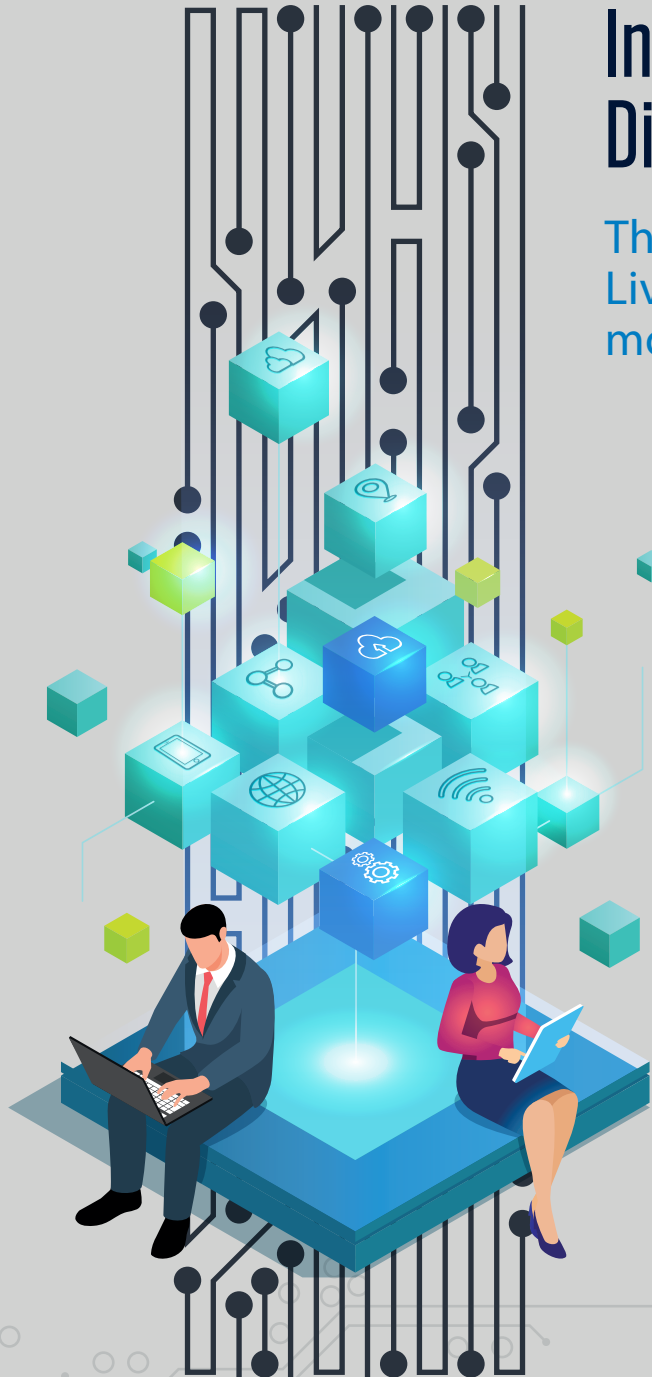


# Infosys Digital Radar 2023

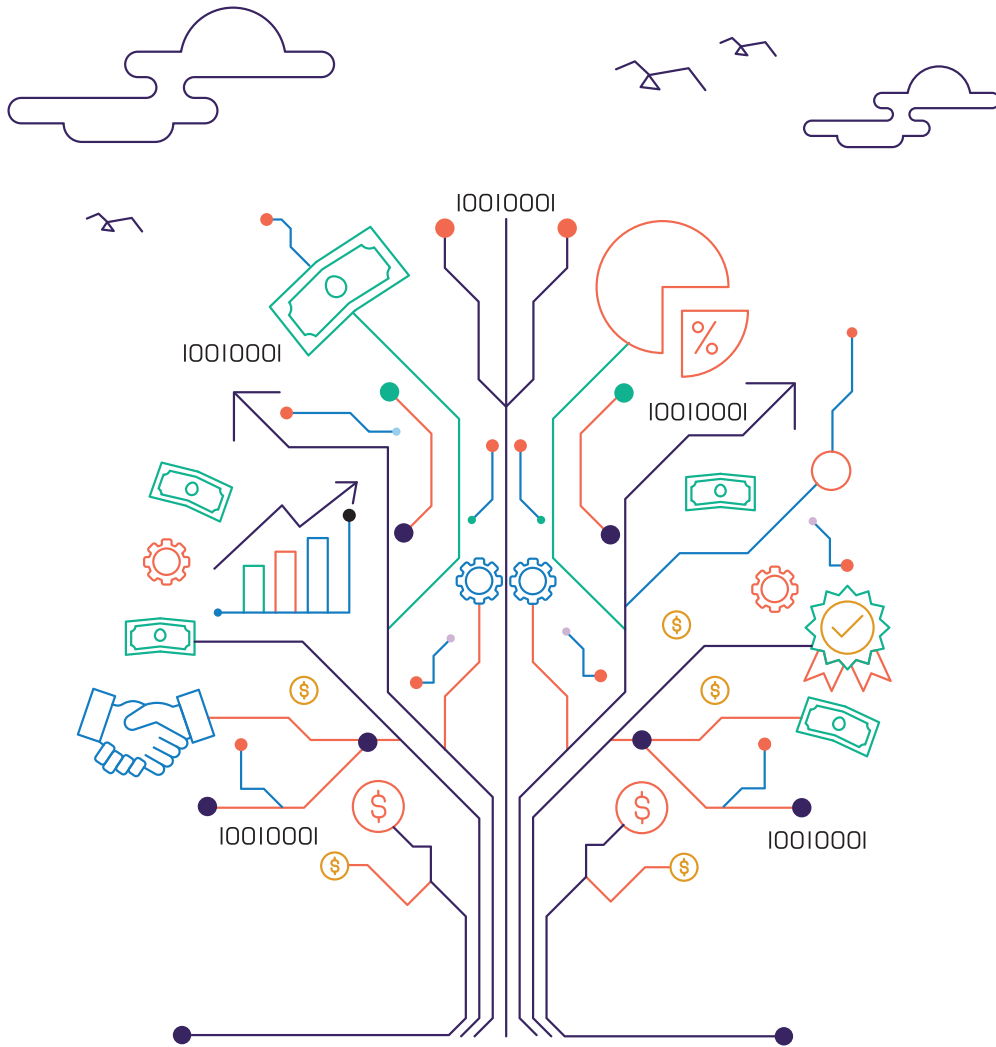
The next digital frontier:  
Live data, operating  
model, and culture



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# Executive summary

The world economy is tougher than ever — and investments in digital technology alone will not guarantee enterprise success. After decades of adopting one digital technology after another, companies now need to change the way they structure their business around technology to get the most out of these investments. Successful companies don't just adopt new technology, they continuously adapt their business around it to consistently outperform their peers. These companies grow despite inflation, a growing worldwide recession, complicated supply chain issues, and other challenges. This year's Digital Radar research examines specific practices and technologies that make companies successful today and in the future.

The Infosys Knowledge Institute surveyed 2,700 executives across seven regions and 12 industries about three areas we believe are important for success: innovation, net zero, and digital experience. We found evidence that all three areas influence profit growth. Innovation and digital experience also correlate with improved brand perception, and digital experience additionally correlates with employee retention.

The research reveals that a company fit for the 21st century must build a foundation of live data; follow the trail of value, not process; and build a culture of responsible risk taking.

## A foundation of live data

Live data – data that is transparent, readily accessible, and shared widely – is a prerequisite for innovative, sustainable, and human-centric enterprises. A culture built around live data practices, like using ESG dashboards and data-driven digital experiences for employees, dramatically increases the likelihood that a company is a top performer.

## Follow the trail of value, not process

Building a business and operating model around products correlates with time to market, a measure of innovation. These companies are about 50% more likely to be in the top quintile of the fastest product creators. The two other important strategies are subscription-based business models (40% more likely to be in top quintile) and expansion into other industries (53% more likely).

## A culture that takes responsible risks

A company that takes responsible, considered risks, backed by live data, is more likely to create products faster, retain employees, and increase profit than those that do not. We identified five culture levers that, together, can increase the chance of being a leader in quick innovation up to fivefold.

## Where firms are going wrong

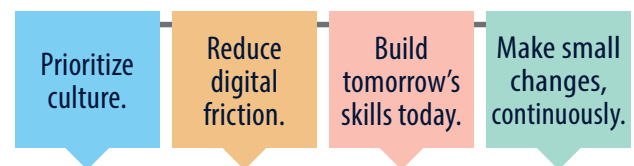
We found that only 5% of firms are currently implementing a live data approach, and nine out of ten companies have the wrong organizational structure and culture to unlock the next frontier of digital growth. In fact, only about half of organizations in this research are organized around products, and just 14% of firms are prioritizing the right cultural practices. Additionally, just 7% of firms are product-centric and using these responsible, risk-taking cultural practices to change how the business makes money.

## The pendulum stops swinging

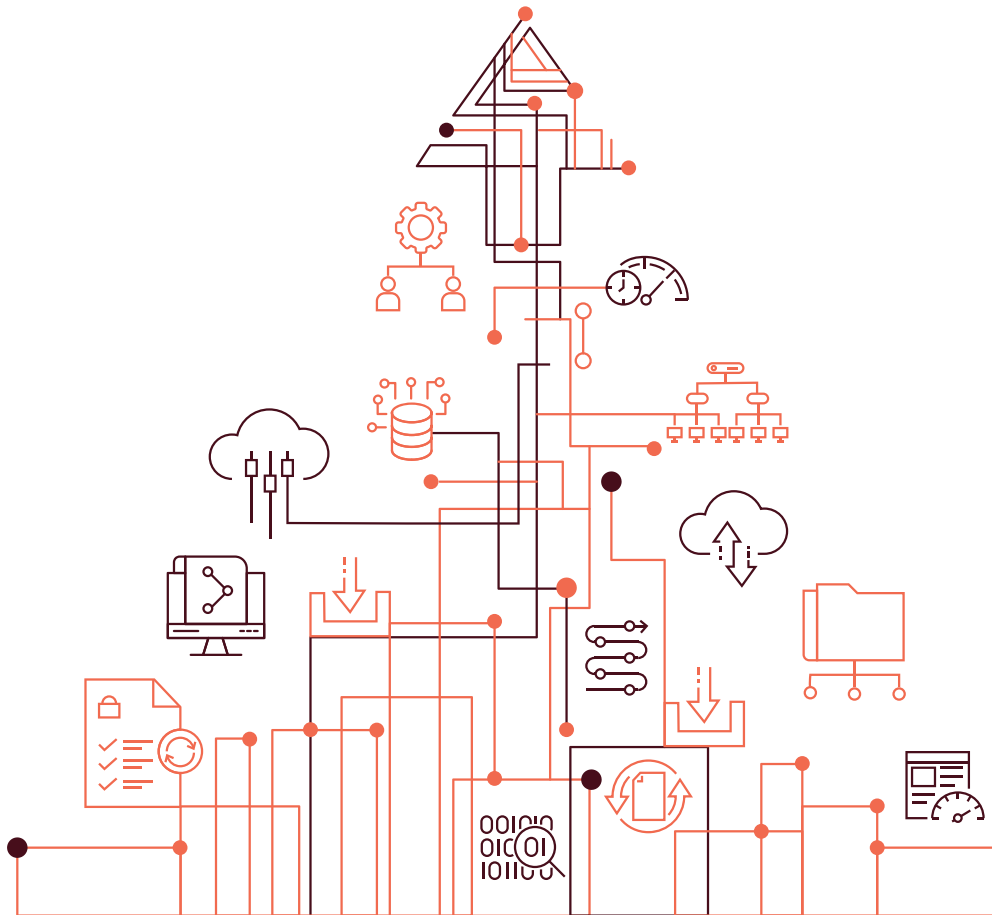
While digital technologies will never stop evolving, our research clearly shows the importance of how companies use tech and how they structure their organizations to be more agile and responsive. Companies used to create scale through people and value through technology, but today the equation has reversed. Now they achieve scale through technology and value through people. These foundational tenets of the modern operating model will stop the pendulum swing from business units to function-centric and back again. It will settle at a hybrid model where start-up-like growth, consistency, and efficiency are not mutually exclusive.

With live data and autonomous, responsible risk taking, firms can have their cake and eat it too: Agile, offering-centric growth strategies live alongside integrated global standards that deliver cross-enterprise functional efficiencies.

To stop the oscillation and ignite growth, firms should follow these four principles:



These strategies will help companies innovate for growth and new market opportunities, provide great digital experiences to attract and retain employees and customers – and do all this while reducing environmental impact.



# A foundation of live data

Digital technology and the data it produces and runs on are ubiquitous and fundamental for 21st-century businesses. However, many companies [are not getting what they want](#)<sup>1</sup> out of their digital investments, and [suboptimal data practices](#)<sup>2</sup> further limit the value of these investments. We previously found that a commitment to people, planet, and purpose correlates with more [effective digital transformations](#),<sup>3</sup> and this year, we investigated the specific mechanisms by which this happens.

We believe that companies best positioned to thrive in the coming years are those that can capitalize on new revenue growth opportunities through innovative practices. We also believe that companies that fully engage with their employees and customers through

digital technologies will achieve better business outcomes. And finally, we believe that companies that reduce their impact on the environment will be more sustainable businesses in the long term. For this reason, this year's Digital Radar focused its research on innovation, digital experience, and net-zero practices and how they correlate with business outcomes.

We found some empirical evidence that doing well at each of these correlates with more profit. Better digital experience enhances employee retention and brand perception. Innovation also strengthens brand perception. The technologies and organizational practices that drive these outcomes create and rely on good, transparent data that is readily available and continuously refreshed – what we term “live data.”

## Most firms aren't doing data well

Live data is real-time or near-real-time data that increases operational and product-based intelligence. In contrast to batch or historical processing, this sort of data is shared widely, either through human-to-machine or machine-to-machine interfaces (in the latter case, this live data underpins the very best machine intelligence, such as deep learning).

Our research found that just 5% of firms are taking a holistic “live data” approach, one where the use of transparent data reporting and data dashboards are implemented alongside data practices like data-driven decision making and a pipeline of comprehensive, precise, trustworthy, and secure live data. We found that this live data approach significantly increases innovation outcomes, including faster product creation, while additionally spurring the organization forward to create better digital experience and net-zero outcomes.

