

The Moment of Truth in Every Digital Journey

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Leading in the New Reality
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The Moment of Truth in Every Digital Journey

Many companies that pursue a digital transformation get stuck. Digital initiatives that have broad potential never emerge from individual business units (BUs) or functional areas. Why? Because the companies haven't developed the necessary capabilities to scale digital throughout the enterprise and make digital the normal way of doing business.

To avoid getting stuck, companies must pass a critical inflection point by doubling down on their digital transformation. The inflection point is a moment of truth when a company needs to decide if it will refocus its efforts using the capabilities that it has built and the lessons that it has learned so far. Using data from BCG's Digital Acceleration Index, we have identified five boosters that companies can use to accelerate past the inflection point and some practical steps that executives can take to focus their teams on these boosters.

The Three Stages of the Digital Journey

Pressure from various stakeholders is pushing companies to pass the inflection point and make digital the standard way of doing business. Customers expect new digital products and services; digital natives expect more creative, flexible work environments; and partners across a global supply chain expect seamless, digitized transactions. Moreover, making digital the norm is necessary to improve a company's agility to respond to market changes, stay ahead of potentially disruptive technologies, improve risk management, and ultimately deliver value to internal and external stakeholders.

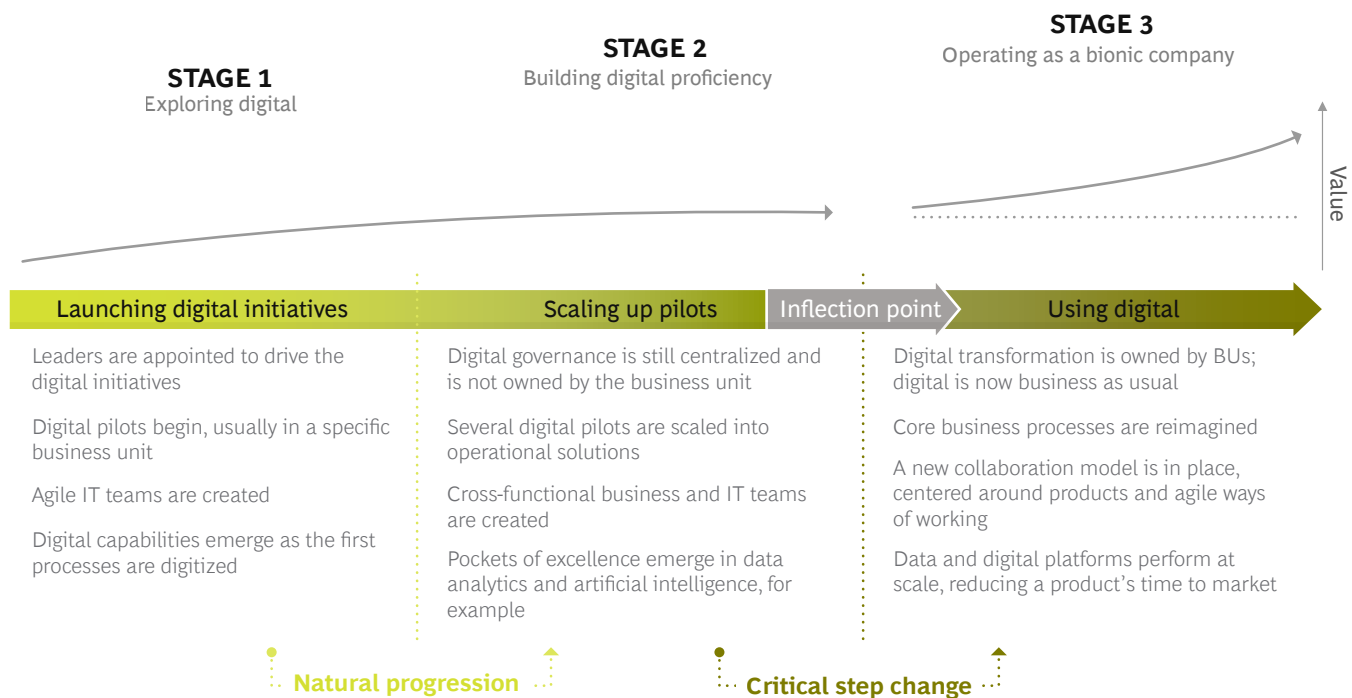
During the typical digital journey, a company goes through three stages. (See [Exhibit 1.](#)) In the first stage, it is exploring digital. A handful of leaders assess potential projects and launch the first digital pilots to prove their value. These pilots are small in scale and mostly focused on applying specific technologies, but they help the first agile teams develop the company's first set of digital capabilities and lay the foundation to support feature development. Success at this stage can create excitement and momentum for change that leads naturally to the second stage: building digital proficiency.

