



Are Digital Natives Losing Sight of the Digital Basics?

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By [Patrick Forth](#), [Romain de Laubier](#), [Michael Grebe](#), [Amanda Luther](#), and [Tauseef Charanya](#)



Many of the original architects of digital disruption are slowing down, squeezed between a new class of digital incumbents that are gaining traction and a younger crop of speedy digital innovators. To get back on track, they need a renewed focus on the factors that drove their initial success.

They may be only in their early twenties, but the older digital natives are feeling their age. The 2022 tech selloff has taken the air out of premium valuations, and behind the market retreat, many former high-fliers now appear vulnerable to business disruption themselves. Just two decades ago, the dominant business paradigm saw digital natives driving sluggish incumbent companies into extinction, with striking examples in media, retail, and travel. Now a resurgent class of digital incumbents are fighting back, and aging digital natives are exhibiting legacy behaviors themselves.

BCG research involving more than 950 companies worldwide found that digital natives born before 2005—the same upstarts that turned “digital disruption” into a cause for boardroom alarm—are subject to many of the limiting factors that constrain growth at legacy companies. As they “moved fast and broke things,” these companies often failed to embed into their organizations and cultures the capabilities—both human and technological—that sustain innovation and growth.

There’s little question that superior **digital capabilities** will underpin many aspects of future competitive advantage. Older digital natives (and

younger companies, too) need to maintain a tight focus on the five essential attributes that have driven their success:

- Leadership with a purposeful digital strategy
- A culture that promotes innovation
- An agile operating model
- The ability to attract, retain, and develop world-class digital talent
- Open-architecture technology and data platforms

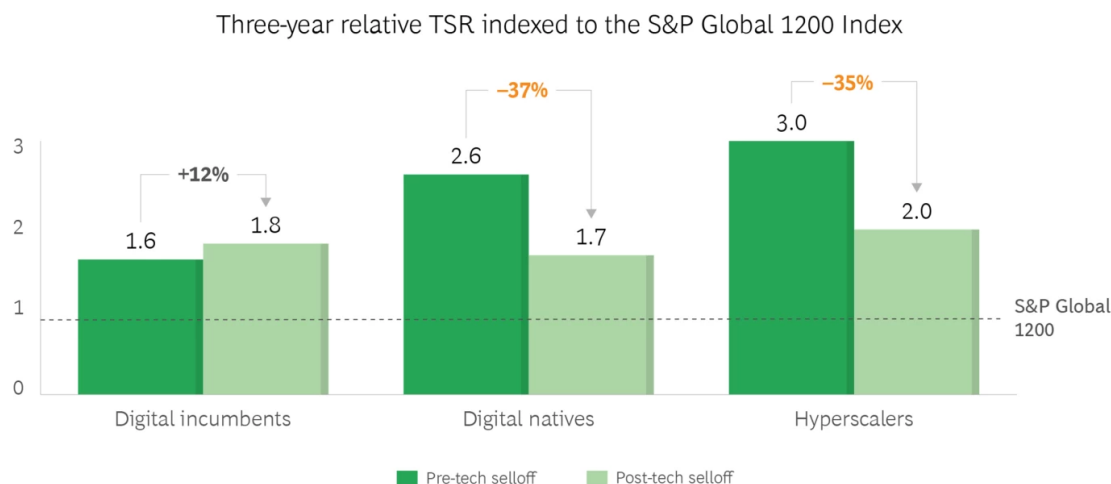
Our survey of the extent to which companies possess these attributes suggests that older digital natives are starting to lag both their younger counterparts and leading incumbents that are building their own digital capabilities. All companies are subject to the encumbering effects of age and size (what may be thought of as a kind of entropy or decay). It's becoming clear that older natives, in particular, need to get back to digital basics.

