# Evolutionary organizations reimagine the future

# Preface

"Evolutionary organizations reimagine the future" is an MIT Technology Review Insights report sponsored by Thoughtworks. This report, based on survey research and in-depth executive interviews, seeks to understand how organizations approach transformation and the obstacles they encounter in adapting to a continuously changing business and technology environment. Elizabeth Gardner was the author of the report, Teresa Elsey was the editor, and Nico Crepaldi was the publisher. The research is editorially independent and the views expressed are those of MIT Technology Review Insights.

**The survey methodology**

In November 2022, MIT Technology Review Insights surveyed 275 senior executives and directors from a wide range of industries and geographies. Respondents to this survey represent four regions – Asia Pacific (27%); Europe, the Middle East, and Africa (27%); North America (27%); and Latin America (18%). Each respondent works for an organization with at least 30,000 employees.

In addition to the quantitative insights gleaned from the survey, this report has been supplemented by a series of interviews with executives, academics, and experts who specialize in digital transformation, business strategy, and emerging technology. These interviews occurred between November 2022 and February 2023.

We would like to thank the following individuals for their time and insights:

**Robert Bastian**, Chief Information Officer, Global Digital and US Retirement and Insurance Businesses, Prudential Financial

**David Cushman**, Practice Leader, Emerging Technology, HFS

**Marcelo De Santis**, Chief Digital Officer, Thoughtworks

**Eglantine Etiemble**, Chief Technology Officer, PEXA

**Nathan Furr**, Associate Professor of Strategy, INSEAD

**Andrew Miller**, Chief Executive Officer, Motability Operations

**Robert J. Sala**, Vice President and Chief Architect, Global Technology, Prudential Financial

# Foreword

Across all industries, organizations are facing relentless customer, market, geopolitical, and technology change. Each change challenges them to adapt in different ways, driving organizations to digitally transform specific aspects of their offerings or their operations.

We've all seen the headline data showing high failure rates for digital transformation initiatives. But our daily experience with clients suggests that organizations aren't just failing to see their desired ROI from episodic, narrow transformation, they're becoming acutely fatigued by it – making it even harder to keep up with today's extreme pace of change. You can do better.

It's time for a new approach to transformation – one that isn't limited by narrow, discrete initiatives and is better aligned with the continuous change you're facing today. And to understand what that approach might look like, you only need to look at the top of your market.

Today, the most successful and valuable companies in the world are "change machines." They're optimized for continuous transformation, enabling them to not only keep up with the constant change happening around them, but also actively turn it to their advantage. To compete with them, you need to lean into disruption, broaden your lens on change, and enable sustainable, holistic transformation by **becoming an evolutionary organization**.

To become a truly **evolutionary organization**, you must do three key things:

• **Move beyond tech-only transformation** and create the foundational capabilities you need to continuously evolve at speed – instead of simply bolting new solutions onto your core.

• **Optimize your entire organization for constant change** and ensure your culture, processes, business model, and organizational structure are optimized to continuously evolve alongside customer, market, and technology change.

• **Focus on enabling customer value and employee empowerment** by getting close to customers and giving product and software teams the means to start leading change instead of simply trying to keep up with it.

The pace of change isn't going to slow down any time soon. Tomorrow's leading businesses will be evolutionary by design.

By looking inwards and challenging your core capabilities, structures, business models, and culture together, you can break free from the inertia of traditional approaches to digital transformation and join these leaders – ensuring your long-term survival and success.

**Marcelo De Santis**, Chief Digital Officer, Thoughtworks

**Sunil Mundra**, Principal Consultant – Advisory, Thoughtworks

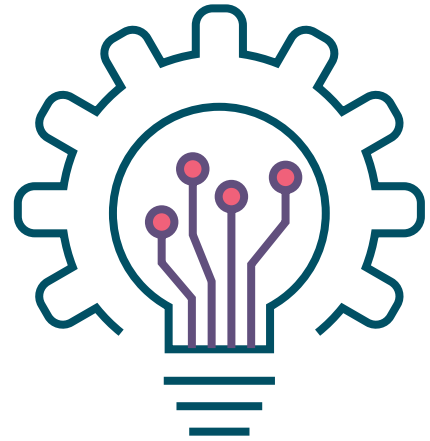**Luke Vinogradov**, Head of Digital Transformation UK, Thoughtworks

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# 01 Executive summary

As the emergence of radically disruptive technologies over the last decades has created, destroyed, or fundamentally changed many business models, most organizations have undergone some kind of digital transformation in response. Many have been reluctant, however, to acknowledge the degree to which they need to disrupt their standard way of working to succeed in this continuously changing business environment.

These change initiatives are commonly called "digital transformation," though, as this report outlines, successful transformation is not a one-time change or single new technology adoption. Rather, it requires the organization to acquire the ability to continuously adapt to change. Although many organizations have the digital fundamentals in place, an updated tech stack and agile IT frameworks are just the beginning. Instead, change should be an evolutionary process that's built into the organization's mission and every aspect of its operations and strategy.

The global technology consultancy Thoughtworks describes organizations that can respond to marketplace changes with continuous adaptation as "evolutionary organizations." It argues that, instead of focusing only on technology change, organizations should focus on building capabilities that support ongoing reinvention. While many organizations recognize the benefit of adopting agile approaches in their technology capabilities and architectures, they have not extended these structures and ways of

thinking throughout the operating model, which would allow their impact to extend beyond that of a single transformation project.

Global spending on digital transformation is growing at a brisk pace: 16.4% per year according to IDC. The firm's 2021 "Worldwide Digital Transformation Spending Guide" forecasts that annual transformation expenditures will reach $2.8 trillion in 2025, more than double the spending in 2020.[1] At the same time, research from Boston Consulting Group shows that 7 out of 10 digital transformation initiatives fall short of their objectives. Organizations that succeed, however, achieve almost double the earnings growth of those that fail and more than double the growth in the total value of their enterprises.[2] Understanding how to make these transitions successful, then, should be of key interest to all business leaders.

This MIT Technology Review Insights report is based on a survey of 275 corporate leaders, supplemented by interviews with seven experts in digital transformation. Its key findings include the following:

•   **Digital transformation is not solely a technology issue.** Adopting new technology for its own sake does not set the organization up to continue to adapt to changing circumstances. Among survey respondents, however, transformation is still synonymous with tech, with 70% planning to adopt a new technology in the next year, but only 41% pursuing changes to their business model.

- **The business environment is changing faster than many organizations think.** Most survey respondents (81%) believe their organization is more adaptable than average and nearly all (89%) say that they're keeping up with or ahead of their competitors — suggesting a wide gap between the rapidly evolving reality and executives' perceptions of their preparedness.

- **All organizations must build capabilities for continuous reinvention.** The only way to keep up is for organizations to continuously change and evolve, but most traditional businesses lack the strategic flexibility necessary to do this. Nearly half of business leaders outside the C-suite (44%), for example, say organizational structure, silos, or hierarchy are the biggest obstacle to transformation at their firm.

- **Focusing on customer value and empowering employees are keys to organizational evolution.** The most successful transformations prioritize creating customer value and enhancing customer and employee experience. Meeting evolving customer needs is the constant source of value in a world where everything is changing, but many traditional organizations fail to take this long view, with only 15% of respondents most concerned about failing to meet customer expectations if they fail to transform.