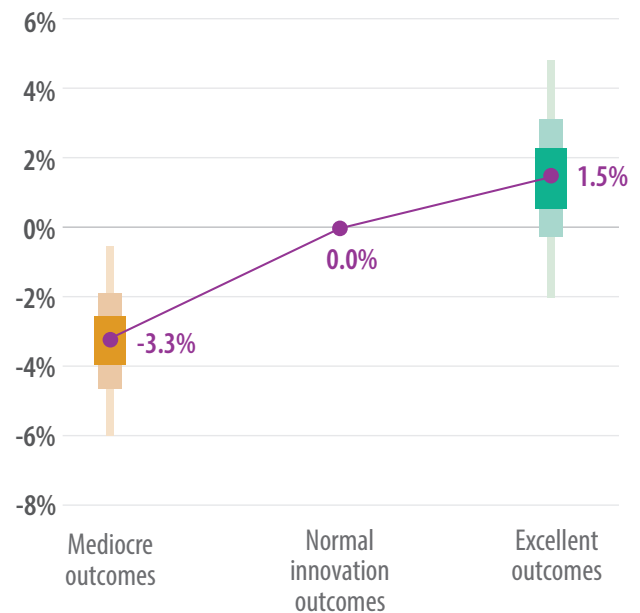
## Stronger data practices, better innovation

Our analysis shows that while some evidence indicates that innovation creates profit, being bad at innovation is also bad for profits (Figure 1). Further, the more best practices companies use for managing data, the more innovative the company, and thus the more likely it is to be profitable.

According to our research, some best practices are using ESG dashboards and data to drive decisions.

“The use of ESG dashboards enables companies to pull in real-time data,” says Corey Glickman, head of sustainability and design at Infosys. “This enables C-suite vision to be transformed into business and technology reality through product owner actions meeting key performance indicators.”

Figure 1. Innovation positively correlates with increases in profit change



N = 1,400 companies. Expected differences (as percentage points) in profit change for mediocre innovation outcomes (orange) and excellent innovation outcomes (green). These differences were estimated from a linear regression model and represent the average expected correlation holding all other variables constant.

Source: Infosys Knowledge Institute

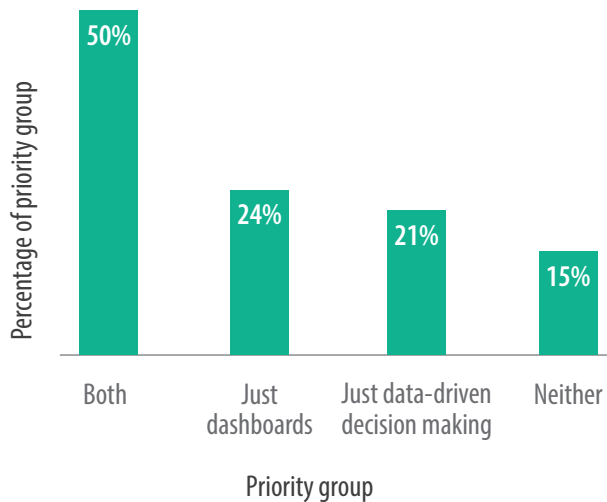


“The use of ESG dashboards enables companies to pull in real-time data. This enables C-suite vision to be transformed into business and technology reality through product owner actions meeting key performance indicators.”

**Corey Glickman**  
Head of sustainability and design, Infosys

Using ESG dashboards and driving decision through data simultaneously doubles the likelihood of a company becoming among the fastest product creators. (Figure 2). In other words, companies that are all-in on data get the best outcomes.

Figure 2. Companies that prioritize both ESG dashboards and data-driven decision-making are faster product creators



N = 146 companies. Percentage of companies that experienced excellent product creation speed, dependent on which of the two practices they listed in the top 5 (from a list of 16) for helping them achieve their goal of increasing product creation speed. When controlling for outside factors through linear regression, we estimate that focusing on data-driven decision making is correlated with >80% increase in likelihood of having excellent product creation speed and focusing on use of ESG dashboards is correlated with a similar increase of about 20%.

Source: Infosys Knowledge Institute

Being all-in means having a strategy for fresh, relevant data.

Rafee Tarafdar, Infosys chief technology officer, recommends a hub-and-spoke data strategy, where companies centralize platform and technology, but give teams flexibility to operate on their own. The hub is a common repository that defines the data and its location. The spokes, figuratively radiating from the hub, contain and share data, as dictated by business specialists and AI teams.

Companies increasingly establish a hub as a common tech layer that organizes data and connects spokes that empower product lines to manage their own live data.

“The central shared data infrastructure provides the building blocks required by each of the data product teams to bring in agility and speed to data engineering, generating insights and provisioning services for consumption,” says Tarafdar. “As the data product teams own the data quality and engineering for a specific business product, they ensure the data is curated, cleansed, and of good quality to generate quality insights and enable AI engineering for decisions, recommendations, and predictive analytics.”

Most organizations have not yet settled on a centralized or federated approach to data management, our [Data + AI Radar](#)<sup>4</sup> found. They are toggling between the two extremes. However, centralized data management will be the most common strategy for big businesses in 2023, with 49% of respondents using it, compared to 32% using a federated approach. Hub-and-spoke offers a pathway out of this one-size-fits-all impasse, a middle ground that suits an organization’s specific context and needs.



“As the data products teams own the data quality and engineering for a specific business product, they ensure the data is curated, cleansed, and of good quality to generate quality insights and enable AI engineering for decisions, recommendations, and predictive analytics.”

**Rafee Tarafdar**  
Chief technology officer, Infosys

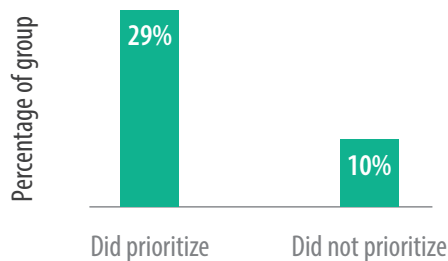
Australian retail behemoth [Wesfarmers](#)<sup>5</sup> has established a sort of hub-and-spoke model for its advanced analytics capabilities. An advanced-analytics hub serves industrial and retail portfolios while analytics and data capabilities are built within each division. With the support of the hub, business units are using customer insights to improve the experience and personalization across various digital touchpoints, supporting decisions by merchandizing, marketing, and store network planning.

## High-fidelity data for better digital experiences

Digital experience initiatives are also improved by the use of good data. Companies that prioritized comprehensive, precise, trustworthy, and secure data (i.e., high-fidelity data) were more than 55% more likely to improve post-sales customer engagement and loyalty (see Figure 3).

“Comprehensive and trustworthy data is key, otherwise you’re just flying blind,” says Terence Eden, an experienced technology architect we spoke to. “It’s easy to innovate on digital experience but to go in the wrong direction. You first need to understand what is making a positive impact on digital experience and then double down on that, leading to better customer engagement after the sale of the product in the market.”

Figure 3. Companies that prioritized high-fidelity data also improved post-sales customer engagement and loyalty



*N* = 103 companies. Percentage of companies that experienced excellent improvement in post-sales customer engagement and loyalty, dependent on if they listed the practice in the top 5 (from a list of 16) for helping them achieve their goal of improving post-sales customer engagement and loyalty. When controlling for outside factors through linear regression, we estimate that prioritizing comprehensive, precise, trustworthy, and secure data is correlated with an increase of more than 55% in the likelihood of achieving excellent improvement in post-sales customer engagement and loyalty.

Source: Infosys Knowledge Institute

Many of our interviewed experts say that if a product or service doesn’t deliver as expected, people will defect immediately to ones that do. The onus then is on companies to clean and secure their data, while always keeping it fresh.

Firms like Walmart and Microsoft use this kind of live data for analytics to work out why customers churn and to use [A/B testing to create new services](#)<sup>6</sup> that make them stay. These titans rely on dependable data for compelling user experiences that tap into the behavioral and social factors, convincing customers that the firm knows, understands, and cares for them.

Creating clean and robust data for data analytics is not a quick process. It needs a long-term strategy that benefits stakeholders through incremental improvements. Haja Deen, director of data analytics at Pladis Global, a global snacking behemoth, talks about using a test-and-learn, microchange management approach: “We started with basic use cases, visualizing the data and building trust over time. It’s not a short-term or easy exercise to make sure the data is clean and consistent. But when you achieve that, people start to trust the dashboards we’ve built and stop using the Excel sheets they used to produce.”

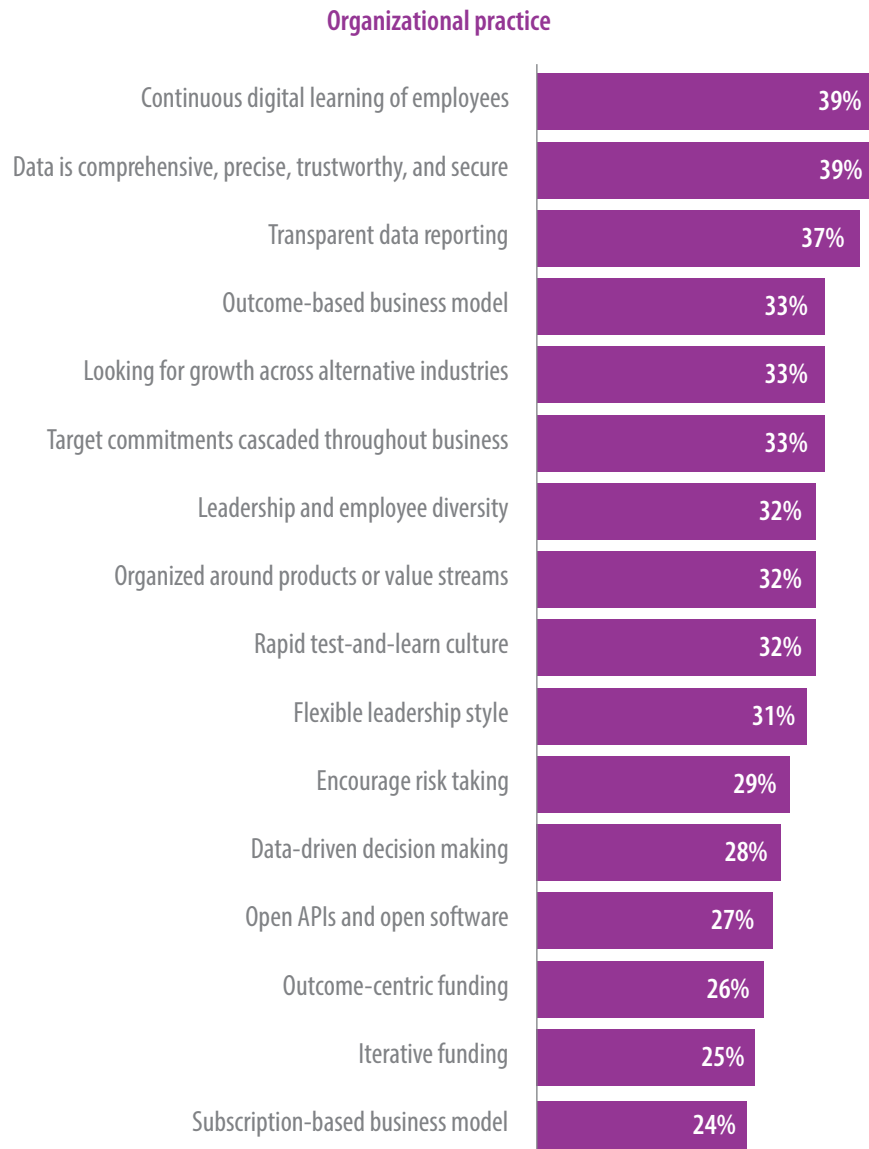
## Live data is transparent — An imperative for innovation, digital experience, and net zero

In addition to the linkage between ESG dashboards improving product creation speed, respondents indicated that transparent data reporting was one of the Top 3 success factors for improving digital experience (Figure 4).

We found a similar trend for net zero, with transparent data reporting among the top three success factors for getting to net zero (Figure 5). According to experts we’ve interviewed for this research, an open data culture is critical to net-zero ambitions. Given many firms are starting net zero from ground zero, there’s realistically no competitive advantage from not sharing data. Instead, open-source data and collaboration across markets and industries is going to be fundamental to net-zero success.