Shifting Fortunes

Before the 2022 technology selloff, digital natives broadly produced higher shareholder returns than incumbents, with investors giving them credit for faster revenue growth. Still, a number of traditional companies were catching up. As we reported in December 2021, incumbents that **successfully executed a digital transformation** improved EBIT by 21%, compared with only 10% for those that did not, and this performance translated into shareholder value. Examples include Domino's Pizza and John Deere, which produced three-year shareholder returns of 31% and 32%, respectively, between December 31, 2018, and December 31, 2021. This trend has continued. In February 2022, we observed that a new class of **digital incumbents**—traditional companies that are making progress in

systematically building digital capabilities—were pulling away from their legacy counterparts and closing in on digital natives in terms of ability and performance. (See the sidebar, "The Corporate Digital Categories.") As of July 31, 2022, these companies had essentially closed the gap, as investors downgraded tech stocks in an inflationary environment and rewarded digital incumbents for improved operational performance. (See Exhibit 1.) Both digital natives and digital incumbents also lagged the so-called hyperscalers (the dozen or so companies such as Amazon and Google that provide cloud, networking, and internet infrastructure at unmatched scale) but again, this gap closed post-selloff.

Exhibit 1 - Digital Incumbents Have Closed the Gap on Shareholder Returns



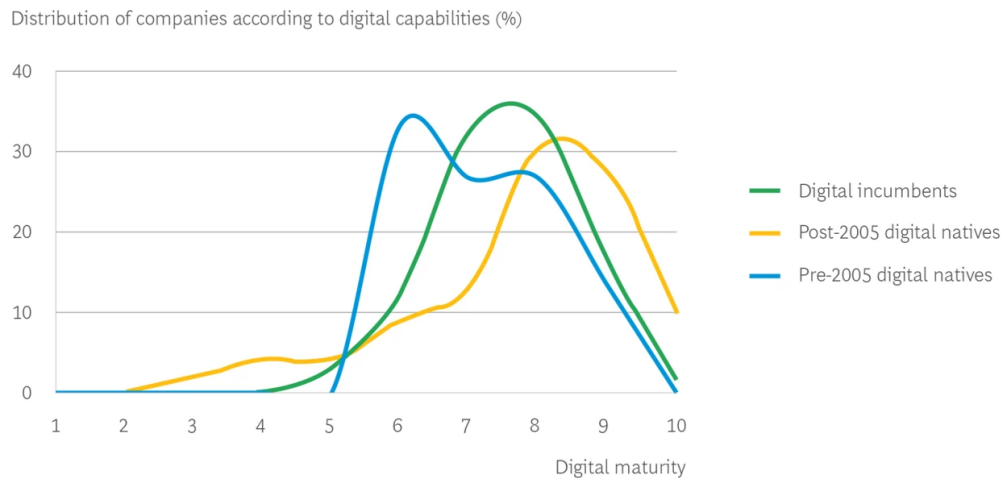
Source: BCG global digital transformation study, 2021–2022.

Note: Pre-tech selloff TSR is calculated from January 31, 2019, through December 31, 2021; post-tech selloff is calculated from July 31, 2019, through July 31, 2022.

Significant dichotomies are also emerging in the digital capabilities (assessed on the basis of the five attributes described above) between digital natives and digital incumbents—and between natives founded before 2005 and their younger counterparts. (See Exhibit 2.) Younger, post-2005 natives exhibit better digital capabilities, reflecting their emergence in an era characterized by cloud-based technology

architectures and more widespread adoption of **agile ways of working**. Older digital natives, in contrast, have (to varying degrees) succumbed to organizational complexity and technical debt, among other factors.

Exhibit 2 - The Digital Capabilities of Older Natives Trail Those of Other Companies



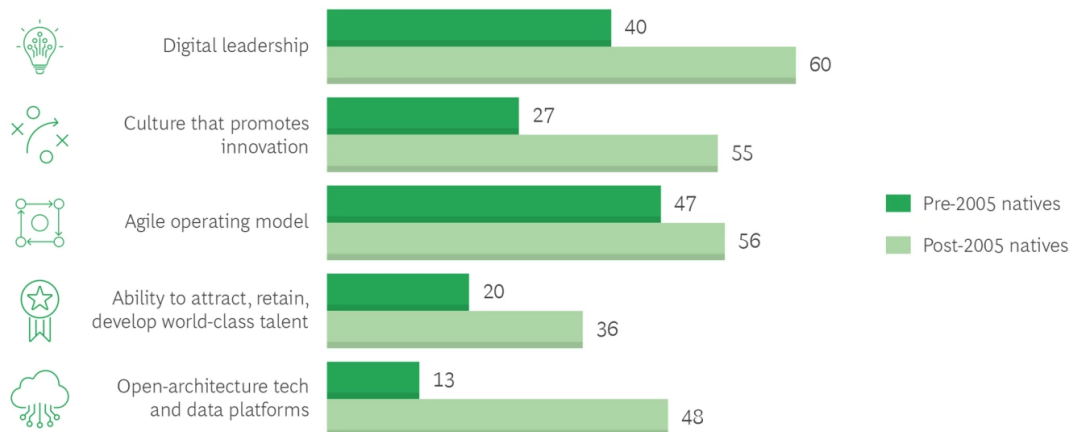
Source: BCG global digital transformation study, 2021–2022 (digital incumbents = 223, pre-2005 digital natives = 15, post-2005 digital natives = 66).