- **Rapid experimentation requires the ability to fail and recover quickly.** Organizations agree that iterative, experimental processes are essential to finding the right solutions, with 81% saying they have adopted agile practices. Fewer are confident, however, in their ability to execute decisions quickly (76%) — or to shut down initiatives that aren't working (60%).

- **Evolutionary organizations will be the ones to succeed in the future.** Companies that develop the capability to repeatedly reinvent what they do — not just the technology they use to do it — will be most prepared to respond to future disruptive technologies, market ecosystem changes, and societal shifts. When adaptive structures and mindsets are woven into strategies and operating models, organizational value is created and extends beyond that of a single digital transformation initiative.

Change should be an **evolutionary process** that's built into the organization's mission and every aspect of its operations and strategy.

# 02 Focusing only on the tech is a mistake
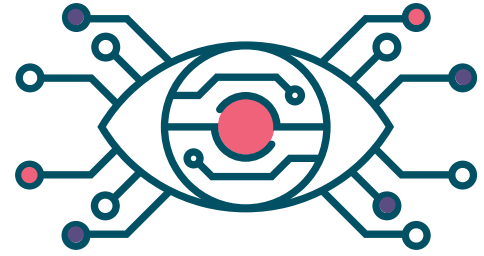
Many companies picture digital transformation as a distinctly bounded process, beginning and ending with the adoption of a particular new technology, tool, or platform. But organizations that are looking for their transformations to have long-lasting impact should differentiate between technology projects that result merely in acquiring "new stuff" and those that substantially change the technology capabilities and competence of the organization. The latter are what will prepare the business for the next technology change—and the next after that.

The most mature organizations also understand that those new technological capabilities should be matched with organization-wide change. Adopting a new technology—or even agile IT processes—will not set up an organization to adapt to the next change in circumstances—unless it makes changes to its capabilities, operating model, and mindsets at the same time.

"I sat down with a senior partner at one of Europe's best digital transformation firms and asked what's the cutting edge?" says Nathan Furr, associate professor of strategy at INSEAD, a global graduate business school. "He just laughed. He said, 'Oh, it's not tech, it's organization change.'"

**Figure 1: Most organizations are undertaking multiple transformations**

Which types of transformation is your organization currently undergoing or prioritizing in the next year?

| | |
|---|---|
| ADOPTION OF NEW TECHNOLOGY | **70**% |
| CHANGES TO OUR ORGANIZATIONAL STRUCTURE | **60**% |
| CHANGES TO OUR ORGANIZATIONAL CULTURE | **49**% |
| CHANGES TO OUR BUSINESS MODEL | **41**% |
| NONE OF THESE | **1**% |

Source: MIT Technology Review Insights survey, 2023

"A lot of digital transformation has focused on digital solutions without changing how we get work done."

**David Cushman**, Practice Leader, Emerging Technology, HFS

"A lot of digital transformation has focused on digital solutions without changing how we get work done," says David Cushman, practice leader for emerging technology at HFS Research, which analyzes technology trends. Many organizations focus on how to improve yesterday's processes with digital tools, rather than listening to their customers' and employees' needs and developing operating models for the future. "That's the biggest mistake, because there's no change to the ways of working beyond using a keyboard rather than using a pen," Cushman says.

## Tech transformation without business model change

Our research found that organizations are still prioritizing technology adoption in their transformation efforts, but that this is increasingly paired with a recognition of the need for accompanying structural and cultural change.

Almost every survey respondent said their company plans to take multiple transformative steps in the next year. Though adoption of new technology is the most prioritized change (70%), many organizations also say that changing the structure (60%) and culture (49%) of the organization is planned for the next year. Only 41% of organizations globally, however, say they are pursuing changes to their business model, which suggests that many are not considering novel strategic opportunities enabled by their new technological capabilities.

Prudential Financial, a Fortune 500 company whose subsidiaries provide insurance, retirement planning, investment management, and other products and

services, has come to recognize that technology is a means to an end. When the company sought to move its services closer to its customers and become more nimble in how it developed new products, its most important transformation task was learning to think "horizontally" about how one or more technologies could effect change in all of its businesses.

"Looking at it very myopically from a technology standpoint probably would have put us in failure mode," says Robert Bastian, CIO for global digital and U.S. retirement and insurance businesses. "Bringing along the business and introducing new people into the organization who had digital skills and thought about things in this more horizontal way definitely changed the trajectory."

While the company had a history of first bringing in new tech and then finding problems for it to solve, Bastian says it has shifted its focus during the past five years to determining business strategy first and then identifying the products and platforms to execute that strategy. For example, to address its customer-centric priority, Prudential established an advanced customer service platform that dramatically improved its response time, and it has reduced its new product development cycle from 18 months to a matter of weeks.

Andrew Miller, CEO at Motability Operations, a UK nonprofit that enables mobility solutions for people with disabilities, sums it up this way: "Technology is an easy enabler. Technology is so cheap now compared to what it used to be. But the real stuff is how you isolate the idea enough to get the change moving, and then how you engage people to get them behind the change as well."

"Technology is an easy enabler. But the real stuff is how you isolate the idea enough to get the change moving, and then how you engage people to get them behind the change as well."
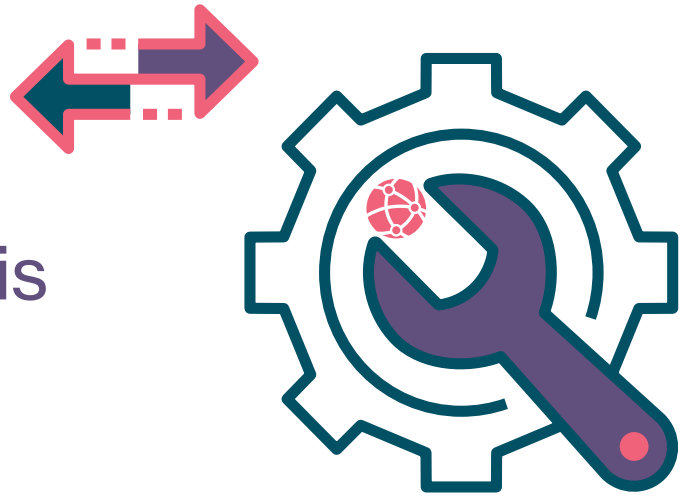
**Andrew Miller**, Chief Executive Officer, Motability Operations

# 03

# The environment is changing fast

The covid-19 pandemic accelerated the pace of digital transformation by forcing organizations to confront and fulfill the needs of home-bound customers and a newly remote workforce. Many businesses rose to the occasion, standing up remote working infrastructures, new customer pick-up or delivery services, or fundamentally reworked business models — at the unprecedented speed of days or weeks. As a result, what was considered "best-in-class" development speed in 2018 is now deemed slower than average, according to a recent McKinsey study.[3]

Prudential has learned to expect a much shorter "half-life" than it has been accustomed to for any given technology, says Robert J. Sala, vice president and chief architect for global technology. That's been a particular challenge as a financial services company that was accustomed to spending decades developing systems with rock-solid reliability and to demonstrating caution in evaluating new technologies. "We've had to get people comfortable with how fast technologies come and go," he says. "You want to build something robust and secure, but you don't necessarily have to assume it's going to run for 30 years. Maybe it needs to run for five or six."