Figure 4. Transparent data reporting is a top practice to improve the digital experience



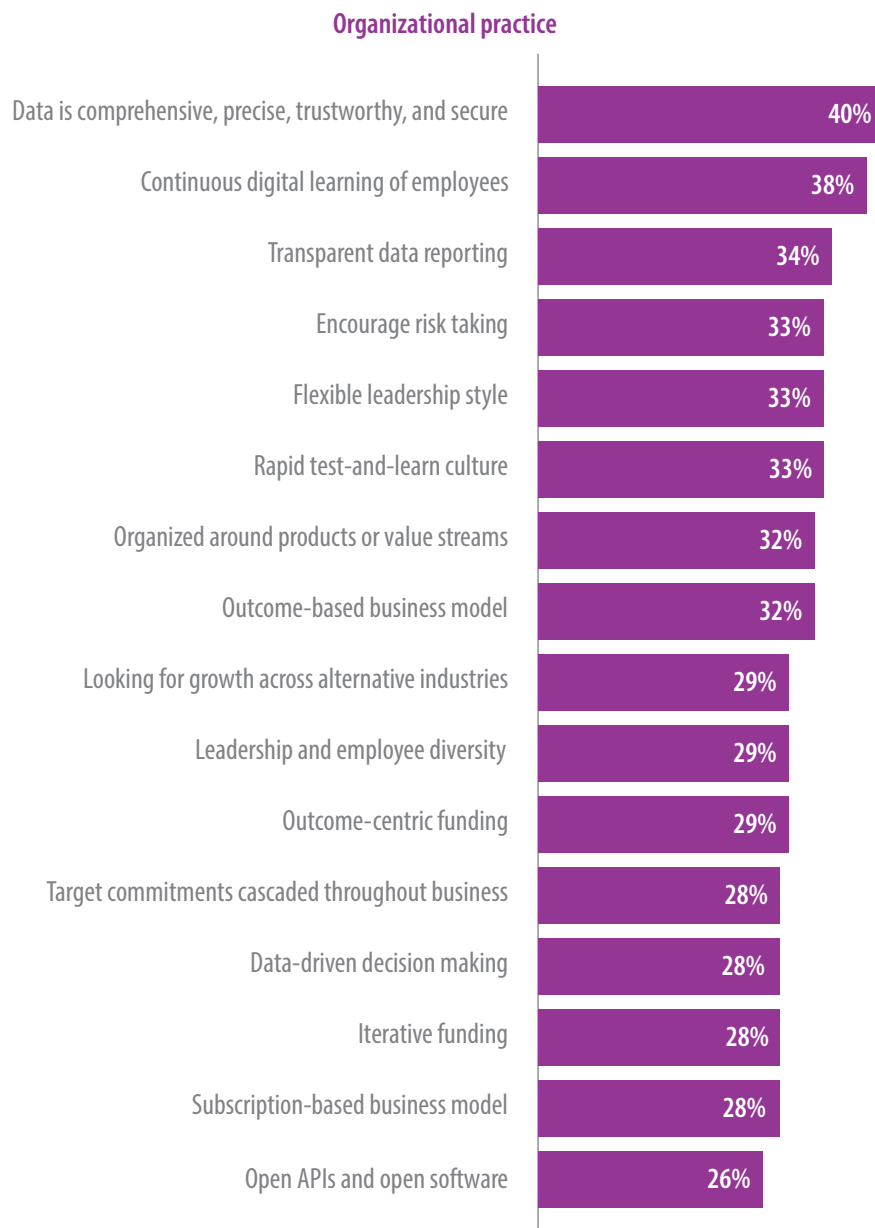
N = 937 companies. Percentage of companies that placed an organizational practice in the top 5 (from a list of 16) for helping them achieve digital experience objectives.

Source: Infosys Knowledge Institute

Transparent data reporting is crucial: It improves efficiencies and, aligns the whole firm with the vision and mission of the firm, whether that be getting to net-zero, innovating, providing better digital experiences, and so on. As Amy Wilkinson, founder and CEO of Ingenuity and lecturer at Stanford Graduate School of Business, says: “A long horizon view is crucial for senior leaders to navigate through turbulence, so they align

on shared goals and are empowered to make quick decisions and avoid distractions. In fact, the more uncertain the future, the more crucial it is for senior leaders to articulate and reiterate a clear long-term vision so they can innovate.” She describes that without a long-term vision or mission, teams won’t make decisions and risk getting left behind.

Figure 5. Transparent data reporting is a top practice to improve net-zero outcomes



N = 797 companies. Percentage of companies that placed an organizational practice in the top 5 (from a list of 16) for helping them achieve net-zero objectives.

Source: Infosys Knowledge Institute

Without transparent data reporting, it is likely that we will fail to meet net-zero objectives, such as those mandated by the [UN's sustainable development goals](#),<sup>7</sup> including the integration of climate change measures into national policies, strategies and planning. Further, transparent reporting significantly increases the speed of decision-making, a prerequisite for an innovative, human-centric, and sustainable firm.

“Transparent data reporting is very important in a modern organization,” says Eden. “In big companies, people often scramble to report financial results because it can take weeks to find the data. It should be a simple button. The same with net zero — People waste time because it is too difficult to find out what their carbon output is”.

For big business to improve the accuracy of its emissions measurements, digital solutions are key. These solutions enable firms such as Microsoft and Google to rigorously measure, track, and reduce their carbon footprint at scale. Data is pulled from different sources

across the business, providing a single source of truth and promoting transparency. Such solutions support informed decision making, automation of CO2 emissions reporting, and provide a roadmap for emissions reduction going forward.

## The importance of innovation at Infosys

Innovation, in its fundamental form, is doing something new that creates value. In a world facing climate disaster, war, and economic turmoil, the ability to innovate and grow is important than ever.

Research indicates that companies that invest heavily in "white space innovation" - developing new products and markets that promote a long-term strategy for value creation - are the most stable. Firms that cultivate a culture of risk taking and making big bets on the future will smoothly navigate tough times and emerge on the other side with their credibility, integrity, and balance sheet intact.

America is increasing its investment toward innovation this year, [spending \\$370 billion on green energy](#),<sup>8</sup> and dedicating a significant portion for research. The US-based Chips and Science Act will provide [\\$52 billion over five years for the semiconductor industry](#),<sup>9</sup> some of which will incentivize private R&D.

We found that good innovation leads to increased profits, all else held equal. Certain corporate practices enable the top performing firms to innovate quickly, and release products to market in short timelines, remaining competitive and growing margins more than others. These practices include a data-driven culture and the use of dashboards to broadcast both success and failure. We discovered that top performers organize their companies around products, such as customer journeys and value chains, rather than functional processes. This allows them to deliver faster to the market and keep customers engaged.

Our Infosys Consulting XTI practice (Experience Transformation and Innovation) has a relevant offering here called Product Powered Organization.

This offering supports senior leaders to create mindsets, culture, and the operating model to build the best and most innovative products. White space innovation is amplified by shifting the mindset toward products as opposed to projects and programs. Some of the key activities we drive are how to enable and nurture product managers, how to work with DevOps teams to run dual track Agile (and continually focus on discovery activity), how to build a product culture, and how to adjust investment and funding models.

At Infosys, we believe innovation comes from all parts of the business. Business lines should share IP, and all employees should have access to the right data to drive innovation and growth. Great ideas should be shared and given the opportunity to become new market-disrupting products. Infosys Wingspan, our learning portal, began in this way, as did the Knowledge Institute's content creation platform, which is now used across the company to create compelling thought leadership. Our XTI practice also has an offering called Enterprise Innovation Management. Here we combine strategy, operations, and "innovation as a service" as a planned and systematic approach to lead enterprises on their innovation journey and close the innovation gap. We build a line of site between company strategy, initiatives, value and then understand capability to innovate before setting the direction and piloting the change.

Quick experimentation and rapid knowledge sharing can remove uncertainty about innovation by providing feedback on what works and what doesn't. Our research this year found that this rapid test-and-learn culture is a top priority for many executives, ranking fourth out of 16 practices that achieve the best innovation outcomes. At Amazon,

experimentation is confined to testing dreamy ideas— ideas that customers love, can become big businesses, generate strong returns, and have a good chance of lasting.

Innovation is more about culture than even technology and operating model. At Infosys, our cultural tenets of putting both customer and

employee at the center has made things smoother for us. Employees become advocates, and with many leaders practicing psychological safety and Agile servant leadership, they are energized to put their best foot forward, dreaming up those new ideas becoming reality.

## Technologies and live data: The importance of cloud, AI, and analytics

### Cloud and AI essential to achieve objectives

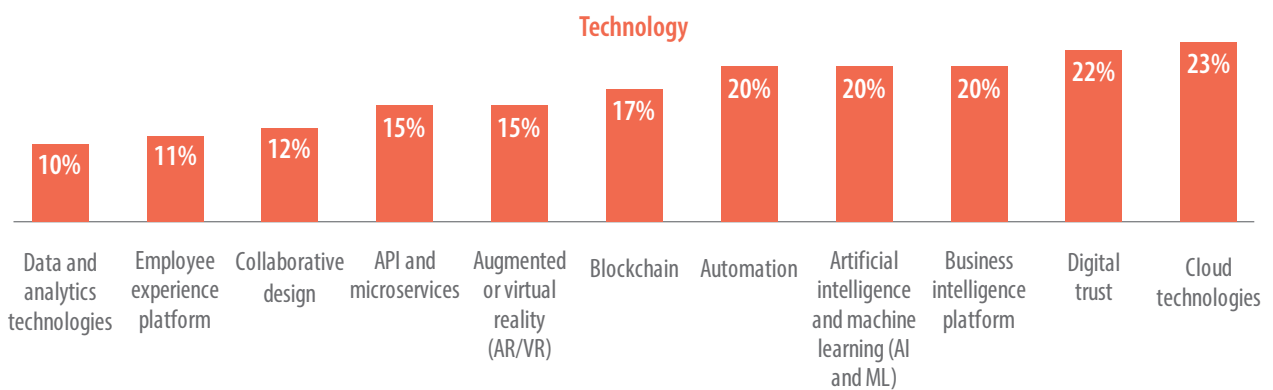
Our [Cloud Radar 2021 research](#)<sup>10</sup> found that exceptional cloud performance can boost profit by up to \$414 billion globally, but only with deep levels of adoption and thoughtful decisions in cloud deployment. Digital Radar 2023 reveals that cloud remains critical to businesses. Respondents selected cloud as the top-ranked technology to help them achieve digital experience, innovation, and net-zero objectives (Figure 6).

Live data requires optimal use of cloud technologies. Legacy systems for their part do not (and cannot) take advantage of the features native to advanced

exponential technologies, such as AI (ranked joint-third in helping companies achieve these three broad objectives; see again Figure 6).

Companies use live data, hosted in the cloud, to make AI algorithms work better, and to release products faster into the chosen market. “First, we think about AI as the engine, and data as the fuel,” says Raj Savoor, vice president of network analytics and automation at AT&T Labs. “It begins with how we want to collect data and learn from it and push out products faster. That’s where a lot of the machine learning capabilities come in. We have been investing in a lot of big data management capabilities over the past few years, ensuring that those are well exposed to our AI engines.”

Figure 6. Cloud rated as the top-most technology to achieve innovation, digital experience, and net-zero objectives



N = 2,700 respondents. Percentage of companies that placed a technology in the top 2 (from a list of 31) for helping them achieve their innovation, net zero, or digital experience objectives. Not represented in figure: enterprise service management (9%); cybersecurity (8%); digital workplace services and employee management tools (7%); digital twins, computational design, internet of things (6%); consumer intelligence platform, process mining, digital self-service, knowledge graph (5%); customer experience platforms, learning management platforms, legacy modernization (4%); NCLC (3%); RPA and edge computing (2%); 5G (1%); 3D printing (0%).

Source: Infosys Knowledge Institute

Firms must be cautious in their use of live data as it poses significant security and privacy risks. Put briefly, live data must come with adequate security and privacy guardrails, as Karthik Nagarajan suggests in the upcoming Infosys Knowledge Institute book, “Trusting Synthetic Data”. “It is much more complex to deal with live data at enterprise scale, as it can be subjected to security or privacy risks as hackers and cybercriminals can get access to personal data through linkage attacks or breaching vulnerabilities in security controls,” he said when we interviewed him for this research. “The other problem is that live data is expensive. Today, organizations are struggling with the huge costs of data swamps. Large enterprises must deal with overhead costs, the sustainability impact, and data center-upkeep when managing live data analysis.”

Live data is a differentiator and increases the value of data that isn't live. An autonomous vehicle, for instance, is powered by telemetry (live, observable data captured over the air), exponentially improving system control and other historical data embedded in the engine. Even more so, Karthik mentions three areas where live data is not just a nice-to-have but a must-have: Threat hunting (or looking for emerging threats in the IT landscape); data analysis, with a focus on protecting individual privacy and sensitive data; and finally, industry specific use cases such as 5G in telecom to get high-quality insights on marketing and sales performance across customer personas.

“Enterprises will ramp up investments in live data analysis. They will use AI to improve data quality and reduce privacy risks in the enterprise,” he notes. “They will rapidly ingest, protect, and dispose of live data to leverage insights without breaching the privacy of the individual or risk regulatory fines.”

### Data and analytics as bedrock for employee satisfaction

Respondents ranked data and analytics technologies in the top-third to improve digital experience, ahead of technologies like IoT and knowledge graph. Indeed, the global data analytics market is set to [grow by over \\$21 billion between 2023 and 2027](#),<sup>11</sup> at a CAGR of 13.84%.

Our [Future of Work report](#)<sup>12</sup> from February 2023 found that automation of digital tools through data correlates with business growth and a more resilient business

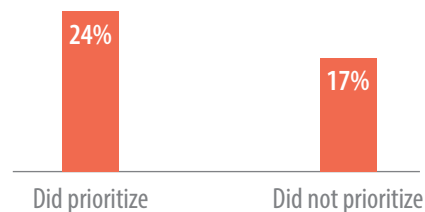
environment. Managers must be equipped with data analytics software to understand their employees in a remote or hybrid operating model. Employees that see their managers using analytics are more likely to use it themselves and engage more with the purpose and mission of the firm.

We found similar outcomes. Firms that engage in data-driven decision-making are 11% more likely to significantly increase employee retention than those that don't (Figure 7).

Live data is crucial, and only 5% of firms are doing it well. But even more important is the way the firm is structured to benefit from data-driven insights. Where once data was shared across functional lines and took weeks to show up in how decisions were made, today's customer power requires an operating model that uses data at speed to reconfigure how value flows without and across smaller units of decision making. Such a model has agility and speed at its heart, thinks carefully about customers, employees, and the wider partner ecosystem, and can use shared resources to cut costs, be more efficient, and grow faster than the competition.