Building Digital Capabilities

We asked senior leaders to score their companies' digital capabilities on a scale of 0 (low) to 10 (high). In addition to spotlighting the rise of digital incumbents, the research revealed that among digital natives, older companies trail their younger counterparts by wide margins on the five attributes that are most important for digital success. (See Exhibit 3.)

Exhibit 3 - The Digital Capabilities of Pre-2005 Natives Trail in All Aspects

Share of companies exhibiting highly developed capabilities (%)



Source: BCG global digital transformation study, 2021–2022 (pre-2005 natives = 15, post-2005 natives = 66).

LEADERSHIP WITH A PURPOSEFUL DIGITAL STRATEGY

Visionary, entrepreneurial founders often give digital natives an advantage over incumbents. But it can be difficult for older natives to make the transition from these charismatic leaders to a more structured and diverse management team.

In our survey, only 20% of senior executives at digital natives founded before 2005 reported that their companies' leaders and middle managers are empowered to take risks, compared with 40% of respondents at post-2005 natives and 48% at digital incumbents. Similarly, only 27% of senior leaders at pre-2005 natives said their leaders are player-coaches (who both lead and play an active role in the business), versus 45% of respondents at post-2005 natives. A third of senior executives at pre-2005 natives (compared with 60% of those at post-2005 companies) said their leaders raise the performance bar with every hire and promotion and recognize exceptional talent, purposefully elevating these people across the organization. “As we've grown through M&A, we've lost some of the

executive-level edge due to differing leadership styles and the size and geographic reach of the organization,” one executive at an aging digital-native company told us.

A CULTURE THAT PROMOTES INNOVATION

A culture of innovation is generally assumed to be a strength of digital natives, but this is not always the case. These companies often begin with a healthy focus on a single product or value proposition, but banking on early success can turn into a lack of boldness and an inability to innovate as the product matures and the market evolves. Our research shows that the entrepreneurial spirit is significantly tested over time by this kind of overreliance on the original innovation.

Executives at only 7% of companies founded before 2005 reported using technology to push the boundaries of innovation, versus 48% at post-2005 firms. Digital natives are credited with inventing methods of rapid testing, learning, and iteration using customer feedback loops.

But senior leaders at only 25% of pre-2005 companies said that these methods have been adopted in all parts of the organization, compared with 90% at hyperscalers and nearly 50% at digital incumbents. Only 20% of digital natives (both pre- and post-2005) reported having an incentive system in place that rewards innovation and value generation, compared with 40% of digital incumbents and 70% of hyperscalers.

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It appears that digital incumbents and hyperscalers have taken the time to design operating models and incentives that promote innovation, while many digital natives lack the same rigor and often assume that continued innovation will happen of its own accord. The cultural components of innovation (such as encouraging employees to fail fast and learn, formally recognizing growth and talent over tenure, and taking big bets on employee-generated ideas) are less evident among pre-2005 natives. “We have focused on revenue growth as a result of investor discussions and deprioritized both innovation for productivity and innovation into new opportunities,” said the CEO of one pre-2005 digital native.

AN AGILE OPERATING MODEL

The agile-oriented product teams and platform organizations commonly associated with digital-native companies often work well only at hyperscalers and younger natives. Only 20% of pre-2005 natives consider themselves a “products company,” with an organizational structure comprising integrated teams of business and tech staff with end-to-end responsibility for digital products or solutions. In contrast, 60% of post-2005 natives and 70% of hyperscalers operate with this sort of structure.