## Unrealistic assessments of market leadership

Our survey asked respondents to rate their organization's overall adaptability to market changes, compared with other organizations. Nearly all companies (89%) think they are keeping up with or leading the competition, and two out of five larger companies think they are leaders. Fully 81% of respondents report that their organization is more adaptable than average. These mathematically

**Figure 2: Organizations — and CEOs particularly — are overly optimistic**

Compared to your competitors, how do you perceive your organization's adaptability and speed of transformation?

Many respondents — and the majority of CEOs — believe their organization is an industry leader, though this cannot objectively be true.

|  | WE ARE A LEADER | WE ARE KEEPING PACE | WE ARE LAGGING BEHIND |
|---|---|---|---|
| **ALL RESPONDENTS** | 37% | 52% | 12% |
| **CEOs** | 52% | 36% | 12% |

Source: MIT Technology Review Insights survey, 2023

implausible results suggest a large gap between leaders' perceptions of whether they're keeping pace and the reality.

Responses varied significantly depending on the respondent's place in the organization: 56% of CEOs described their culture as "extremely adaptable," but only a third of other C-level executives and top managers agreed. Still, executives at all levels pegged their organizations as above average in adaptability.

When asked how well their organizations are keeping up with the demands of business transformation, CEOs are again the most optimistic, with 52% saying their organization is leading its industry. Conversely, more than half of other C-suite executives (56%) say their organization is just keeping pace with its competitors. These large gaps suggest that CEOs are particularly prone to cognitive bias when assessing their organizations, but they may also mean that the transformations they are leading are limited in scope — not sufficiently visible or impactful to even their direct reports.

**Figure 3: Almost all claim they are more adaptable than average**

How would you rate your organization's overall adaptability to changes in market context?

| | |
|---|---|
| **EXTREMELY ADAPTABLE** | **35%** |
| **SOMEWHAT ADAPTABLE** | **46%** |
| **ABOUT AVERAGE** | **13%** |
| **SOMEWHAT RIGID** | **6%** |
| **EXTREMELY RIGID** | **0%** |

Source: MIT Technology Review Insights survey, 2023

## Responding to ecosystem change at Motability

Motability Operations, a UK nonprofit providing mobility solutions for people with disabilities, can attest to the speed at which the world is changing. Motability's car leasing programs enable its customers to use government disability allowances to get on the road. The company now purchases 15% of all cars sold in the UK and serves 650,000 customers, providing mobility as well as insurance, roadside assistance, and related services.
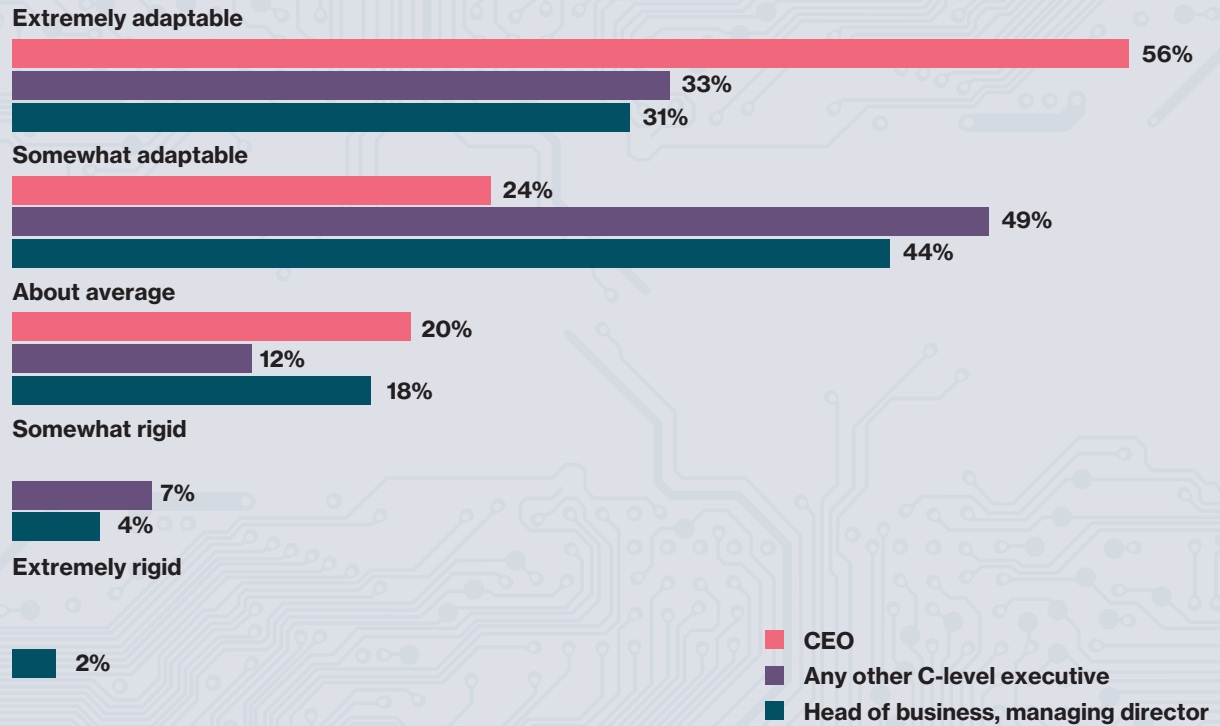
CEO Andrew Miller joined the organization amidst a perfect storm of industrywide changes. He explains, "Every part of the value chain we're in is being disrupted by digital technology."

Motability needed a technology makeover — to move from being "a classic spreadsheet-driven company to a tech-enabled one" — but the range of disruptions happening in the industry meant that alone wouldn't suffice. So along with tech upgrades and moving to the cloud, Miller also prepared the organization for reinvention. "The key issue," he says, "is making sure your organization structures are nimble and agile enough to deal with the day-to-day innovation required to keep the business going."

And the stakes are real. Miller explains, "Unlike other companies, we're not surviving to pay a private investor or to pay dividends. We're surviving to keep people with disabilities mobile."

**Figure 4: CEOs say they're more adaptable than their subordinates do**

How would you rate your organization's overall adaptability to changes in market context?

**Extremely adaptable**

56%
33%
31%

**Somewhat adaptable**

24%
49%
44%

**About average**

20%
12%
18%

**Somewhat rigid**

7%
4%

**Extremely rigid**

2%

■ CEO
■ Any other C-level executive
■ Head of business, managing director

Source: MIT Technology Review Insights survey, 2023

"We've had to get people comfortable with how fast technologies come and go."