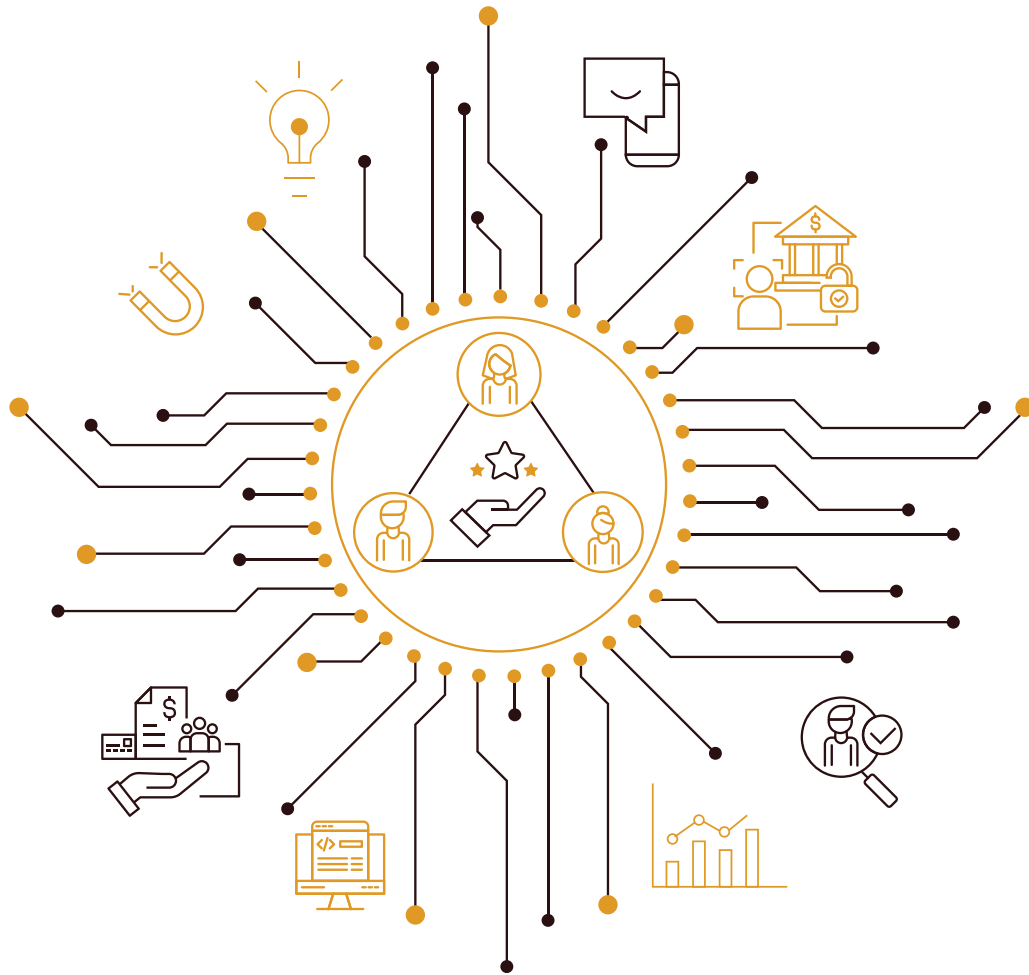
Figure 7. Data-driven decision-making leads to improved employee retention

#### Percentage with significantly improved employee retention



*N* = 797 companies. Percentage of companies that experienced a significant increase in employee retention, dependent on if they listed data-driven decision making in the top 5 (from a list of 16) for helping them achieve any of their innovation, net zero, or digital experience objectives. When controlling for outside factors through linear regression, we estimate that prioritizing data-driven decision making is correlated with an about 11% increase in the likelihood of having significantly increased employee retention.

Source: Infosys Knowledge Institute

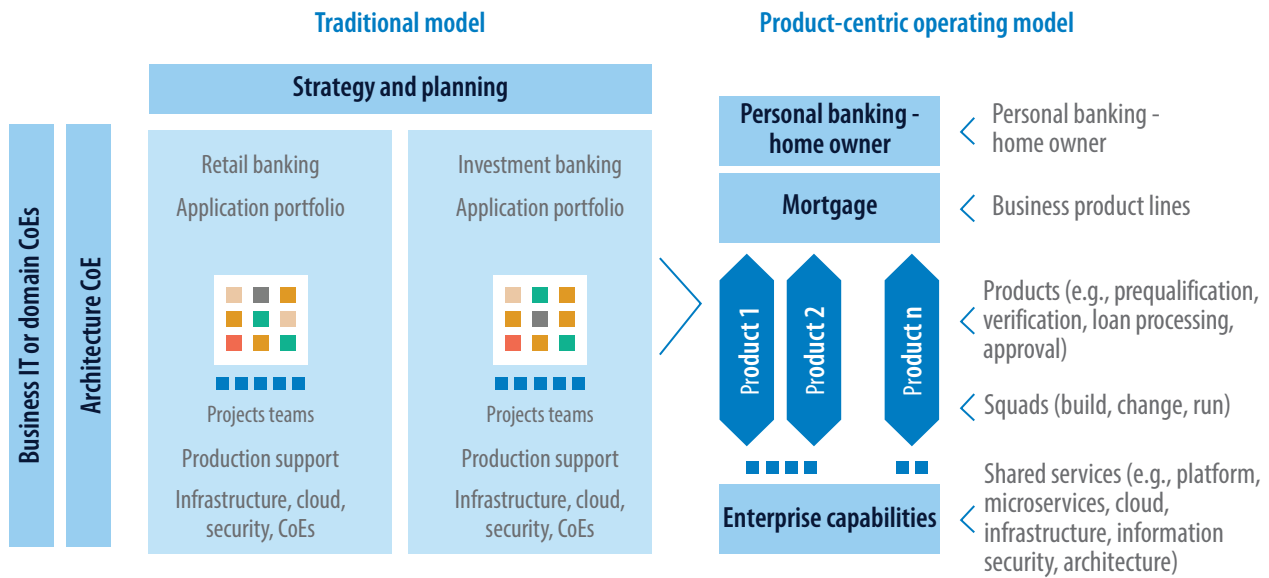


# Follow the trail of value, not process

Our research suggests that effective companies not only have a live data foundation but also an operating model built around products or value streams (Figure 8). This offering-centric approach enables fast-growing, profitable, sustainable, and human-centric outcomes, and in turn better returns on technology investments.

Companies following this approach are about 50% more likely to be top performers in delivering products faster, a key innovation objective in our research. Companies centered around processes (rather than products) have a higher likelihood of mediocre performance from their innovation initiatives (Figure 9).

Figure 8. In the product-centric operating model, IT delivery is aligned to customer journeys



Source: Infosys Knowledge Institute

## Only half of firms pursue a product-centric approach

While product-centricity offers many benefits, our analysis found that just 50% of our respondent companies are organized in this way.

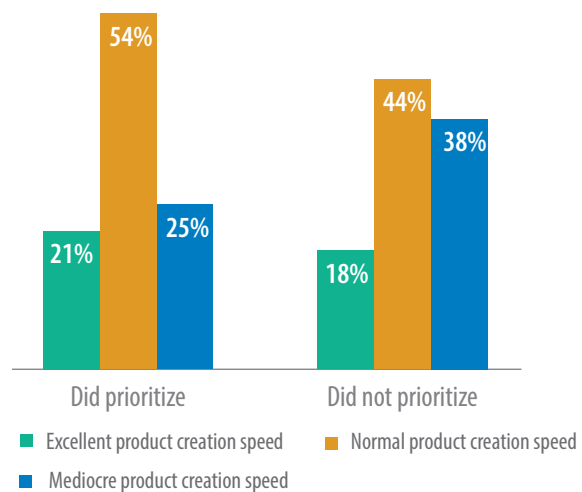
Those that do can run faster and are able to pivot quickly in the face of market forces.

Organizing around offerings is less about a specific product and more about the [value delivered](#),<sup>13</sup> enabling the firm to have the [agility of a start-up](#)<sup>14</sup> while being connected via networks across the partner ecosystem. A line or lines of business offer capabilities and services, often grouped around an end-to-end customer journey. Outcome-centric business model helps firms track value, create alignment, and increase engagement around measurable goals.

This model enables customer-centricity across the value chain and creation of market-specific innovative products. Product-centric delivery allows firms to achieve value faster and adapt for greater innovation. Depending on the business strategy, the approach might focus on client experience, customer journeys, or value streams, with live data underpinning decisions.

Our interviewees talked about live data as the glue that binds the product-centric organization together. What's needed is data that flows smoothly without friction,

Figure 9. Product-centric operating models boost product creation speed



N = 147 companies. Percentage of companies that experienced each product creation speed outcome dependent on if they listed the practice in the top 5 (from a list of 16) for helping them achieve their product creation speed objective. When controlling for outside factors through linear regression, we estimate that prioritizing organizing around products or value streams is correlated with an about 50% increase in the likelihood of having excellent product creation speed.

Source: Infosys Knowledge Institute

bringing teams together to make customer-loved products. In this paradigm, data spreads quickly and efficiently across the entire value chain.

“Our offerings-centric business model, driven by real-time data and insights, helps us to create innovative products that impact peoples’ lives through healthier lifestyle decisions”, says Dr. Robert Maciejewski, founder and CEO of Biolytica, a health data platform for longevity professionals and their clients to decode the complexities of human ageing. “Modern AI will contribute enormously to the understanding of longevity biotechnology in healthcare. That is why we firmly believe that AI combined with live data will drive innovation forward and have a strong net impact on healthier living.”

Andrew Duncan, CEO and managing partner, Infosys Consulting, concurs.

“The only truly successful operating models of the future will be the ones driven by data, and flow in real time through all avenues of the enterprise. Seamless technology experiences will enable every employee with powerful decision-making capabilities that help them to drive a better end customer experience and create tighter connectivity between brand and product. Whether through planning and forecasting, to sales and servicing, to supply chain management and customer support, the data-driven “live enterprise” of the future will have a platform for significant competitive advance and accelerated growth — and will be strongly positioned to win new market share.”

## Product-centric strategies deliver better innovation and customer outcomes

In addition to organizing around products, two other strategies improve product time to market, one of our innovation outcomes: subscription-based business model and looking for growth across alternative industries (Figure 10).



“The only truly successful operating models of the future will be the ones driven by data, and flow in real time through all avenues of the enterprise.”

**Andrew Duncan**  
CEO and managing partner, Infosys Consulting

Figure 10. Three product-centric strategies drive product creation speed

Product-centric lever	Estimated increase in likelihood to have excellent product creation speed
Organized around products or value streams	45%-55% more likely
Subscription-based business model	30%-40% more likely
Looking for growth across alternative industries	45%-55% more likely

Source: Infosys Knowledge Institute

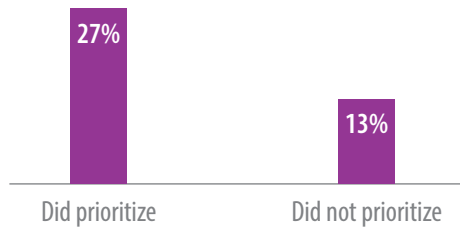
These levers have value beyond driving innovations. For instance, subscription-based business models also improve customer outcomes, including post-sales customer engagement and loyalty (Figure 11). Specifically, we estimate that the likelihood of having these outcomes (improved customer engagement and loyalty) increases roughly 80% by prioritizing subscription-based models, all else held equal.

Organizing around products, and not processes, enables firms to be more data- and customer-centric, igniting the ability to change how money is made from the product itself. Subscription businesses offer customers value, personalized product offerings, and convenience (when done right). With product-centricity, customers are part of the [development life cycle](#),<sup>15</sup> helping firms innovate on the right product offering and price point, while generating a virtuous cycle that uses data to better curate products and services to the needs of specific individuals. All this engenders loyalty and post-sale profit, according to experts we interviewed for this research.

The book [Beyond Digital: How great leaders transform their organizations and shape the future](#)<sup>16</sup> describes Adobe’s journey to subscription-based services. Before the move to subscription-based sales and the cloud, third parties were taking care of the company’s marketing and sales operations. So, the firm had limited customer information. Following the SaaS subscription, Adobe uses live data to see how customers use applications in real time and quickly identify both



Figure 11. Subscription-based business models improve customer engagement and loyalty



N = 103 companies. Percentage of companies that experienced excellent improvement in post-sales customer engagement and loyalty, dependent on if they listed subscription-based business models in the top 5 (from a list of 16) for helping them achieve their post-sales customer engagement and loyalty objective. When controlling for outside factors through linear regression, we estimate that prioritizing subscription-based business models is correlated with an about 80% increase in the likelihood of having excellent improvement in post-sales customer engagement and loyalty.

Source: Infosys Knowledge Institute

opportunities and pain points. Adobe then changed its operating model to concentrate on the product and the delivery of customer insights.

Product-centricity also enables companies to look for growth across alternative industries, which increases the likelihood of being in the top 20% of innovative firms (in terms of time to market) by more than 50% (Figure 10). This is because focusing on value streams or customer journeys increases the amount of data and resource sharing between product lines and creates more

flexibility with the firm’s intellectual property. When companies quickly launch new offerings in alternative markets, they grow faster. They also get a better understanding of the kinds of practices and strategies that will generate white space innovation, leading to entirely new markets (rather than just incremental improvement on current products or services that serve known customers).

“Organizing around products takes a user-centric view in solving the right problems the right way, brings business and technology together, breaks functional silos, and encourages a culture of experimentation driven by fast paced test and learn cycles,” says Alok Uniyal, VP and head of process consulting at Infosys. “This is a vital ingredient for innovation and over time it enhances the ability of an organization to experiment and innovate in adjacent or completely new industries and markets. No wonder [then] digital natives are entering into new areas and disrupting traditional players through innovative business models.”

In this paradigm, funding is linked to specific outcomes and key objectives. Many companies who follow this model use standardized, fast resource-allocation processes to shift people, technology, and capital rapidly between initiatives, out of slowing businesses, and into areas of growth. All this is possible through an operating model that is Agile and nimble enough to surface insights and act on them in real time — ahead of the command-and-control structures of the past.

## A glance into digital experience at Infosys

Digital experience includes both employee (EX) and customer experience (CX). EX is the set of interactions employees have with their organizations, while customer experience (CX) focuses on all touch points of the customer journey, from searching for a product to after-sales engagement.

Companies that fully engage with their employees and customers through technologies will achieve better business outcomes. Our [Digital Radar 2022 research](#)<sup>17</sup> found that leading firms use technology to improve these digital experiences and spur innovation. Further, our trends report last year, [Tech Navigator: Building the Human-centric Future](#),<sup>18</sup> described specific technologies and ways of working needed in this human-centric era. New technologies should work with and for us, with ethical standards in place, forgoing the dystopian view of some AI thinkers who say that automation and AI are coming for our jobs.

In this climate, organizations achieve better outcomes by looking after their employees and giving them adequate resources to perform their jobs effectively. Research by [Qualtrics found that employees are 230% more engaged and 85% more likely to stay three years in their jobs](#)<sup>19</sup> if they have appropriate technology to support them at work. Benefits from this human-centric perspective include the fostering of a culture of inclusion, the ability to retain top talent, and more resilient and agile operating models. This then has a concrete impact on the customer experience. According to the Temkin Group, CX leaders were five times more likely to earn “good” or “very good” employee engagement ratings than CX laggards.

