery on a project. Because matching the right employees with the right work and mentors is crucial, you should bring HR and strategic workforce planning together with your portfolio manager to align on content, staffing, and pairings.

Also ripe for acceleration are new ways of working, a collaboration-ready infrastructure, and a move to the cloud. Even before COVID-19, bionic companies demonstrated that investments in this area pay off. In a post-crisis world, the ROI will be even greater.

Stop. Some things need to halt. In our experience, between 25% and 60% of the tech workforce is involved in indirect activities—coordination and other steering and administrative tasks—that are redundant or don't create independent value. By drawing up a map of current roles, skills, and activities you can zero in on activities to eliminate. This will enable your workforce to focus on value-generating tasks, generating real efficiencies.

Finally, although talent plans typically look three to five years down the road, you'll want to develop a series of six- to eight-month workforce scenarios. In light of the uncertainty about what lies ahead, scenario planning can give you a set of options that aligns more closely with evolving situations, constraints, and requirements.

Build Scalable and Adaptable Data and Digital Platforms

Resilience requires adaptable technology and rapid access to data. Digital champions have shown the way here: when you foster agility and data-driven decision making, you gain more immediate visibility and insight into your customers and processes. As a result, you can respond faster to evolving situations. The problem is that many large companies are long on ambition but short on tangible value creation. They often pursue large-scale modernization of their core business systems, which will only start yielding tangible rewards or increasing adaptability several years down the road.

A better approach focuses on three key pillars: incrementally and pragmatically accelerate data use cases that drive business outcomes; build a robust data layer; and modernize your architecture with targeted investments. The idea is to identify how to use data to meet critical near-term needs and then to implement those use cases while building toward your modern technology North Star. That way, instead of waiting for the grand unveiling, you begin seeing the benefits and creating key capabilities early on.

At the center of this approach is a modular data and digital platform (DDP)—a unified architecture that combines applications, technologies, and data to permit rapid, at-scale implementation of business use cases. Crucially, the DDP decouples or “liberates” data from the underlying applications, creating a separate content layer that facilitates data sharing and usage. This makes it easier to develop digital services as needed.

The DDP also lets you decouple high-value use cases from the transformation of your core legacy IT. This unlinking is extremely important. Many companies suffer slowdowns from the hundreds or thousands of systems they have added to the mix over many years. These fragmented environments are not conducive to rapid change or resiliency. A DDP enables you to rapidly deliver the business outcomes that matter most (whether they boost revenue, reduce costs, or support new ways of working).

And in parallel, you transform your legacy environment.

You can gain further flexibility by using APIs and [microservices](#) to build out your DDP in a consistent and standardized way. Instead of creating each application and service from scratch, you can leverage existing components, speeding up delivery while reducing complexity. Indeed, simplifying your data and application landscape is an important and readily attainable goal as you build out new digital services. Over the years, most businesses have accumulated a significant amount of technical debt—the additional work and cost involved in operating with an array of overengineered, redundant, obsolete, and legacy solutions. As your newer, more efficient platform develops, much of the older stuff can go.

Of course, this approach works best when you identify and prioritize the right opportunities. To find good initial candidates, look in places that matter most for business value. For B2C companies, digital marketing and targeting may provide a good launch point. COVID-19 has highlighted and exacerbated challenges that many organizations face: flat or decreasing sales, cumbersome campaign processes, and data siloed within specific applications and departments, to name a few. A smartly designed use case—one that leverages data to better understand customer preferences and behavior—can move companies away from blunt-force marketing and toward more timely and personalized messages and promotions. Businesses can more accurately identify, segment, and target existing and prospective customers, develop 360-degree customer intelligence, and feed automated processes. Already, some marketing use cases are yielding significant top-line improvement.

For B2B companies, end-to-end transparency into the supply chain should be a top priority. Many large-scale industrials, telecommunications providers, and other businesses have far-flung supply chains that are difficult to track quickly and accurately.

Data often spans numerous systems and silos, which can lead to delays or inconsistencies in efforts to build a picture of how things operate. By linking the DDP's data layer to existing ERP and other business systems, companies can aggregate, map, and harmonize their supply chain data—and obtain a real-time, single source of truth. They can also gain quick insight into errors and hiccups, and how to correct them.

Some best practices can help smooth the DDP journey. Robust [data governance](#), which ranks among the least mature of the 36 dimensions in BCG's [Digital Acceleration Index](#), is critical. Another important step is to review your development practices. By using a low-code application development environment, for example, you can deploy solutions faster while still getting the customization you need. Also, embrace cloud infrastructure as you build your DDP, decommissioning legacy infrastructure where you can. And crucially, build your new above-the-data-layer solutions according to the latest insights into cybersecurity and resilience.

CRISES WORK ON their schedule, not yours. And they are relentless, sowing uncertainty and disrupting everything in their path. In crisis conditions, resilience is a business necessity—and increasingly, a strategic weapon fueled by digital capabilities. While other companies tread water, or worse, you can support employees, adapt to changing circumstances, and accelerate recovery. Uncertainty will remain long after the COVID-19 crisis has passed, but you can be ready for it—and you can react quickly and flexibly to whatever conditions arise.

About the Authors

Karalee Close is a managing director and senior partner in the London office of Boston Consulting Group and the global leader of BCG's Technology Advantage practice. You may contact her by email at close.karalee@bcg.com.

Michael Grebe is a managing director and senior partner in the firm's Munich office. You may contact him by email at grebe.michael@bcg.com.

Marc Schuurin is a managing director and senior partner in BCG's Amsterdam office. You may contact him by email at [schuurin.marc@bcg.com](mailto:schuuring.marc@bcg.com).

Benjamin Rehberg is a managing director and partner in the firm's New York office. You may contact him by email at rehberg.benjamin@bcg.com.

Matthew Leybold is an associate director in the New York office of BCG Platinion. You may contact him by email at leybold.matthew@bcg.com.

Acknowledgments

The authors would like to thank the following BCG colleagues for their valuable contributions to this article: Vanessa Lyon, Heiner Himmelreich, Rajiv Gupta, Ruth Ebeling, Oriol Solans, Thomas Bohne, and Marc Roman Franke.

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