**Robert J. Sala**, Vice President and Chief Architect, Global Technology, Prudential Financial
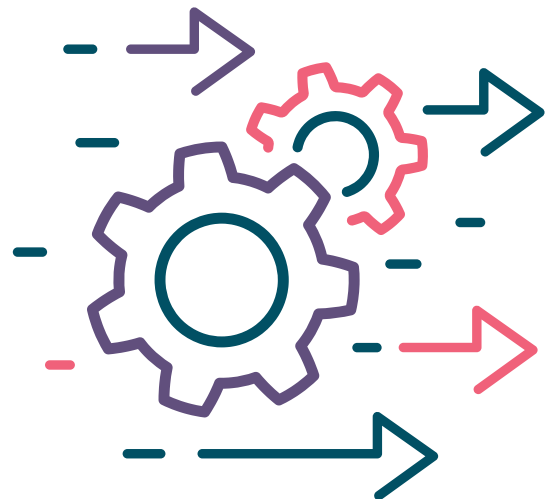
# 04 Continuous reinvention is mandatory

The only way to keep up with rapid technological and societal change is to embrace continuous evolution. But despite believing they are more adaptable than average, most companies acknowledge that they lack organizational capabilities that would enable more rapid change: fluidity of structure and process.
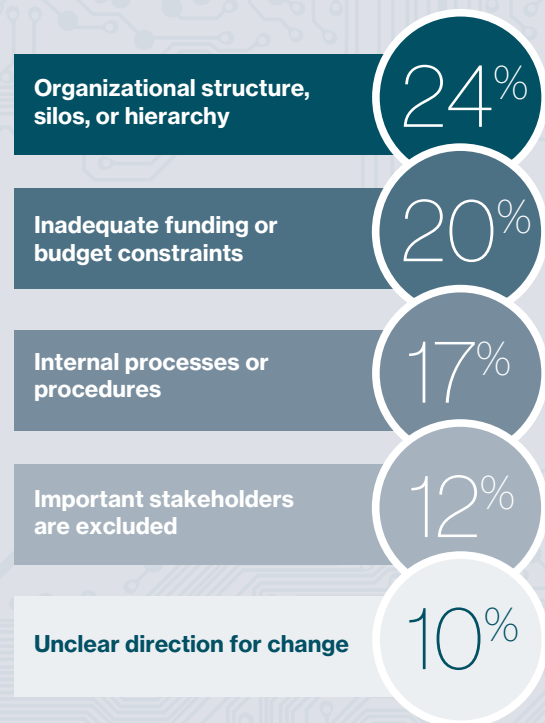
When asked about the biggest impediments to their business transformation, survey respondents largely named factors that are within the organization's power to address: organizational structure or silos (24%), inadequate funding (20%), or faulty internal procedures (17%).

One in four CEOs sees "unclear direction for change" as the top barrier to their organization's transformation. While rapidly changing external pressures may be at the root of this concern, organizations with the capability for rapid experimentation — those that "do change for a living" — are more comfortable with lack of clarity, as they know every adaptation is followed by another.

Leaders outside the C-suite overwhelmingly implicate organizational structure (44%) as the top blocker to company transformation. Nearly half of all organizations, then, may need to take a hard look at why senior leadership feels unable to remove constraints that they see are holding back their evolution.

**Figure 5: Internal barriers stall change**

What one obstacle most impedes transformation at your organization?

**Organizational structure, silos, or hierarchy** — 24%

**Inadequate funding or budget constraints** — 20%

**Internal processes or procedures** — 17%

**Important stakeholders are excluded** — 12%

**Unclear direction for change** — 10%

Answers selected by less than 10% of respondents are not included.

Source: MIT Technology Review Insights survey, 2023

**Figure 6: Perceived barriers vary by job title**

What one obstacle most impedes transformation at your organization?

**24%**
OF CEOS SAY
UNCLEAR DIRECTION
FOR CHANGE –
2.4 TIMES MORE
THAN THOSE IN
OTHER ROLES

**27%**
OF CHIEF INFORMATION
OFFICERS SAY
INTERNAL PROCESSES
OR PROCEDURES –
1.6 TIMES MORE THAN
THOSE IN OTHER ROLES

**32%**
OF CHIEF
TRANSFORMATION
OFFICERS SAY
INADEQUATE
FUNDING OR BUDGET
CONSTRAINTS –
1.6 TIMES MORE THAN
THOSE IN OTHER
ROLES

**44%**
OF HEADS OF
BUSINESS AND
MANAGING DIRECTORS
SAY ORGANIZATIONAL
STRUCTURE, SILOS,
OR HIERARCHY –
1.8 TIMES MORE THAN
THOSE IN OTHER
ROLES

Source: MIT Technology Review Insights survey, 2023

## Mindset shifts empower ongoing innovation

Marcelo De Santis, chief digital officer at Thoughtworks, agrees with the assessments of survey respondents. "While technology, data, and talent are very important enablers," he says, "business processes combined with leadership behaviors that turn uncertainty into business opportunity are the engine of a responsive operating model. Most organizations are not there."

Mindset shifts are the key to finding new business opportunities technology enables, says Cushman. When the organization moves beyond just optimizing existing processes, it can create new value: "What would be the new business that I might develop as a result of knowing everything that's in the process, and what new ways of working could I develop as a result of understanding that?"

A rapidly changing business environment means that building capabilities is a more durable solution than producing answers. "Equip your team with the ability to find out the right questions to ask, not to only manage data," De Santis advises. "We are inundated by large amounts of data, but we do not know how to explore the existing data to uncover new sources of business value."

That distinction is the difference between using a static, printed report and using a dynamic analytic dashboard with data that updates in real time. "Provide people with as much information accessibility and visibility as possible, so they have autonomy to explore different avenues to uncover valuable insights. As business context becomes more volatile and uncertain, the race is for time to insights," says De Santis.

## "Equip your team with the ability to find out the right questions to ask, not to only manage data."

**Marcelo De Santis**, Chief Digital Officer, Thoughtworks

## Even digital natives must continuously reinvent: PEXA

The case for continuous evolution is clear to PEXA, a digital-native company that has transformed the Australian property settlement system. Its digitization of that ecosystem has been so complete that 90% of property title transactions in Australia are now done via PEXA.

Yet the company is not resting on its laurels. Says chief technology officer Eglantine Etiemble, "PEXA was born 10 years ago, and we constantly need to rethink how we remain a modern digital business." She explains that while PEXA's technology isn't necessarily revolutionary, the challenge is always getting the stakeholders to a consensus. And while the technology itself can scale, those relationships cannot. "We have to reinvent every time, and in every geography," Etiemble says.

PEXA is now repeating that process as it expands, partnering with the Bank of England to carve out its first small stake in the UK ecosystem.

"We can't just rely on the best practices," Etiemble says, underscoring the necessity for continuous evolution. "We need to continuously explore how the system itself, how the organization itself adapts."