We found that good use of digital experience boosts profits and improves brand perception and employee retention. To do so, firms institute the role of Chief Experience Officer to look after both CX and EX and use live data more than others to improve post-sales customer engagement and loyalty. In fact, companies that use comprehensive, high-fidelity data were up to 60% more likely to achieve good customer outcomes than those that didn't.

Transparent data reporting is a top practice to improve the digital experience. Leaders and employees are more likely to prioritize customer needs when they see the positive results of digital experience initiatives. The use of subscription-based business models also impacts digital experience outcomes, and specifically, post-sales customer engagement and loyalty increases by 80%. The servitization or by-the-hour business model has already benefited industries like manufacturing and energy, and others need to follow.

A good customer experience often involves a seamless customer journey or value stream. Apple is successful because it offers limited products and simplifies the customer journey. A survey by the consultancy firm [Siegel+Gale](#)<sup>20</sup> found that brands perceived as providing the simplest, most seamless customer journeys boasted both the strongest stock performance and the most loyal customers. At Infosys, our CX and EX offerings are also built around simplicity and effectiveness. Our solutions drive deliberate, disciplined design and delivery of experiences to employees and customers, while creating connections between the two. We also champion both customers' and employees' perspectives in the company's strategic decision-making through WONGDOODY.

Infosys Consulting helps foster a critical shift in how its clients envision experience-led transformation from a business problem best solved by technology, to a business change imperative whose success from a customer and employee perspective holds both future growth and marketplace viability in the balance. Our wider aperture for experience strategy allows our clients to make the critical connection between technology strategy, including even the most common IT architecture and software issues, and an enterprise's future ambitions for growth and profit. We assist our clients to realize a full spectrum of value gains with new ways that are nimble and flexible to catalyze innovation. This helps them scale more easily and form ecosystem partnerships that drive faster speed to market.

As our clients increasingly pivot from traditional business models to subscription-based (as-a-service) and digital product-led models, Infosys Consulting helps shape the new class of offers, products, and processes. We help them create

engaging customer experiences using innovative operating models, frictionless transactional infrastructures, and new monetization schemas and gain customer trust for a sustainable competitive advantage.

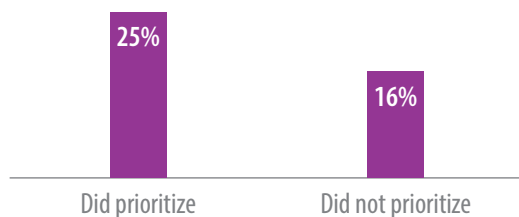
## Product-centric strategies deliver better employee outcomes too

We also found two product-centric strategies that drive better employee outcomes: outcome-based business models and identifying digital friction. Outcome-based business models ensure end users pay only for the service tendered. It is the result of a product-centric business, rather than how the business is structured to bring the product to life.

An [outcome-based business model](#)<sup>21</sup> is positively correlated with higher employee retention (Figure 12), with those prioritizing outcomes 17% more likely to significantly increase employee retention.

An outcome-based business model delivers long-term value to customers, employees, and partners across the business ecosystem. It's less transactional and fosters long-term commitment by all parties. This drives customer and employee retention.

**Figure 12. Outcome-based business models improve employee retention**



*N* = 797 companies. Percentage of companies that experienced significantly increased employee retention dependent on if they listed outcome-based business models in the top 5 (from a list of 16) for helping them achieve their innovation, net zero, or digital experience objectives. When controlling for outside factors through linear regression, we estimate that prioritizing outcome-based business models is correlated with an about 17% increase in the likelihood of having significantly increased employee retention.

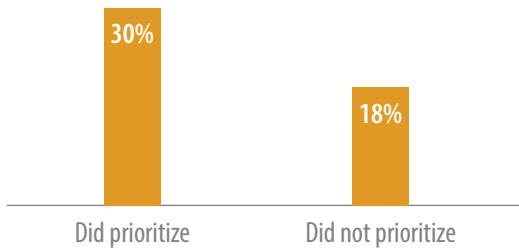
Source: Infosys Knowledge Institute

Inditex, the Spanish retailer behind the Zara brand, has found particularly [good results](#)<sup>22</sup> from their outcome-based model. In 2021, [50% of vacancies were filled in-house](#),<sup>23</sup> and nearly 7,500 people were promoted over the year. Retention was at its highest. Employees reportedly love working there and are dedicated to meeting customer expectations, including their goal to become net zero by 2040. The business model is based on adapting production to demand, with near-real-time data (through RFID tags) on what customers are buying and what clothes are popular in certain regions and markets. Customer feedback, such as the desire for sustainable cotton and renewable energy in manufacturing, are sent to operational experts and designers at headquarters, who are charged with translating these wants into sustainable new products. The key is in the flexibility to adapt quickly to customer preferences and sell solutions that customers love. In the process, employees feel committed to the organizational purpose: [“give customers what they want, and get it to them faster than anyone else.”](#)<sup>24</sup>

By organizing around product, not process, companies can deliver specific outcomes in real time. Sustainability, customization, and personalization then become the organizational mantra. The caveat is that live data, data-driven insights, and software are critical for firms looking to use this approach and retain employees in the process. Without looking deeply at data engineering and software management, many firms fail to get the spoils they are looking for from outcome-based investments.

Identification of digital friction improves digital experience. Those who prioritize identifying digital friction in their digital experiences can increase the likelihood of being in the top quartile for improving employee engagement by 35% compared to those who do not (Figure 13).

Figure 13. Identification of digital friction leads to excellent employee engagement



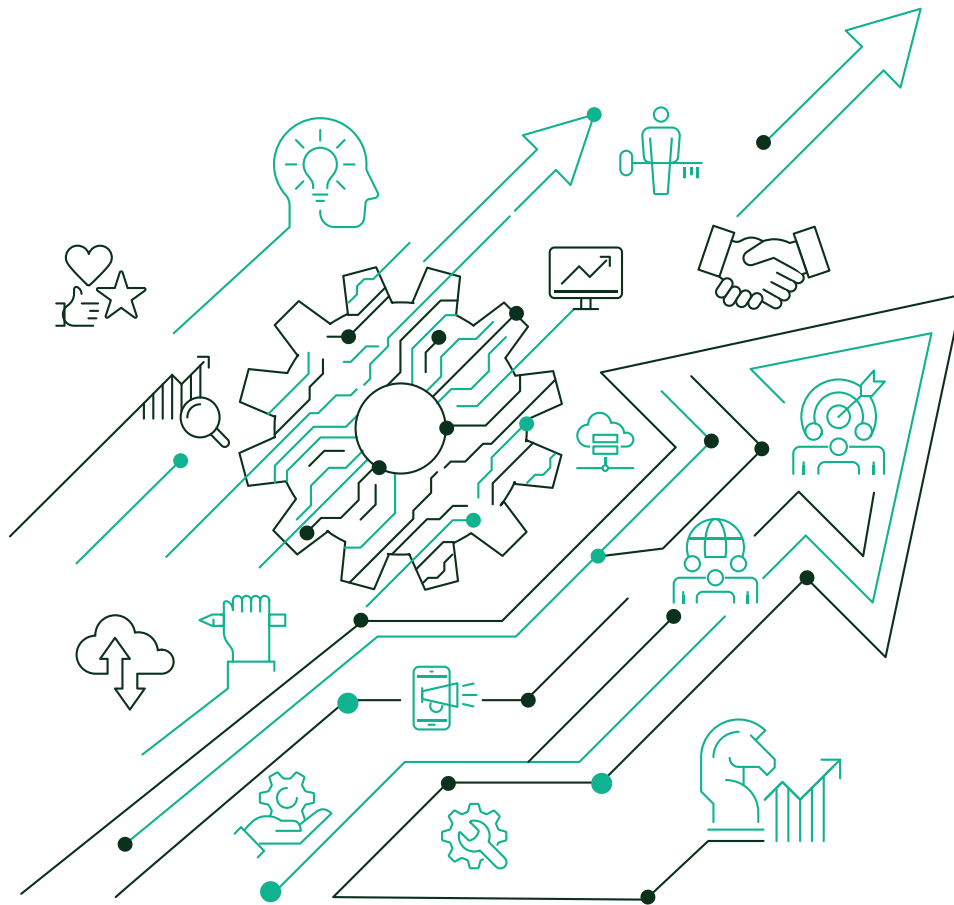
*N* = 126 companies. Percentage of companies that experienced excellent improvement with employee engagement dependent on if they listed identifying digital friction in the top 5 (from a list of 16) for helping them achieve their employee engagement objectives. When controlling for outside factors through linear regression, we estimate that prioritizing identifying digital friction is correlated with an about 35% increase in the likelihood of having excellent improvement with employee engagement.

Source: Infosys Knowledge Institute

By removing digital friction, firms [nudge](#)<sup>25</sup> employees along the user journey and remove friction to make their lives less stressful, whether that be the speed of booking a flight in the system or using dashboards for analytics.

Other causes of digital friction, according to Infosys's [report on human experience](#),<sup>26</sup> include too many platforms, lack of digital accessibility, lack of IT support, and screen fatigue. The report identified solutions such as designing for a range of digital connectivity situations, creating joyful digital experiences, and fixing chatbots through better data.

Today, experience is measured in how much friction a firm can take out of people's lives. Product-centricity enables firms to act on the displeasure of the user much faster and with better, fresher data. But even this is not enough in the highly fraught environment of 2023 business economics. For this, firms will need leaders and a work culture that take risks responsibly, quickly evolving and updating offerings so that the business is heading due North, taking both customers and employees along for the ride.

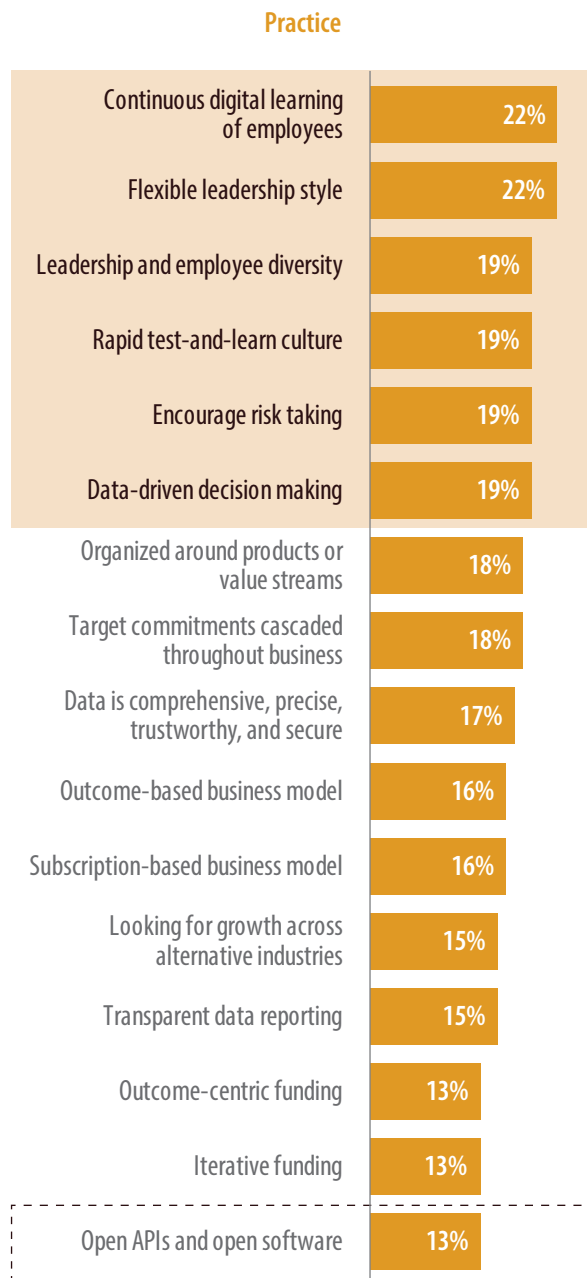


# A culture that takes responsible risks

Foundational live data capabilities and organizing around products (not processes) are keys to success and winning in today's business climate. The last part of the jigsaw is the right leadership and culture. Industries from healthcare to manufacturing have seen first-hand how scale (through people) and value (through technology) has now reversed and tech adoption only works with the right people-centric levers doing the heavy-lifting.

We found that a work culture that takes responsible, considered risks, backed by live data, is more effective than the competition. Leadership is also a critical component. Of the practices our respondents ranked as helping them meet digital experience, innovation, and net-zero objectives, five of the top six had to do with a data-driven, diverse, and flexible leadership that made quick, inspirational decisions (Figure 14).

Figure 14. Five of the top six ranked practices involve good leadership and a risk culture



N = 2,700 respondents. Percentage of companies that placed a technology in the top 2 (from a list of 16) for helping them achieve their innovation, net zero, or digital experience objectives.

Source: Infosys Knowledge Institute

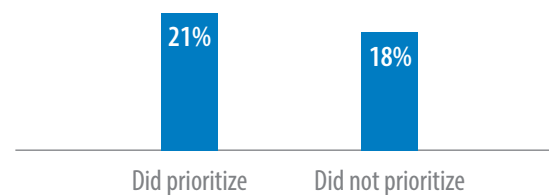
However, though these cultural practices lead to great benefits on major innovation, digital experience, and sustainability outcomes, we found that just 14% of firms have the right culture (i.e., one that encourages the top ranked practices above), while just 7% of firms have both the right culture and the right operating model (i.e., are organized around products).

While data-driven decision-making ranked in the top six practices, companies don't seem to attach the same importance to the use of open APIs to execute complex data interactions. This is a mistake. A rich and diverse API ecosystem enables a firm to access the data it needs to create business opportunities across markets. This rich use of data enables business leaders to make decisions that are less heart than head, engendering strategic confidence through the ranks.

Firms should have good data and the right risk profile to shape the decisions they're making. According to experts we've interviewed for this research, it is critical that leaders have the right data to back up bold decisions and to get a bird's-eye view on the impact they're having. Firms should shape the path they're on very objectively and through data, rather than just going by gut instinct.

Further, firms that place more importance on encouraging risk-taking tend to do better at achieving net zero, at innovation, and, at creating products faster (Figure 15).