The second stage's objective is to scale the pilots into operational solutions—a stronger proof of their value. These initiatives are brought to life in the BUs but are centrally governed in terms of budget and scope to ensure alignment across all business units. The human and technology capabilities being used for the new solutions are limited to a specific, often functional context. During this stage, technology departments take the lead in setting the digital agenda, often motivated by emerging technological opportunities and better data to drive agile development. When technology departments set the agenda, sometimes the objectives of the initiatives are not well coordinated with the needs of the BUs.

Moving from the first to the second stage can feel like a natural progression, but continuing to the third stage—operating as a bionic company—requires more fundamental changes. BUs must take active ownership of the digital initiatives and transformation efforts. BUs also need to find and commit resources and capabilities to drive their digital agenda forward. Bionic companies engrain human and technology capabilities into core processes, reinvent how employees do their work, and revamp how business is conducted.

Our research showed superior results for bionic companies. From 2017 through 2020, bionic companies grew their earnings before interest, taxes, depreciation, and amortization 1.7 times faster than digitally proficient companies increased their EBITDA. In addition, bionic companies grew their total enterprise value 2.2 times faster than digitally proficient companies increased theirs. Moreover, we found that 43% of bionic companies generated more than 10% of EBIT from their digital-transformation investments, while only 27% of digitally proficient companies generated that return on such investments. Many bionic companies also used digital to reinvent their business models: 31% generated more than 15% of their revenue from adjacent digital businesses, products, and services, while only 18% of digitally proficient companies produced the same result.

Exhibit 1 - The Typical Digital Journey Has Three Stages



Source: BCG analysis.

Bionic companies' superior digital capabilities may have also contributed to their resilience during the COVID-19 crisis. Even though their valuations took a huge hit in March 2020, bionic companies grew their market capitalization 27% from February 2020 through January 2021, while companies that were exploring digital grew just 3% in the same period. (See [Exhibit 2](#).)

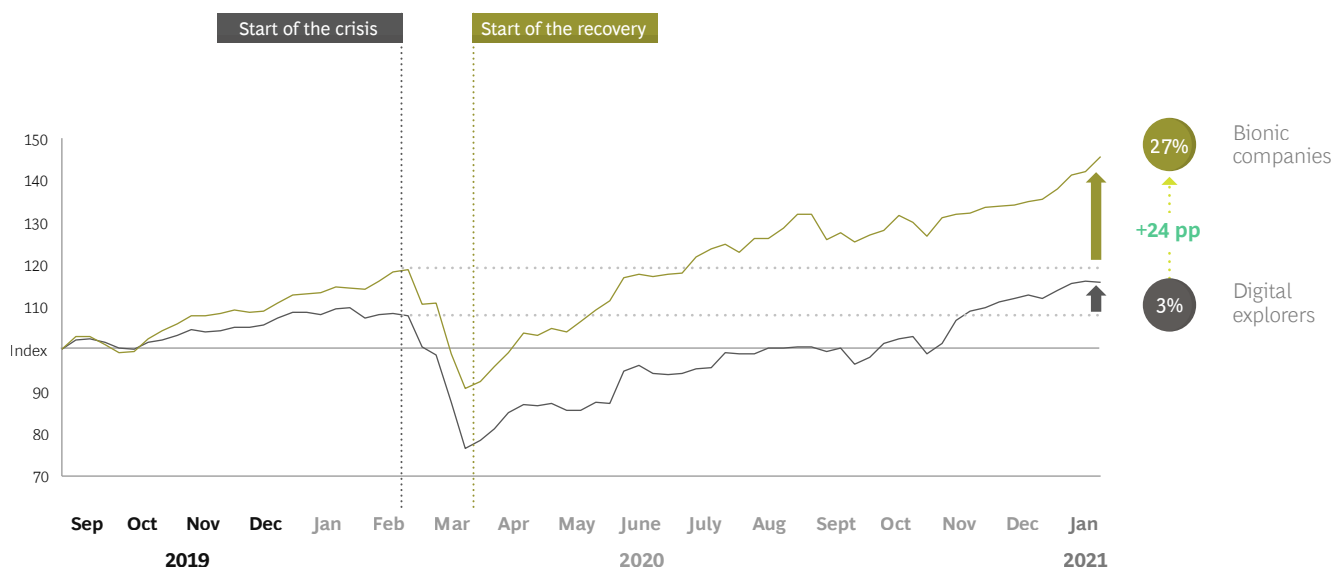
The Five Bionic Boosters

We have identified five boosters that can accelerate the transformation to a bionic company. (See [Exhibit 3](#).) Some boosters are more powerful than others, but because they are so interconnected, it is imperative to activate them simultaneously to get the maximum benefit from each. For example, unlocking and scaling high-value digital initiatives more quickly requires vital artificial intelligence (AI) capabilities, so a company needs to activate the second and third boosters at the same time. We estimate that engaging all boosters simultaneously can improve the odds of becoming a bionic company by a factor of ten.