# "We have to reinvent every time, and in every geography."

**Eglantine Etiemble**, Chief Technology Officer, PEXA

# 05

# Sustainable transformation centers on customer value

t's tempting to fuel digital transformation initiatives with the promise of quick operational wins: reduced paperwork, faster financial settlement, perhaps the potential to reduce the workforce through automation.
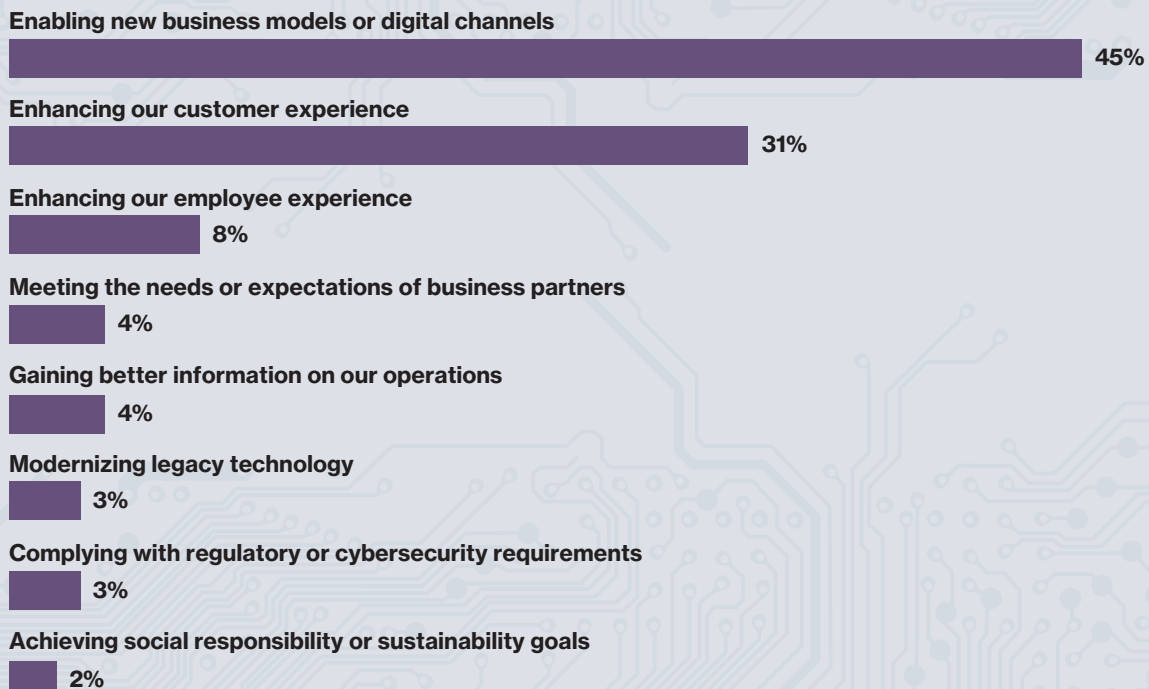
Those goals may generate immediate return on investment, but that limited view almost guarantees missed opportunities, says Furr: "I have found that the best way to frame digital is about serving customers

better, faster, more efficiently. It should not be framed as cost savings."

When everything in the environment is changing, focusing on customer value and experience is the only constant. As customer demands evolve, of course, this requires a constant reinvention of the business's products, offerings, and the organization itself, as these exemplars have also shown.

**Figure 7: Return on investment still top motivator for transformation**

What is the most important factor driving transformation in your business?

**Enabling new business models or digital channels**
45%

**Enhancing our customer experience**
31%

**Enhancing our employee experience**
8%

**Meeting the needs or expectations of business partners**
4%

**Gaining better information on our operations**
4%

**Modernizing legacy technology**
3%

**Complying with regulatory or cybersecurity requirements**
3%

**Achieving social responsibility or sustainability goals**
2%

Source: MIT Technology Review Insights survey, 2023

Sala at Prudential Financial says, "Prior to digital, we were more focused on back-office concerns. The dawn of digital really drove us to focus on customer experience and business partner experience." In order to do that, Prudential teams had to more directly engage with customer feedback—"we had to put our teams in direct contact with customers to see how the technologies we were putting in play were meeting or not meeting their needs," he says—resulting in better products, and a more customer-centric organization overall.

## But few are motivated by customer value

When asked to rank the factors motivating transformation in their businesses, however, nearly half of survey respondents (45%) were focused on return on investment (ROI), putting enabling new business models or digital channels first. Only 31% ranked enhancing customer experience first. Other options, such as enhancing employee experience (8%), modernizing legacy technology (3%), and achieving social responsibility or sustainability goals (2%) were significantly less likely to be top motivations for transformation.

Customer experience is also not the primary focus when organizations are asked what will happen if they don't transform. Only 15% of respondents ranked failing to meet customer expectations the top consequence of failure to transform, putting it in a distant third place behind loss of revenue or growth opportunities (40%) and falling behind the competition (25%). The desire to grow the organization without centering customer experience contradicts the lessons of today's largest digital brands—and suggests a disconnect in leadership's understanding of where that growth comes from.

## "The best way to frame digital is about serving customers better, faster, more efficiently. It should not be framed as cost savings."

**Nathan Furr**, Associate Professor of Strategy, INSEAD

**Figure 8: Few consider customer experience a top concern**

What is the top consequence you foresee if your organization fails to transform?

Loss of revenue or growth opportunities — 40%

Falling behind our competitors — 25%

Failing to meet customer expectations — 15%

Loss of brand value or reputation — 6%

Increased regulatory or cybersecurity risk — 7%

Difficulty attracting or retaining talent — 5%

Inability to achieve social responsibility or sustainability goals — 2%

Source: MIT Technology Review Insights survey, 2023

# 06

# Empowered employees are a key evolutionary capability

No technology will be successful if its users don't embrace it. Giving people autonomy, the right skills, and an enabling organizational structure around them will help them make the best use of new technology tools — as well as prepare them for the next transition.

In our research, however, it was uncommon for survey respondents to say that a focus on employee experience is motivating their transformation efforts. When asked to rank the factors motivating transformation in their businesses, only 8% of respondents selected enhancing employee experience as their top impetus, and only about one-third of companies (36%) included it in their top three.

By failing to focus on their people, these organizations risk losing a critical means of addressing today's challenges — and tomorrow's. As demand for digitally

**Figure 9: Few transformations center on employee experience**

**Rankings of "enhancing employee experience" as a factor driving transformation**



8% Ranked first

12% Ranked second

16% Ranked third

64% Not ranked
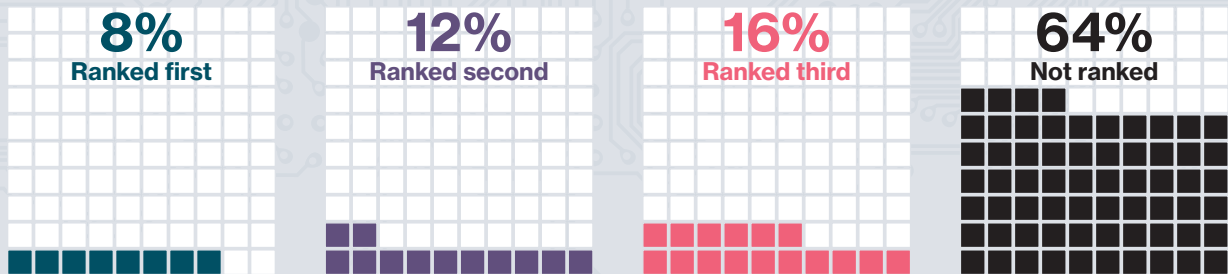
**Rankings of "difficulty attracting or retaining talent" as a consequence of failure to transform**

5% Ranked first

16% Ranked second

13% Ranked third

66% Not ranked
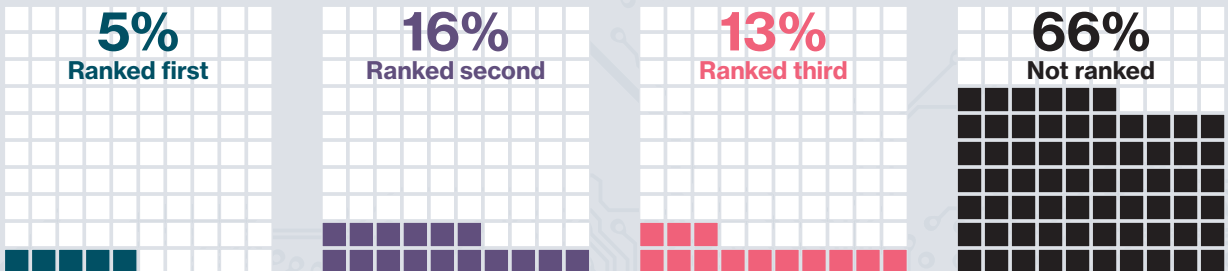
Source: MIT Technology Review Insights survey, 2023

skilled top talent increases, these companies may be systematically disadvantaging themselves.