Figure 15. Leaders that encourage risk taking can create products faster



N = 147 companies. Percentage of companies that experienced excellent product creation speed, dependent on if they listed encouraging risk taking in the top 5 (from a list of 16) for helping them achieve their product creation speed objective. When controlling for outside factors through linear regression, we estimate that prioritizing encouraging risk taking is correlated with a more than 75% increase in the likelihood of having excellent product creation speed.

Source: Infosys Knowledge Institute

## The ability to fail forward

More risk-taking results, however, in a higher chance of failure. That’s why leading with fresh, high-integrity data is so important. In a world where firms need to innovate or die, a tolerance for the right sort of failure should be encouraged. As Thomas Edison, one of the most renowned innovators in history put it: “I have not failed 10,000 times – I’ve successfully found 10,000 ways that will not work.”<sup>27</sup>

Failure can be viewed as a learning exercise, with being bold, ideating, and driving both formal and informal value recognized.

“It’s crucial to adopt a mindset of learning, growing, and continual improvement,” says Wilkinson, “This is in contrast to perfection. Persevering through failure demonstrates courage and grit. Customers and employees respect leaders who come up short and try again with flexible persistence.”

However, many leaders struggle to see failure positively. When we asked about the importance of certain leadership philosophies and how critical they were in their own careers, viewing failure as a learning opportunity was the least favored (Figure 16).

A good leader knows the importance of failing. Instead of blaming others for failed risks, smart leaders provide support and guidance to help employees try again. A lean start-up approach can be beneficial here. Teams fail fast and often but stay close to the customer to ensure that learnings are applied to the product or service delivered. A company that focuses on its products and customer feedback can quickly improve its customer experience and make changes to its products.

Figure 16. Learning from failure is a less favored leadership philosophy; being clear about long-term mission far more so



N = 2,700 respondents. Percentage of respondents that placed a philosophy as a top 3 (from a list of 6) when asked to reflect on how they generally or typically behave.

Source: Infosys Knowledge Institute

## The five cultural levers for better innovation

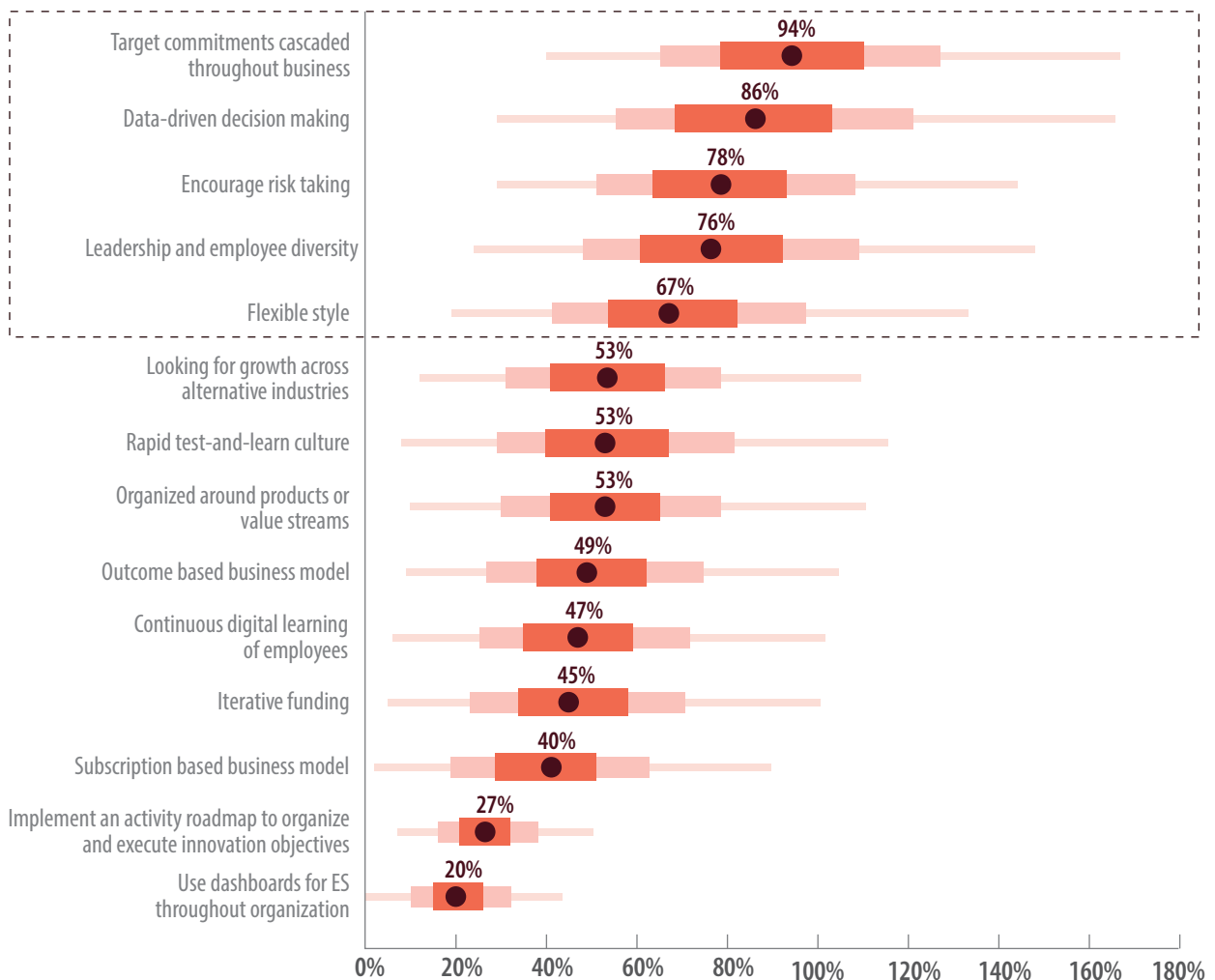
We found five cultural practices that significantly uplift certain innovation outcomes (Figure 17): cascading target commitments throughout the business, data-driven decision-making, leadership that encourages risk-taking, leadership and employee diversity, and a flexible leadership style. In fact, by doing all these well, firms can fivefold the chance of being a top innovator, in terms of time to market. The lever that had the greatest

effect was the ability to cascade target commitments through the organization, but diversity in leadership and employees also figured highly.

Good innovation and digital experience require leaders with a broad range of skills, experiences, and perspectives.

“In today’s digital world, the key to an organization’s success is how well it understands and anticipates the needs of its customers and how quickly its able to fulfil those needs in a way that ensures a frictionless

Figure 17. The five leadership and culture levers of better innovation



N = 147 companies. Estimated range and average increase in the likelihood of a respondent having excellent product creation speed from prioritizing a practice while holding all other variables constant.

Source: Infosys Knowledge Institute



digital experience,” says Uniyal. “To get there, one leading logistics company deepened its product management skills and ran hackathons to inculcate a product-mindset in the leadership ranks.”

Uniyal believes that leaders in this paradigm do four things well:

- Use entrepreneurial rather than management thinking.
- Take a collaborative leadership approach as opposed to command and control.
- Empower teams and celebrate successes as well as failures with them.
- Embrace servant leadership.

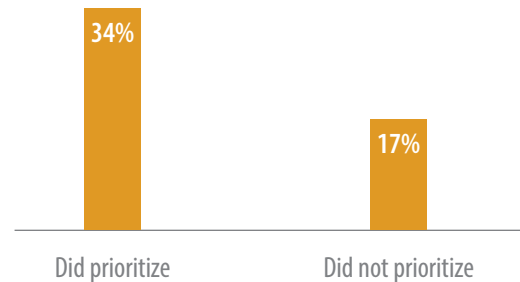
Top firms seek individuals that see problems and opportunities from a completely different angle to the status quo. [Researchers at the University of Michigan](#)<sup>28</sup> found that diverse groups can solve problems better than more homogenous ones. This goes beyond the usual diversity box-ticking exercise. These researchers argued that firms need to be more strategic about the backgrounds and talents that everyone brings to the team. Experiences from different fields and ecosystems, with knowledge of technology, business, and how product-centric culture works, are important.

Innovation practices listed in Figure 17 gravitate around a uniquely Agile center. Iterative funding models enable a firm to take a microchange approach to innovation, with executives handing out more cash once they see a product prototype in action. A rapid test-and-learn culture is also important. In our [Agile Radar research](#),<sup>29</sup> we found that firms that have more of a start-up culture in their DNA achieved better business and IT outcomes. These companies – as diverse as [Peloton](#),<sup>30</sup> [Adobe](#),<sup>31</sup> and [General Electric](#)<sup>32</sup> – also invest in continuous learning for their employees and use data-driven decision-making more than other firms. Ocado, the UK grocery behemoth, uses machine learning, AI, and data analytics to determine the food customers want and need and adjusts orders from suppliers accordingly. This enables the firm to slash its food waste to [just losing one in 6,000 produce items](#).<sup>33</sup>

## Cultural keys for differentiated net zero

Cascading target commitments throughout the organization also significantly impact net-zero initiatives, specifically in a firm’s ability to differentiate in the market through net zero (Figure 18). A flexible leadership style also helps. (Figure 19).

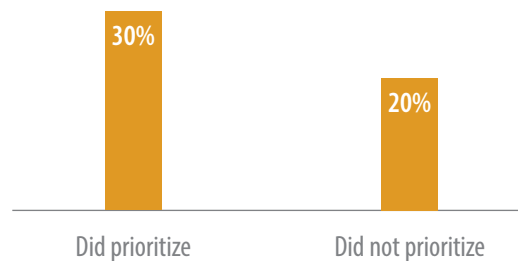
Figure 18. Cascading target commitments has a huge impact on net-zero initiatives



N = 139 respondents. Percentage of companies that experienced excellent market differentiation dependent on if they listed cascading of target of commitments throughout the business in the top 5 (from a list of 16) for helping them achieve their market differentiation objectives. When controlling for outside factors through linear regression, we estimate that prioritizing cascading of target commitments throughout the business is correlated with an about 48% increase in the likelihood of having excellent market differentiation.

Source: Infosys Knowledge Institute

Figure 19. Flexible leadership style has a big impact on net-zero initiatives



N = 139 respondents. Percentage of companies that experienced excellent market differentiation dependent on if they listed a flexible leadership style in the top 5 (from a list of 16) for helping them achieve their market differentiation objectives. When controlling for outside factors through linear regression, we estimate that prioritizing a flexible leadership style is correlated with an about 51% increase in the likelihood of having excellent market differentiation.

Source: Infosys Knowledge Institute

Cascading target commitments increases the chances of a firm becoming a leader in net zero by about 50% (Figure 18). It is notable what [leading digital firms have done with OKRs](#).<sup>34</sup> Objectives (O) are a firm's key strategic vision for net zero and team-level rationale for the efforts spent. Key results (KRs) are metrics and initiatives to make a firm's net-zero vision and roadmap impactful.

OKRs are stretch goals that embody the direction the firm wants to take in its net-zero initiatives and make apparent the necessary steps to get there.

According to some of our interviewees, doing net zero without stretch goals and ambitious targets is ill-advised. For one bank we spoke to, the main question they asked

themselves before beginning their net-zero journey was: "How can we begin to finance the green transition with sustainable finance products and services?" Once they knew the answer to this question, they set OKRs to train their people in climate-change and ESG and determined the role the business would play in educating the public sector and customers.

Make no mistake. Net zero is a big challenge, and many firms need clear targets around research and innovation, investing in start-ups and the use of alternative energy sources. And they need these targets in relation to their own governments' sustainable action goals. Taking a holistic, objective viewpoint then becomes mandatory.

## The importance of net zero at Infosys

Every firm worth its salt is declaring net-zero emissions targets – meaning they will dramatically slash net emissions of greenhouse gases to nothing, or even go negative, by 2050. This is in line with the Paris Agreement of 2015, which emphasized that corporates need to do something now, otherwise global warming will cause serious damage to citizens and nations, and harm businesses to the level they come to a halt.

Some will reduce carbon output from their supply chain, or scope three emissions; others aim to transform their business and operating models to make energy use more efficient. Others will adopt more carbon-friendly tech in their operations. Many are making headway. A fifth of the world's 2000 biggest publicly traded firms – worth sales of nearly \$14 trillion a year – have embraced net-zero targets. In the US, about a quarter of the big industrial firms in the S&P 500 Index have done so. Some are even going further, with Microsoft and Alphabet claiming to remove all the carbon they have emitted in the atmosphere in their corporate history. The number of tech companies publishing sustainability reports grew by [57% between 2011 and 2021](#).<sup>35</sup>

And net zero isn't just about doing the right thing, it directly correlates to profits, as we said earlier. We've found in our [ESG Radar](#),<sup>36</sup> published late

last year, that ESG is no longer a nice to have, but a business necessity. ESG practices, including net zero, are good for the balance sheet, with a full 90% of ESG initiatives showing positive returns. ESG is the way firms will sustain in the future, and those that wait will lose customers, brand reputation, and profits.