Let the business lead. Digitally proficient companies centralize the steering and governance for their portfolio of digital initiatives, but BUs in bionic companies actively own and drive their digital agenda and capture value. Each BU sets its agenda and ensures that its digital vision translates into tangible goals that are consistent with its business objectives. Each BU also communicates with and makes its case directly to the board of directors to ensure that its goals are consistent with the company's overarching digital strategy. And each BU works closely with the chief digital officer (CDO) to secure capabilities and resources for its initiatives and to align on a scalable architecture.

In 2020, we surveyed 2,296 companies across the globe to assess their digital maturity. (See the sidebar "[Our Survey Methodology](#).") We found that 44% of bionic companies—compared with only 13% of digitally proficient companies and 4% of companies that are exploring digital—cascade digital responsibilities down to BUs and give BU leaders a seat at the boardroom table. The story is similar when it comes to funding. Although 51% of bionic companies coordinate with the CDO to standardize the budget process, only 15% of digitally proficient companies do the same.

Exhibit 2 - Bionic Companies' Market Capitalization Began Recovering Sooner from the Pandemic



Source: BCG's Digital Acceleration Index database.

Note: The global sample is based on 193 companies from 38 countries. Bionic companies are companies with a Digital Accelerator Index score of 67 (out of 100) or higher. Digital explorers are companies that are launching digital initiatives and that have a Digital Accelerator Index score of 43 or lower. pp = percentage point.

For example, an industrial manufacturer was using centralized digital governance and top-down agenda setting to bring several digital solutions to market. But this approach was not properly incentivizing the BUs to push the digital initiatives forward. In response, the company put a senior manager in charge of a dedicated digital team. This team supported the individual BUs, helping them design and execute their digital roadmaps in a way that was consistent with the company's overall digital strategy. Furthermore, this digital team worked with the BUs to design the right incentives that would drive the digital initiatives forward and facilitate cross-BU initiatives.

Focus on high-value initiatives. Digitally proficient companies often define initiatives quite narrowly, such as digitizing certain processes in a specific part of the value chain. Bionic companies, by comparison, focus on a combination of high-value initiatives that aim to reinvent core operations end to end. Taking this all-encompassing view is often what separates companies that transform the business model from those that simply digitize business processes. Although 57% of bionic companies rework their business model fundamentally and build sustainable digital capabilities, only 33% of companies that are exploring digital take this disruptive approach.

For example, an insurance company was organized around processes, not customers. The insurer realized that this setup was impeding its digital progress and decided to reorganize to have an end-to-end view of the customer journeys. By combining more than 3,000 processes into 30 customer journeys—and creating agile teams focused on these customer journeys—the company significantly reduced the amount of time required to bring its products to market.

Educate the workforce. Automation gives employees more time to work on redesigning processes end to end and reinventing the way they conduct business. Employees must be trained to leverage data and technology to improve decisions and outcomes. This is where bionic companies invest a lot. About 27% of bionic companies have upskilled 25% or more of their employees on digital technologies and tools—for example, AI and machine learning (ML)—while only 11% of companies that are exploring digital have upskilled 25% or more of the workforce. Moreover, 73% of bionic companies have integrated AI and ML into everyday, employee-managed processes, whereas only 7% of companies that are exploring digital have done the same.