Prudential Financial, by contrast, has switched thinking beyond the current tech stack and emphasizes each employee becoming a lifelong technical learner, says Sala. "You need to be continually learning because every couple of years the stacks are going to turn over."

The employee response has been gratifying, adds Bastian. "I had one employee – she's been at Prudential for 30 years – say, 'I feel alive for the first time in 20 years.' When you hear people at that tenure say that, you know you're onto something that's really getting people excited."

"When employees see you are intentionally investing in their personal development and growth, they are more motivated to engage with the transformation process," says De Santis. When he worked with a manufacturer implementing AI-enabled image recognition to spot part defects, it chose to use the technology to enable people, rather than to replace them.

"We established a digital academy to uplift our employees' digital skills and speed up the modernization of our business," De Santis says. "We first focused on enabling the teams at the manufacturing plants with the skills to visualize and analyze shop floor data, empowering them to drive improvements in the production process, which was a game-changing intervention for that business." And the rate of manufacturing defects plummeted to almost zero.

## "I had one employee – she's been at Prudential for 30 years – say, 'I feel alive for the first time in 20 years.'"

**Robert Bastian**, Chief Information Officer, Global Digital and US Retirement and Insurance Businesses, Prudential Financial
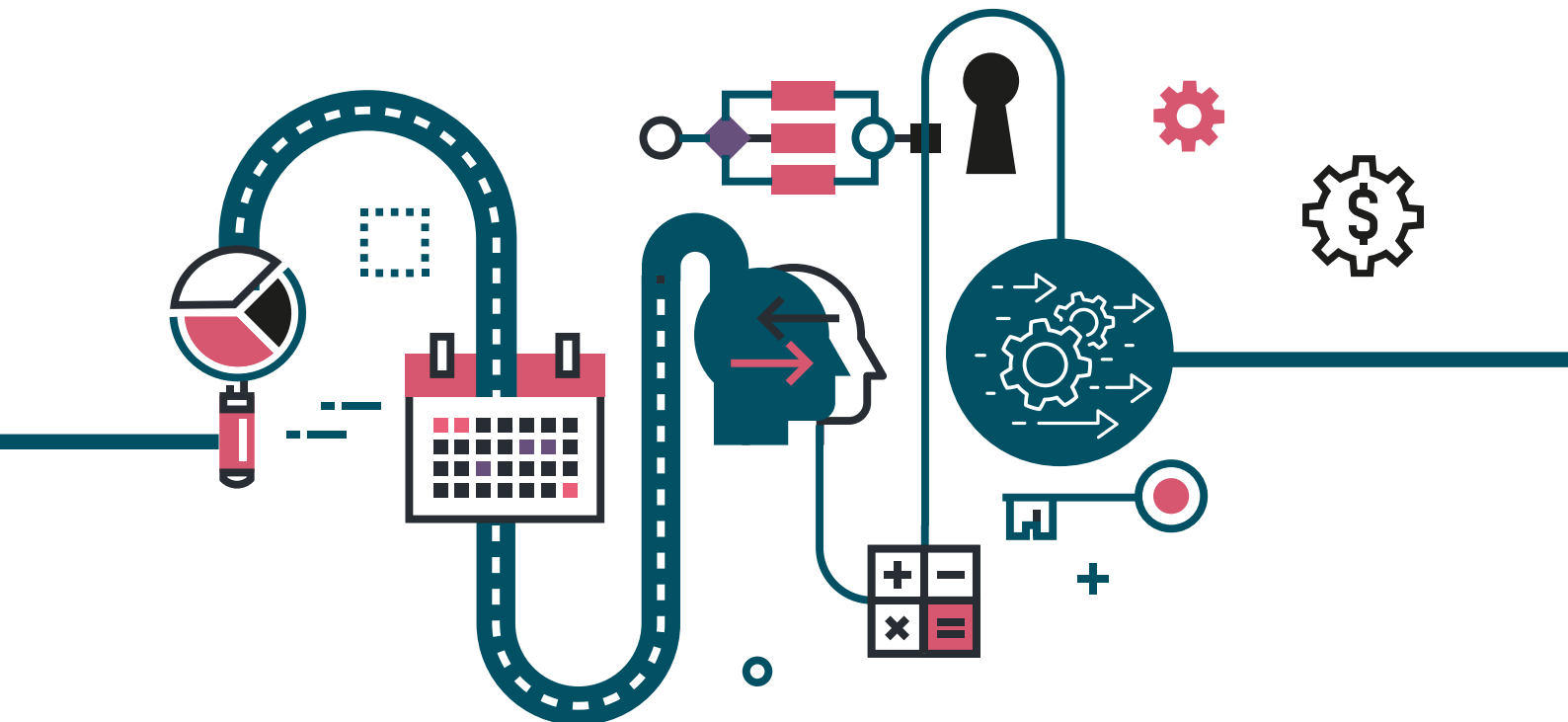
# 07 Invest in experimental mindsets
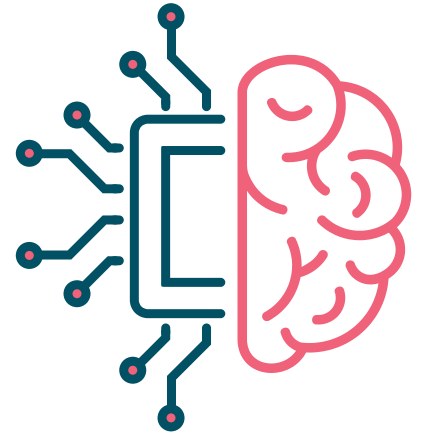
The more transformation actions that are taken, the greater an organization's chances of eventual success, according to McKinsey research. "The main differentiator between success and failure," the authors write, "was not whether an organization followed a specific subset of actions, but rather how many actions it took throughout an organizational transformation's life cycle." [4]

Experimentation—and hence failure—is an inevitable and essential element of successful transformation. "You need to be comfortable with the idea that eventually a high-risk transformation initiative might fail, so carefully balance the risk profile of your transformation portfolio," says De Santis. Every failure is a learning opportunity—as long as it's followed up with another attempt, and then another.

The ability to iterate quickly—to "fail faster"—in pursuit of a transformational outcome is an organizational skill like any other. "It's easy to celebrate wins," De Santis says, "but complex transformations are evolutionary processes and eventually you will face some degree of failure. How leaders manage that setback, and reflect and capitalize on the learnings, directly contributes to build new levels of organizational resilience."

The rapidity of change often lessens the consequences of failure, Sala says. "For so long, you would evaluate a particular tech stack or a particular product, and you would really lean into the decision because you were making a potentially 15- or 20-year decision and now you're probably not," he says. "It's easier to recover from an imperfect decision. If one module zigs where you wish you'd zagged, it's a much lighter lift to fix."