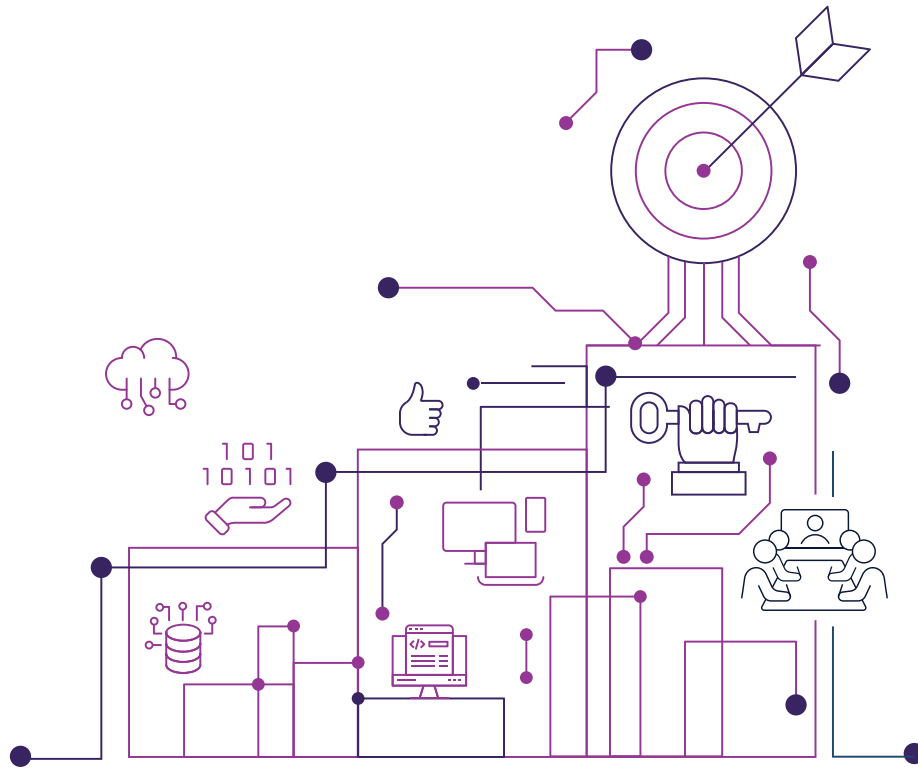
Firms who are serious about saving the planet and the long-term viability of their business need to accurately map emissions footprint across scopes 1, 2, and 3 (According to [CDP](#),<sup>37</sup> the average company's upstream Scope 3 greenhouse gas emissions is 11.4 times larger than its operational - Scope 1 and 2 - footprint). They need to prioritize emission reductions over carbon offsets, and they need a concrete, viable, and achievable net-zero action plan. They should also integrate net zero into company strategy, and cascade net-zero commitments throughout the organization quickly. We found that cascading well-defined commitments has a big impact, increasing the chance of a firm becoming an excellent net-zero differentiator by about 50%. Firms will also need to be transparent about data reporting, which we also found to be a top practice in getting firms in this study to net zero. Indeed, better and more useful data reporting will help the whole firm see where it is doing well, and where more work needs

to be done, mitigating risks in the long run. It will also help firms further up the value chain to trust the carbon-spewing operations in its supply chain. In [ESG Radar](#),<sup>38</sup> we found that most companies are not sharing ESG data with their supply chain, with many unsure of how to adopt technology and data-driven practices to get there.

But as ESG Radar also proved, much of the success of sustainability initiatives comes from the top. Companies only make profits when they make the leadership accountable for ESG issues. This research backs this up. Of the practices that respondents ranked as best helping them meet their net-zero objectives, five of the top six had to do with data-driven, diverse, and flexible leadership that made quick inspirational decisions. This new business landscape favors speed, confidence, and a new way of looking at business models and innovation. As Larry Fink, CEO of Blackrock, an investment firm, [said recently](#):<sup>39</sup> “The next 1000 unicorns won’t be search engines or social media companies, they’ll be sustainable, scalable innovators – firms that help the world decarbonize and make the energy transition affordable for all consumers.” This is serious stuff, not least because along with the carrot, there are some serious sticks out there. Advances in global regulation and industrial standard-setting are exposing those that aren’t making commitments and boosting those that do. In fact, in the last

year, many regulators have weighed in on how listed firms should disclose climate-related risks from their operations, and corporate disclosure of climate-related data was a big theme.

At Infosys, we believe that achieving net-zero and decarbonization goals is not a company- or industry-specific challenge. Rather, it transcends sectoral and geographical boundaries. We collaborate with clients across the energy generation and consumption value chain, including utilities, oil and gas companies; renewable energy providers; supply chain leaders; and waste management and government organizations, all in a bid to help them navigate the complex challenges of energy transition. As countries increase investment or subsidize growth in this arena and as regulatory oversight principles become clearer, the move towards accelerated EV adoption, decentralized energy supply, expanded consumer choices and sustainable supply chains will become more prominent. Infosys Consulting is advising our clients on leveraging data and digital solutions to address changes in consumer behavior, energy consumption patterns and CAPEX decisions. We are recommending cloud-first, customer-first, digital-first solutions utilizing AI and advanced analytics – ensuring technology is used in the right way for the benefit of people, profit, and planet.



# The value at stake:

## Live data + Product-centricity + Culture

Our research shows that leading companies now, and, in the future, will be more agile, lean, and experimental. They will work with live, accessible, and high-fidelity data, feeding into a product-centric operating model that has a culture of responsible risk-taking at the core.

Live data is the foundation for enterprise transformation, but just 5% of firms are currently implementing what we define as a holistic live data approach. Companies that use data-driven decision making were 85% more likely to have an excellent ability to create products faster. Further, live data improved digital experience outcomes, increasing the likelihood of excellent post-sales customer engagement and loyalty by 55%.

The importance of live data for AI further increases its relevance. "Our chief data officer, in particular, has worked very hard to establish and evolve a democratized ecosystem for both the data and AI capability," says Savor, from AT&T Labs. "There's a step function in complexity as the amount of data increases, particularly with 5G. As we get finer grain visibility with AI, we have a lot more intelligent controls to then apply decisions."

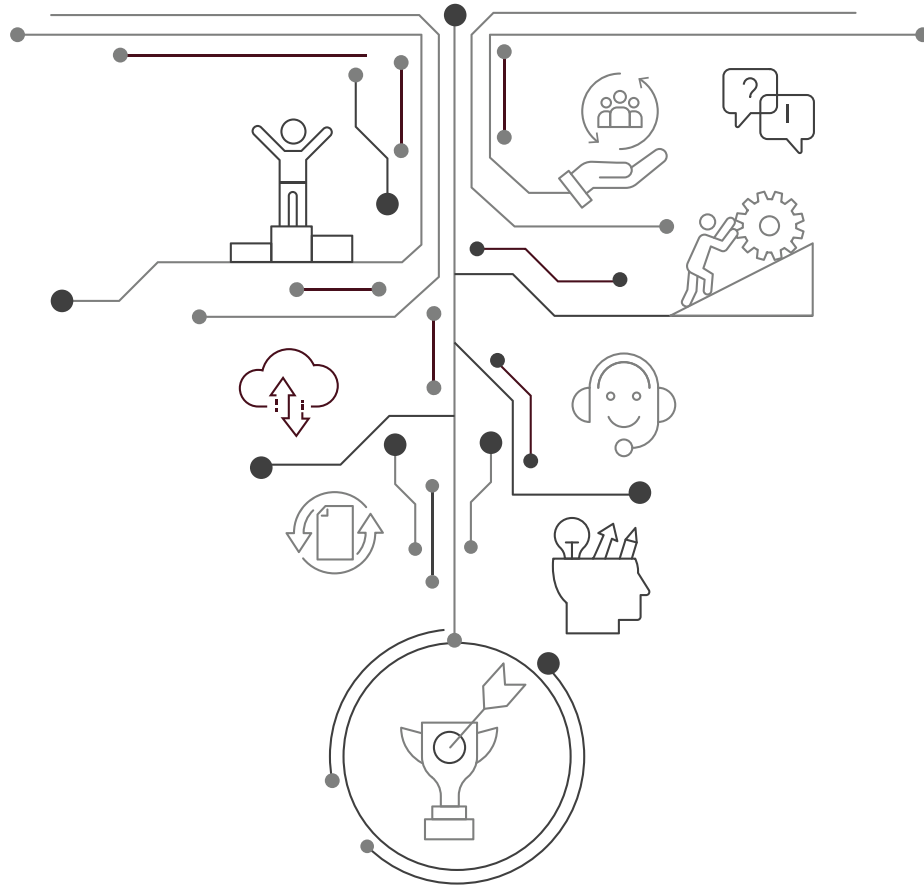
Aligning the whole firm around offerings or products increases the likelihood of being in the top 20% of speedy creators by about 50%. We found that just half of firms are organized in this way. An outcome-based business model, an offering-centric strategy, increases the chance that a firm significantly increases employee retention by 30%, a correlation that is also linked to profitability. Further, this model enables the firm to take advantage of subscription-based business models (40% more likely to be a top performer at creating products faster) and to more easily seek growth in alternative markets (53% more likely to be a top performer at creating products faster). “Organizing around products is the only way for the ‘organization of tomorrow’ to accelerate its ambitions to become more customer-centric, to innovate faster and react to the speed of the markets and changing dynamics,” says Paul Dillon, partner and European head, Infosys Consulting. “With an over-abundance of high-value data at the fingertips of organizations, a product-based business model will be leaner, more agile and connected to customers on a more intimate level - elements that will all be the panacea of future growth.”

A sound business strategy requires executives and managers to look more closely at the cultural makeup of their teams, fail forward, and take considered risks to sprint ahead of the competition. We found five cultural practices that increase the probability of being in the top tier of time to market fivefold: Cascading target commitments throughout the business, data-driven

decision making, leadership that encourages risk taking, leadership and employee diversity, and a flexible leadership style. Such practices are fast becoming table-stakes for a firm that wants to grow fast and keep up with industry giants that are swallowing market share. However, just 14% of firms are currently prioritizing these cultural practices, and just 7% prioritize these practices while also being product-centric.

The 20th-century operating model is ending, but not fast enough. Firms are still stuck in process-over-product thinking, siloed or matrix organizational structures, and adopting technology without changing the way in which the organization uses it to extract business benefit. Almost a quarter of the way into the 21st century, companies are still taking 20th century approaches to value creation. However, companies can no longer wait – they need to adapt to face the economic, political, and social challenges on the horizon. All companies are digital now, but that is no longer sufficient. Companies must evolve to become a continuously learning organization that’s built on live data and organized around value – a flexible operating model built for speed.

Doing so will also slow the pendulum swing, from business units to function-centric and back again, enabling firms to react in near real time to market forces. Firms will then manage their resources sustainably and generate a greater sense of employee purpose through the ranks.



# The pendulum stops swinging

A firm that organizes around products, built on a foundation of live data, and that takes considered risks is the next frontier of business excellence. Winning companies will deliver on the following strategies:

- Attain the agility of a start-up.
- Remain responsive to customer needs and the wider stakeholder group.
- Enable a networked and connected ecosystem.
- Spark the velocity of ideas and innovations.
- Create a competitive advantage through platforms.
- Practice extreme automation and live data in every action.

This future-ready firm will be human-centric, innovative, and low carbon, enjoying increased retention, profit, and brand perception for the fraught years ahead.

Winners will be those who prioritize culture, reduce digital friction, build tomorrow's skills today, and take a microchange management approach.

# 1. Prioritize culture

Digital Radar 2022<sup>40</sup> found that technology by itself is not enough. When everyone is adopting it at a similar speed and urgency, the differentiator will be shape-shifting attributes, including company culture. Emphasis on building a culture around live data practices (such as ESG dashboards and data-driven digital experiences for employees) dramatically increases the likelihood of a company entering the top performer band. However, there is a mismatch between this finding and the amount of importance that senior leaders are giving culture as a top transformation area to achieve their goals and build future success stories (Figure 20).

Respondents identified technology and operating model as the top transformation areas to achieve innovation, net-zero, and digital experience goals – but only about 50% identified culture.

Technology is often seen as a cure to all ills, and the operating model (like product-centricity) enables the firm to use that technology optimally. But it was also clear that there is a need to evolve Peter Drucker’s famous phrase to “culture now eats technology, not just strategy, for breakfast.”

“Culture is often strongly engrained in many organizations – from mindset, to legacy ways of working to organizational structures and decision making,” says Dillon. “Transforming culture not only starts at the

top but must be owned and driven here to permeate the organization. However, it must facilitate a grass-roots mindset and movement to take charge and be welcomed and championed by frontline employees, as this is where the real culture will live and breed. Tech, while critically important in this journey, will only help power a cultural revolution, it won’t become, nor takeover the human element, which is sometimes marginalized in a large-scale change effort.”

We asked sustainability interviewees what was driving success in their companies. Many said the success of their sustainability agenda directly rests on their organizations’ culture.

What’s needed is a bold, strong, and inspirational decision-making culture, deployed through the ranks at speed. “To change culture, leaders must reduce the fear of failure and show visible examples of leaders who have failed and rebounded to even greater success,” says Wilkinson. “Visible examples of setbacks that have been turned into successes begin to shift culture toward Agile practices. Leaders must also demonstrate fast decision making even with limited information. If you wait to make a decision until you have ninety percent of the needed information, you have waited too long and likely missed the window for impact. Leaders must lead by example in making fast and informed decisions, and in continuing to make good decisions.”

Figure 20. Respondents believe in technology and operating model, and not culture, to achieve goals



N = 2,700 respondents. Percentage of respondents that ranked an area in the top 4 (from a list of 6) for achieving all goals.

Source: Infosys Knowledge Institute

## 2. Reduce digital friction

New digital deployments won't stop. However, people become **frustrated and fatigued**<sup>41</sup> when their efforts do not turn out well. The new organization will therefore need to continuously optimize usability and integration. This means identifying digital friction and removing it in the next product update. Having a product-centric operating model built on live data and orbiting around defined business outcomes enables this. Firms can more readily diagnose customers' (or employees') needs and make real-time updates.

The goal of reducing digital friction should be to increase the value delivered in each interaction, thereby improving brand perception, employee retention, and ultimately the top and bottom lines.

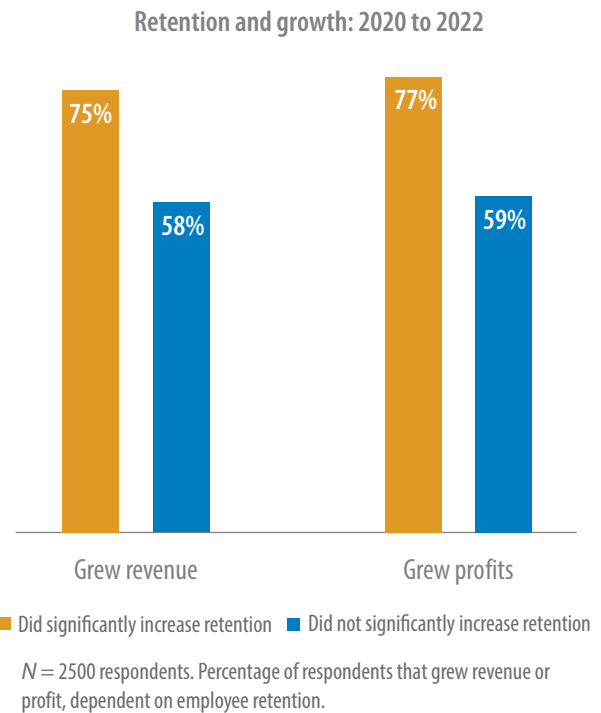
"Getting full value out of a product is really about making it user-centric and frictionless," says Deen, from Pladis Global. "This means designing for two groups of people. First, those already in the building, who have some existing processes and want higher accuracy, lower effort, lower bias, and more measurability. And second, those who want extremely simple user interfaces where they can add value to decisions made by computers, such as demand planning. When we bring this together, the solution really comes to life, and we start seeing results."