Exhibit 3 - Bionic Boosters Raise a Company's Chances to Pass the Inflection Point

Booster	Primary KPIs	The likelihood that a company will accelerate past the inflection point ¹
1 Let the business lead	The CEO or a business unit head is involved in the execution of the digital initiative	1.2x
2 Focus on high-value initiatives	Investments are being made in high-value initiatives	1.4x
	The scaling of digital initiatives is accelerating	1.1x
3 Educate the workforce	A high share of the workforce is skilled in AI and analytics	1.7x
	Core processes are digitized	1.6x
4 Adopt platform thinking	A digital platform enables cross-functional, product-oriented collaboration	1.1x
5 Leverage data and AI	AI is at the core of the digital transformation	2.5x
	Software applications are digitally ready—able to interact via APIs and microservices	1.6x

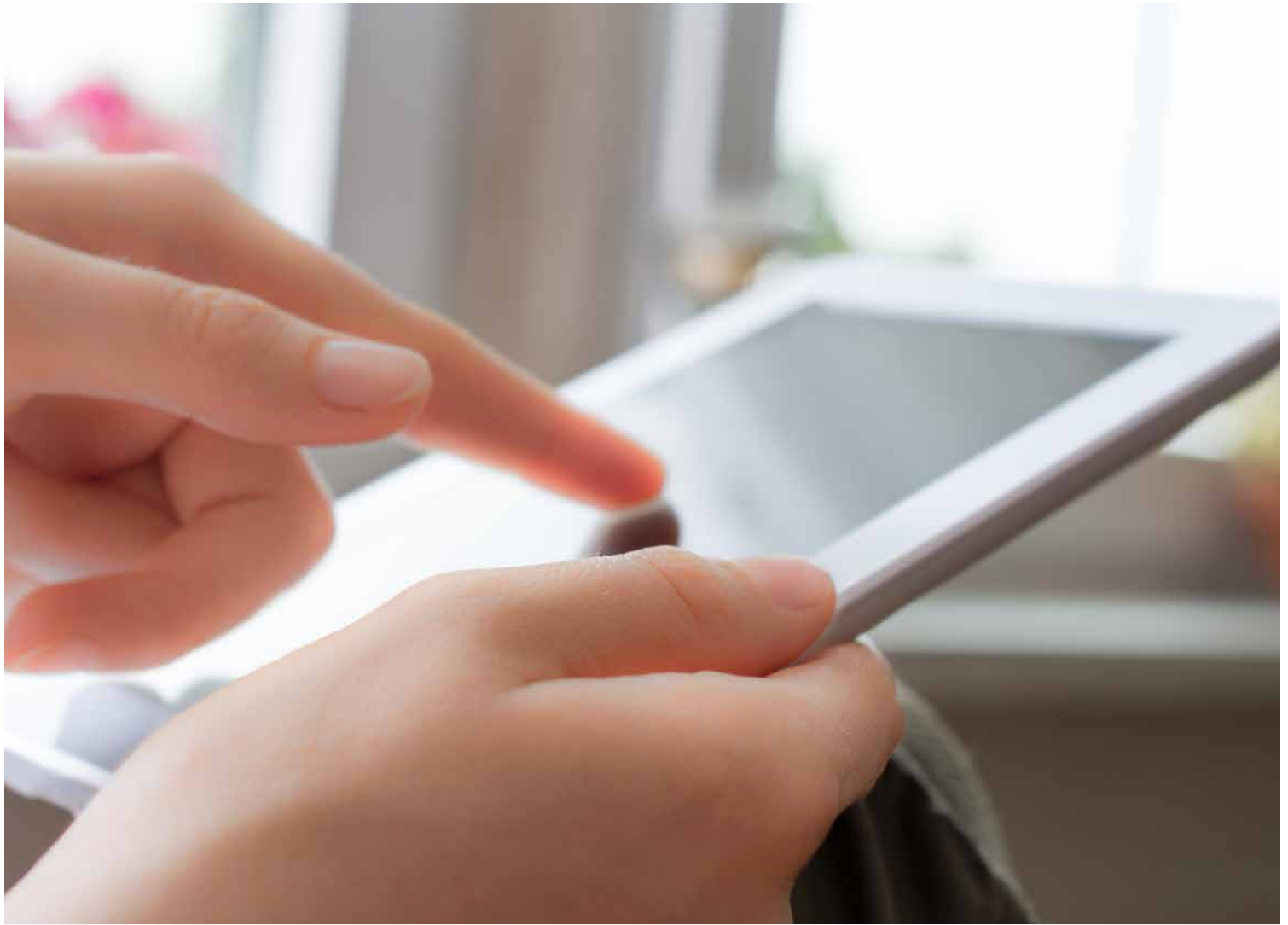
Source: BCG's Digital Maturity Assessment survey, 2020.

¹To determine which input KPIs have the most predictive power, we performed logistic regression using a categorical variable of companies that were below and above the inflection point. AI = artificial intelligence; API = application programming interface.

An international airline had developed sophisticated analytic tools and a state-of-the-art data platform, but there was a problem. Operators who repaired the airline's planes tended to revert to their old ways of doing the job. To encourage the adoption of the digital tools, the CDO worked with BU heads to put upskilling programs in place that demonstrated the benefits of the new tools and to establish clear metrics and targets for adoption.