## Ability to learn from experimentation

Our research, however, found that many organizations are not fully confident in their ability to experiment—or to declare an experiment a failure. Although most survey respondents say their organization has adopted flexible, agile, data-driven methodologies for shaping their strategy and products, they are less confident in their organization's ability to restructure itself or execute quickly as a result.

Most respondents say they have aligned their business and technology strategies (86% agree), that they have adopted agile practices (81%), and they are using data for advanced insights (80%). And when asked about their organization's ability to make and execute strategic changes, respondents are bullish, agreeing that their

## "You need to be comfortable with the idea that eventually a high-risk transformation initiative might fail."

**Marcelo De Santis**, Chief Digital Officer, Thoughtworks

## Strategic agility

Agility — the ability to quickly adapt and respond to changing circumstances — became a business buzzword as a result of the Agile software development movement of the early 2000s. Over the next two decades, these agile practices came into general business use via innovations like iterative design processes, sprints, early and frequent feedback cycles, and a reorientation toward continuous incremental improvement.

Thoughtworks differentiates, however, between operational agility, when agile capabilities make existing business operations more efficient, and strategic agility, when the organization is able to change its strategy, business model, or operating structure to meet the moment.[5]

According to Sunil Mundra, principal consultant at Thoughtworks, and author of *Enterprise Agility*, a strategically agile organization has three key capabilities:

- **Sense**: Assimilate information about, for example, customer needs, emerging technology, and the changing market landscape
- **Adapt**: Evolve the business strategy in response to that information
- **Respond**: Deliver new value to customers rapidly

Andrew Miller, CEO at Motability Operations, concurs. "Agile in a much broader sense," he says, "is being able to move directionally as and when things change. To me, agility comes from your mindset about being willing to change that process once you're in it and see the opportunities that come from the marketplace from it."

organization responds promptly to changes in customer expectations and market needs (94%) and that they frequently review and revise their strategy (88%).

But though respondents' companies speak the language of agile, it seems that their capabilities for rapid experimentation are less than fully fledged. Respondents are less likely to agree that decisions can be executed quickly (76%), or that resources (77%) and talent (71%) can be easily reassigned as needed. And failure is not an option for many: Only 60% of

respondents agree that their organization is quick to shut down initiatives that aren't working.

Miller emphasizes that the ability and willingness to fully reinvent the company as circumstances require — not just to tinker at the edges — is essential for competing with new entrants to the market. "Ultimately you've got to decide if the disruption you're facing is so significant that you've got to start again," he says. "Iterating from within is an incredibly hard way to deal with transformation when you're up against startups and new businesses."

"Iterating from within is an incredibly hard way to deal with transformation when you're up against startups and new businesses."

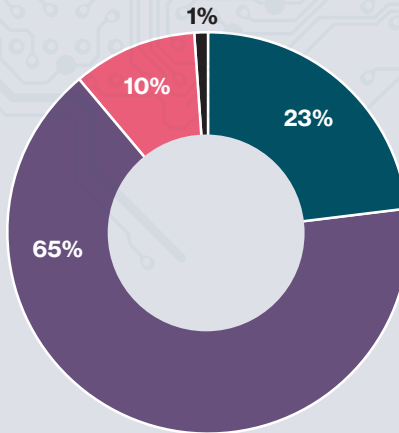**Andrew Miller**, Chief Executive Officer, Motability Operations

## Figure 10: Companies have adopted agile practices

Respondents widely agree that they are using agile principles and methodologies.

**We respond promptly to changes in customer expectations and market contexts**

- 31% Strongly agree
- 63% Agree
- 6% Disagree
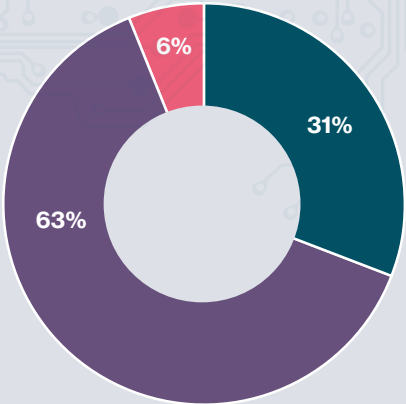
**We frequently review and revise our strategy.**

- 23% Strongly agree
- 65% Agree
- 10% Disagree
- 1% Strongly disagree

Legend:
- Strongly agree
- Agree
- Disagree
- Strongly disagree

**Our business and technology strategies are aligned.**

- 53% A great deal
- 33% Somewhat
- 11% A little bit
- 3% Not at all
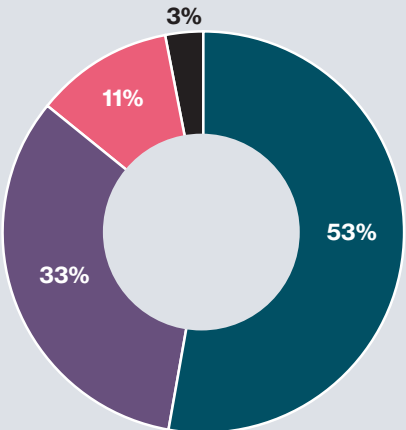
**We use iterative product design techniques.**

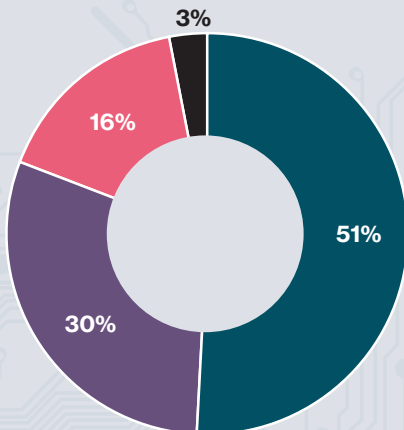- 34% A great deal
- 44% Somewhat
- 15% A little bit
- 5% Not at all
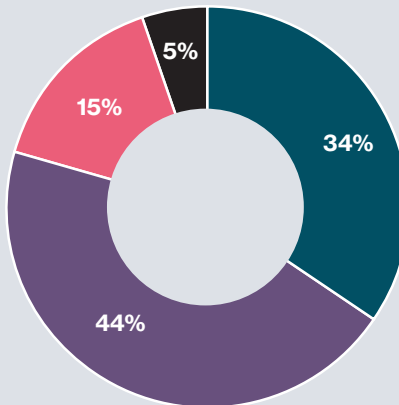
Legend:
- A great deal
- Somewhat
- A little bit
- Not at all

**We use data, advanced analytics, and machine learning to produce insights.**

- 55% A great deal
- 26% Somewhat
- 15% A little bit
- 4% Not at all
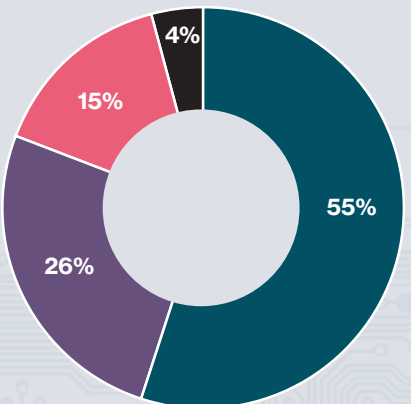
**Agile practices are in use across the organization.**