Agility appears to subside with increasing organizational scale and complexity. Executives at only 13% of digital natives founded before 2005 reported having small, decentralized, multidisciplinary teams that own and run what they build, compared with leaders at 45% of post-2005 natives, 40% of digital incumbents, and 70% of hyperscalers. The CEO of a younger digital native captured her company’s agile spirit this way: “We have an advantaged NLP [natural language processing] capability and have experimented intensely with different use cases, pivoting our product teams as we learn more about what really drives value for our clients. Customer-led innovation is our secret for success.”

ABILITY TO ATTRACT, RETAIN, AND DEVELOP WORLD-CLASS DIGITAL TALENT

Digital natives usually have strong employee value propositions (EVPs) driven by charismatic leaders, flexible work models, and rapid market deployment; in addition, they allow employees to take on important responsibilities early in their careers and give them the chance to share in high valuations and a “cool” environment. But an attractive EVP can become tarnished unless leaders continue to invest in it. Only a third of pre-2005 natives claim to have a strong EVP, as opposed to more than 60% of post-2005 companies.

Other, medium-term issues are talent and skill retention and upskilling. Digital natives tend to rely on “brought in” skills and have underdeveloped employee development programs. They use on-the-job training rather than designed courses and curricula, which can lead to attrition and dilution of talent. The ability to maintain and develop skills is a challenge for all digital natives, regardless of age. Only 28% of respondents at these companies reported having incentives for employees to keep up with the latest advances in their field, compared with 60% of respondents at hyperscalers. Only 27% of leaders at digital natives reported having the ability to identify comprehensive and personalized learning needs for reskilling and upskilling, versus 50% of respondents at digital incumbents and 60% at hyperscalers. As one digital-native executive put it, “We’re a pretty informal place and you learn by rubbing shoulders with others. We don’t have the time or the organizational capacity to formalize training, but it’s on my radar screen as a future priority.”

OPEN-ARCHITECTURE TECH AND DATA PLATFORMS

Digital natives are fortunate to have been born into the era of cloud-based technology architecture, whose modularity and interoperability

provide an advantage over the complex legacy technology stacks of incumbents. But cloud-based platforms and data architectures have advanced dramatically over the last two decades, and pre-2005 natives now wrestle with their own versions of legacy technologies. In addition, these companies often prioritize speed to market over scalability, and the lack of appropriate governance and planning has caused an accumulation of technical debt.

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Pre-2005 natives often prioritize speed to market over scalability.

Only 27% leaders at pre-2005 natives reported having open-architecture technology and data platforms that provide the flexibility to introduce new products and features quickly, compared with 55% of leaders at post-2005 natives and 70% at hyperscalers. A tiny 7% of respondents at pre-2005 natives said their companies have a strong data organization and a consistent approach to data management, and only 20% reported having codified data governance tools. One executive at a long-tenured digital native said, “We set out with a strong commitment to build our software platform in a modular way so that code could be reused. But then we pivoted the business model as we learned from releases in the market, and acquired another company as a faster way to incorporate new functionality. As we gained customer and transaction data, we wanted to add a data and analytics capability, but we discovered that we had never really defined a clear, scalable data model, so the process for accessing well-formatted data was very complex.”

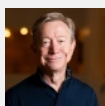
Staying Grounded

For years, traditional incumbents looked to the example of digital natives in their efforts to digitally transform their organizations and operating models. Now the tables have turned.

The lessons for both the original digital natives and their younger counterparts are clear. Digital natives founded before 2005 need to assess whether and where legacy technologies and ways of working are holding them back. Many may need a structured, programmatic approach to building—or rebuilding—the capabilities most essential to digital maturity. Meanwhile, younger natives must be sure to invest in those capabilities as they grow. Such investments may come naturally in the early years, but over time, these companies' leaders must be purposeful about adopting more formal processes to ensure that stultifying legacy technologies and behaviors do not take hold.

The race is on to determine which companies emerge as the successful digital companies of the future. The pathways and required attributes are clear; the ability to implement faster and better than others will be the real differentiator. The threat of disruption applies to all companies, regardless of the era in which they were born.

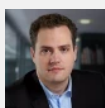
Authors



Patrick Forth

Senior Advisor

Sydney



Romain de Laubier

Managing Director & Senior Partner; Asia-Pacific Chair, BCG X

Tokyo



Michael Grebe

Managing Director & Senior Partner

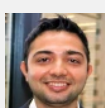
Munich



Amanda Luther

Managing Director & Partner

Austin



Tauseef Charanya

PA Product Director - DSR

New Jersey

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