Adopt platform thinking. Bionic companies adopt digital platforms and implement company-wide governance to democratize data—to provide all employees access to the data they need. By facilitating cross-functional teams to draw on data from across the organization, these platforms also improve agility and promote more effective use of data. Among bionic companies, 42% have platforms with data lakes that support advanced analytic tools. Over time, this cross-functional accessibility establishes what we call platform thinking—a kind of common approach that makes it progressively easier for people across the enterprise to communicate, to reorganize, and to center themselves around products rather than a function or BU. This more flexible platform thinking is inherently better at allocating talent for product development. Our research found that 24% of bionic companies have already moved to this platform model, whereas only 14% of digitally proficient companies have done so.

A large retail company was struggling with a monolithic legacy system that made sharing data across channels very difficult. This, in turn, prevented product teams from efficiently building end-to-end customer journeys. In response, the company invested significantly to move to a technology architecture that used customer domains (such as customer service). At the same time, it redesigned the organization's structure and governance using the same domains as a blueprint. This new approach to customer data helped the company double the revenue growth of its digital platforms in the course of just one year.



Our Survey Methodology

For our study, we asked 2,296 companies across 28 countries in Asia, Europe, and North America to estimate their digital maturity on a scale of 1 to 4 in 36 categories. We then aggregated those raw scores and calculated the resulting values to their responses on a scale from 0 to 100. We weighted them to determine each company's overall performance on our Digital Acceleration Index (DAI).

Bionic companies combine technology with the flexibility, adaptability, and comprehensive experience of humans to transform operations, improve customer experiences and relationships, and develop new products and businesses. Companies with a DAI score from 67 to 100 qualify as bionic companies, those with a score from 44 to 66 are building digital proficiency, and those with a score of 43 or less are exploring digital. We examined nine industries: consumer goods, energy, financial services, health care, industrial manufacturing, insurance, public sector, technology, and telecommunications.

Leverage data and AI. Bionic companies are increasingly committed to integrating AI into business processes and leveraging its considerable power across the enterprise. We found that 37% of bionic companies put AI at the core of their transformation and rolled it out across many processes. By comparison, only 15% of digitally proficient companies have put AI at the center of their digital transformation. Most consider AI just an enabler—not a key driver—of their transformation efforts. Hence, it's not surprising that bionic companies are also better at scaling AI initiatives. We found that 74% of bionic companies have successfully scaled more than 10% of their AI initiatives—an achievement by only 54% of digitally proficient companies and 32% of companies that are exploring digital. We also found that 29% of bionic companies have started to integrate AI into their business models—an undertaking at only 9% of digitally proficient companies and 1% of companies that are exploring digital.

For example, a company in the restaurant industry uses ML to improve labor allocation and customer service. The company realized that by incorporating external data into its existing data platform, it would be able to forecast customer traffic in its restaurants—in 15-minute increments. In turn, the company would be able to optimize worker schedules and improve its top line.

Three Concrete Steps

We recommend three steps to prepare the organization for putting these boosters into practice. All require that senior leaders bring together the right people to talk about the right issues.

- **Put the business in charge.** Bring BU leaders together to discuss their digital goals and the return on their digital investments so far. To encourage BU leaders to own their digital transformations, to hold them accountable, and to ensure that they deliver value, design incentives on the basis of appropriate KPIs (with AI at the core of those efforts).
- **Mandate a digital upskilling program.** Ask the CDO, chief information officer (CIO), and the chief human resources officer to determine the upskilling programs that BUs need in order to implement their digital initiatives and achieve the business outcomes they envision. These upskilling programs need to be tailored in cooperation with the BUs to develop a concrete plan for training each BU's employees in specific technical skills (for example, the AI or ML skills needed to use data and analytic tools). Define specific KPIs and targets to measure technology adoption consistently.
- **Double down on tech and data.** Meet with the CDO and the CIO to create a roadmap for putting the necessary technology and data capabilities in place to achieve strategic business targets as well as specific business outcomes. Define KPIs that measure progress toward constructing a company-wide digital and data platform.

On the path to the next wave of value creation in the new digital reality, every company will need to get as much value as possible from its digital journey. Eventually, this will mean confronting an inflection point that separates the digitally proficient organization from the bionic company. Accelerating past this inflection point demands a step change in a company's digital transformation. The five boosters discussed here can help every company realize and embrace its bionic future.

Customers, digital natives, and partners are pushing companies to make digital the standard way of doing business.



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