- 51% A great deal
- 30% Somewhat
- 16% A little bit
- 3% Not at all

Legend:
- A great deal
- Somewhat
- A little bit
- Not at all
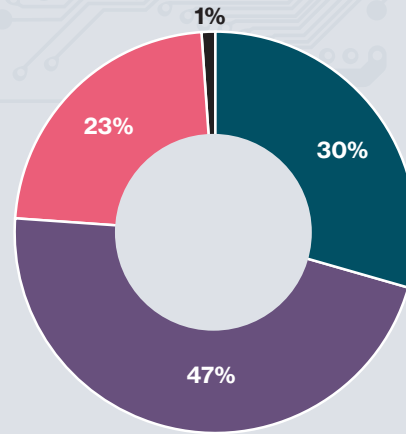
Source: MIT Technology Review Insights survey, 2023

## Figure 11: But still lack capabilities for experimentation

Organizations are less confident that they have the organizational fluidity that enables evolution.
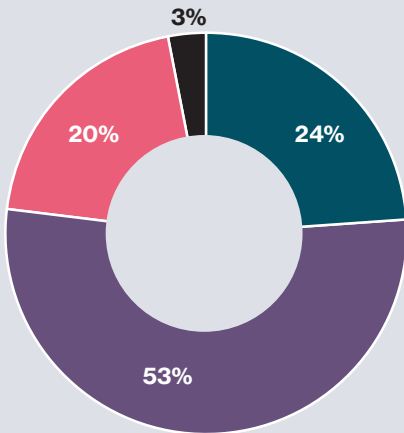
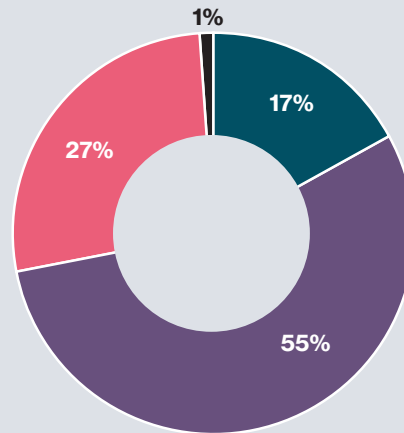**Decision-making power is close to where the work is done.**

- 1%
- 22%
- 31%
- 45%
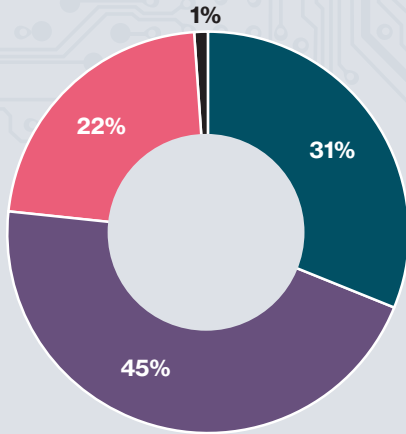
**Once a strategic decision is made, it can be executed quickly.**

- 1%
- 23%
- 30%
- 47%

**We are able to quickly reallocate capital and resources when priorities change.**

- 3%
- 20%
- 24%
- 53%

**We are able to quickly reassign talent when priorities change.**

- 1%
- 27%
- 17%
- 55%

**When an initiative is not working, we are quick to shut it down.**

- 4%
- 15%
- 37%
- 45%

Legend:
- ■ Strongly agree
- ■ Agree
- ■ Disagree
- ■ Strongly disagree

Source: MIT Technology Review Insights survey, 2023
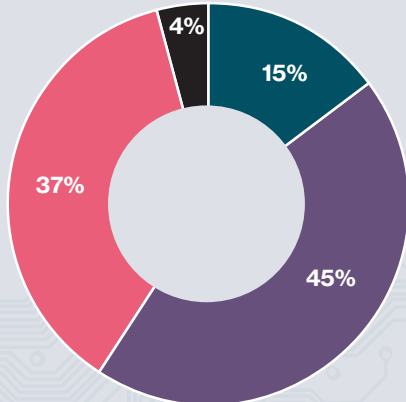
# 08 Conclusion: Ready for evolution
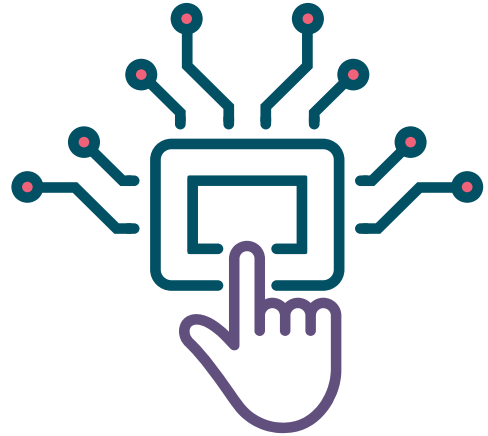
The most consistent feature of the future will be change, and as such, businesses must be able to continuously adapt to a permanently disrupted environment. Our research shows that organizations have largely not yet made a mindset shift toward evolution — a commitment to developing their organizational capabilities for continuous, iterative change.

Digital transformation in the enterprise should not be a one-and-done event, focused on adopting new technology. Instead, it should take an evolutionary lens, focused on building people and organizational capability for ongoing adaptation. We find that organizations that center on creating customer value and developing employees' skills at answering — and asking — new questions in their transformations are most likely to encounter success. An experimental mindset — including practice at failure and quick recovery — is key.

While many organizations now engage flexible, adaptable approaches in their technological capabilities and architectures, their true benefit is only realized when an organization develops evolutionary capabilities throughout its entire operating model. Many organizations lack this structural fluidity — the ability to shift the organization's structure in concert with the technology architecture and in response to changes in business strategy. As such, they are forced to resort to disruptive restructuring when the business's structure no longer meets its needs.

Companies that create a level of malleability in the way they operate that matches their approach to technology will create organizational resilience and sustainable business value — the ability to change what they do, not just how they do it. Though the precise technologies motivating transformation will change, the ability to evolve in response to the next radical remaking of the industry is what will pay dividends long into the future.

"The pinnacle of a digital transformation," says De Santis, "is embracing an organizational operating model that is able to respond to changes in customer expectations and business context almost on demand; that is, in essence, the core of the digital transformation journey."

"The pinnacle of a digital transformation is embracing an organizational operating model that is able to respond to changes in customer expectations and business context almost on demand."

**Marcelo De Santis**, Chief Digital Officer, Thoughtworks

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## About Thoughtworks

Thoughtworks is a global technology consultancy that integrates strategy, design and engineering to drive digital innovation. We are over 12,500 people strong across 50 offices in 18 countries. Over the last 25+ years, we've delivered extraordinary impact together with our clients by helping them solve complex business problems with technology as the differentiator.

/thoughtworks

**Footnotes**

1.  "IDC Worldwide Digital Transformation Spending Guide," International Data Corporation, 2021.
2.  Patrick Forth, Tom Reichert, Romain de Laubier, and Saibal Chakraborty, "Flipping the Odds of Digital Transformation Success," Boston Consulting Group, October 29, 2020.
3.  Michael Bucy, Bill Schaninger, Kate VanAkin, and Brooke Weddle, "Losing from day one: Why even successful transfomations fall short," McKinsey & Company, December 7, 2021.
4.  Ibid.
5.  Daniel Pallozzi, "The word that took tech by storm: Returning to the roots of agile," Thoughtworks, October 16, 2018.

**Illustrations**

Illustrations assembled by Tim Huxford with elements from Shutterstock.

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