In this paradigm, experiences become more **perceptive and predictive**<sup>42</sup> with AI infused into sentient routines. Other ways to reduce digital friction include the following:

- Provide users the information they need at decision points.
- Meet users' needs in as few steps as possible.
- Enable users to evaluate alternatives at the decision points.

Digital friction ultimately boils down to poor digital experience and slows productivity. We found that good, frictionless digital experiences increase employee retention, which is linked to revenue and profit growth: Companies that significantly increased their staff retention between 2020 and 2022 were more likely to increase revenue and profit than those that did not significantly increase retention during this period (Figure 21).

Figure 21. Companies with higher retention tend to growth



Source: Infosys Knowledge Institute

## 3. Build tomorrow's skills today

Companies still struggle to hire and **keep**<sup>43</sup> talent, while talent remains critical for success. Our **Future of Work research**<sup>44</sup> found three talent sources linked to growth: external skills marketplaces (or gig work), universities, and community colleges (or polytechnics). Community colleges, though not often preferred by large organizations, were linked to a 1.5 percentage point increase in revenue growth. Some interviewees also stated that partner organizations can be a source for talent, with advantages such as quick onboarding and diverse perspectives.

Many firms are upskilling workers to retain talent. Continuous digital learning of employees was a top-ranked practice across innovation, net zero, and digital experience in this research (Figure 14).



As one leading Irish bank we spoke to leading on net zero means building capacity internally around ESG areas, including net zero and carbon reduction. One of the firm's main themes for 2023 is upskilling through digital learning platforms to create climate awareness for everyone within the organization.

The same is true at E.ON., a multinational electric utility company based in Essen, Germany.

Education via digital platforms is "transforming the ways of learning in a professional context," says Marika Arvelid, head of digital empowerment strategy and engagement at E.ON. "The digital design of learning is the next level in upskilling and an ideal solution as it creates both a place for tailored learning and coming together. Our E.ON. campus offers employees a 3D environment, where they feel empowered to learn, and can drive their own individual learning development to grow skills and share their knowledge with colleagues. As the digital set up makes it possible to customize to the individual needs of each employee, learning can take place in a personal and familiar environment at any time and any place."

Among the more innovative ways to upskill employees, some firms are using AI. They are building chatbots and better capabilities to help support employees, provide learning, and foster educational awareness. Leading firms in this research also look at technology innovations that will support leaders in the business and give them the tools and capabilities to deliver on their ambition.

Our [ESG Radar research](#)<sup>45</sup> found that having leadership with the requisite skills leads to real-world impact. Changes that actually enhance the bottom line are those linked to executive foresight, accountability,

and board diversity. Upskilling employees then is not enough – leadership matters just as much. But the survey also found that the top executive ranks were the most neglected areas for ESG. What's needed is a strong pivot toward upskilling leadership, so that they can lead in a product-centric environment. This means building up their ability to "lead from the back of the room" and use both soft skills (candor, integrity, humility) and the technical prowess to analyze why products might be failing. The insight and confidence to change product definitions based on high fidelity, live data will then come as a matter of course.

The best firms utilize technology to respond to customer pain points, deliver value, motivate and unite teams, streamline processes, increase profits and reduce costs by upskilling employees and leaders. Upskilling should be done in stages to prevent scaring employees who are used to the old way of doing things. Gaining merits in AI, for instance, will be good for an employee's career beyond the walls of the enterprise. Leadership and HR should communicate the change in a positive way and allow employees to learn at their own pace to get them on board with the new technology.

## 4. Make small changes, continuously

Transformation to a data-driven, risk-taking, product-centric firm is a multiyear journey. Charting a good course requires courage and persistence.

We previously found that a persistent set of [small, orchestrated changes](#)<sup>46</sup> is the best approach to drive large and lasting organizational changes. In



"The digital design of learning is the next level in upskilling and an ideal solution as it creates both a place for tailored learning and coming together. Our E.ON. campus offers employees a 3D environment, where they feel empowered to learn, and can drive their own individual learning development to grow skills and share their knowledge with colleagues."

**Marika Arvelid**

Head of digital empowerment strategy and engagement, E.ON

microchange management, small and gradual changes lead to larger and significant transformations. Infosys used this approach to adopt a new “live” operating model, enabling it to quickly move 99% of the workforce to remote work during the pandemic.

During this transformation, employee satisfaction increased dramatically, and client value scores were at their highest. But it wasn’t easy, and it didn’t happen overnight. A continuous process of small changes spread over six-week sprints led to the remarkable transition. Important was using small, cross-functional, and autonomous Agile teams, with shared data resources providing the foundation.

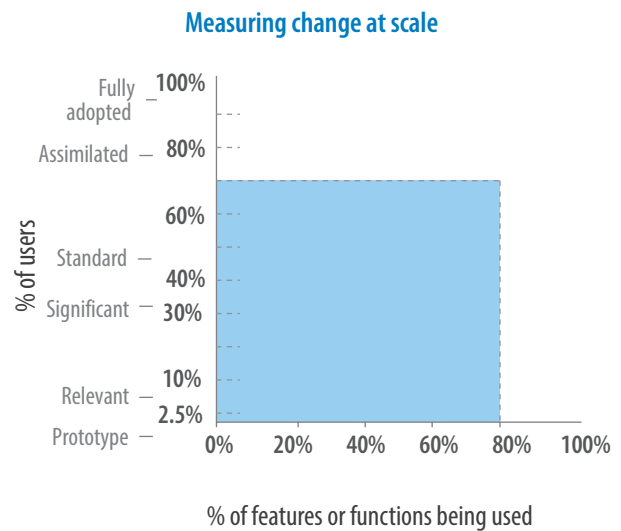
Pladis Global takes data initiatives through its value-centric operating model. By starting small and incrementally improving the way of data utilization, the organization is transforming the overall culture. The firm focuses on solving problems, step by step. In one example, Deen’s team built an innovation dashboard that combined data from various reporting systems, to work out how new product innovations were performing. The dashboard was released piecemeal, enabling key stakeholders to resolve the problems, with a sense of what was in it for them. By focusing on the solution to real-world problems, adoption significantly increased.

One [metric for successful adoption](#)<sup>47</sup> is the number of people using the product offerings, with anything over 80% considered full adoption (Figure 22). For Deen, success doesn’t come through products built initially to impact the top or bottom line. Instead, success revolves

around three factors: how many people are using the solution? How many people are discontinuing the previous solution? And, (c) is the product impacting the business in a positive way?”

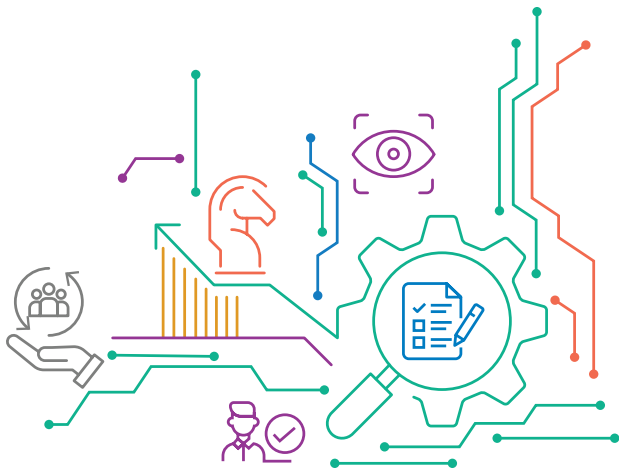
“True digital transformation gives people confidence through small, incremental measures of success,” Deen says. “Just get the users up, just get adoption. Is it only going to be twenty or thirty people using it? Then once they smash through those attainable targets, you start to see the results flowing through the top or bottom line.”

Figure 22. 80% adoption is considered complete and a success



Source: The Live Enterprise: Create a Continuously Evolving and Learning Organization, McGraw Hill

# Appendix: Research approach



Infosys commissioned an independent third-party survey of 2,700 executives and managers. In addition to questions about technologies and practices around digital experience, net zero, and innovation, we asked survey respondents for financial details including revenue range and yearly revenue and profit growth rates. To enrich insights, we also conducted phone interviews with industry practitioners, executives, and subject matter experts.

The survey was conducted from October to December 2022. Respondents represented 12 industries and were from companies with more than \$1 billion in annual revenue in Australia, New Zealand, China, France, Germany, India, the United Kingdom, and the United States. We asked respondents which technologies and organizational practices they focused on to improve outcomes in digital experience, innovation, and net zero. These outcomes were both subjective (e.g., sentiments about employee retention, brand perception, ability to innovate against transformation objectives) and objective (profit change, share price change, revenue change). We then identified and analyzed which technologies and practices could affect outcomes, subsequently set base cases, and found — via linear regression — actions that showed evidence of a statistically significant correlation with profit growth, revenue growth, change in employee retention, change in brand perception, and other subjective outcomes.

## Industry

Manufacturing 265	Energy, mining, or utilities 235	Healthcare 221	Automotive 215
Financial services 241	Consumer packaged goods (CPG) 226	Logistics or supply chain 215	Life sciences 203
Retail or hospitality 240	High tech 222	Insurance 214	Telecom 203

Source: Infosys Knowledge Institute

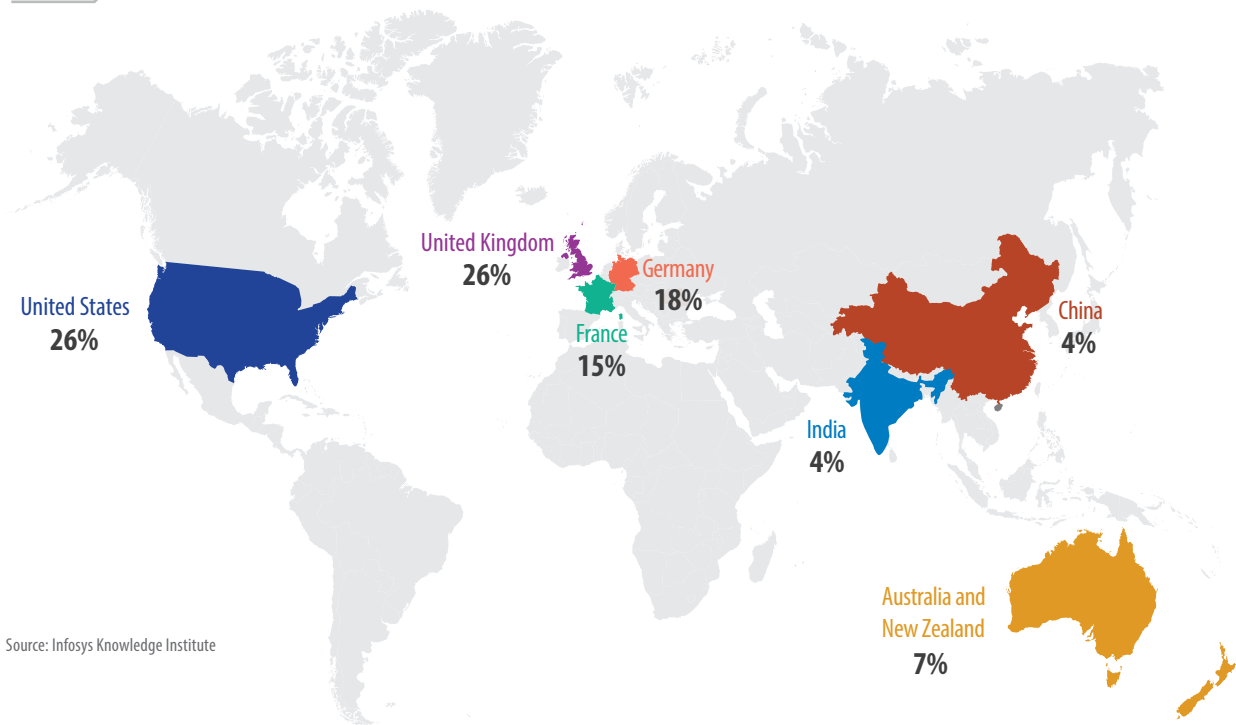
## Job function



Source: Infosys Knowledge Institute

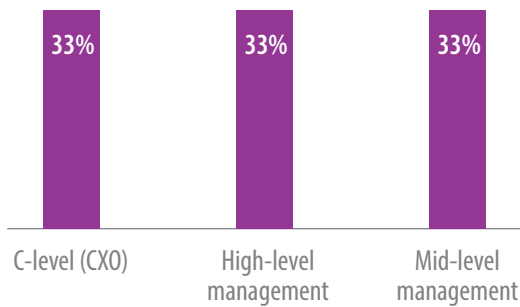
# Maps of respondents by region and industry

## Country



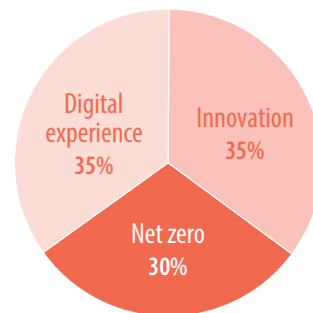
Source: Infosys Knowledge Institute

## Respondents by seniority



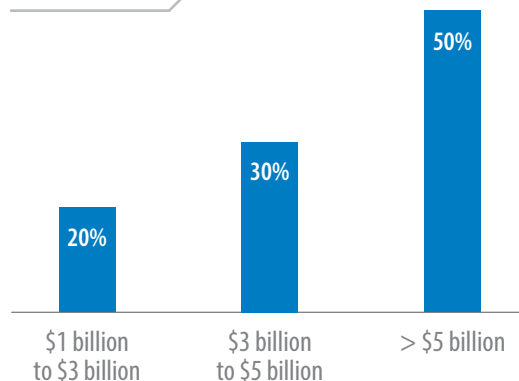
Source: Infosys Knowledge Institute

## Respondent area of expertise

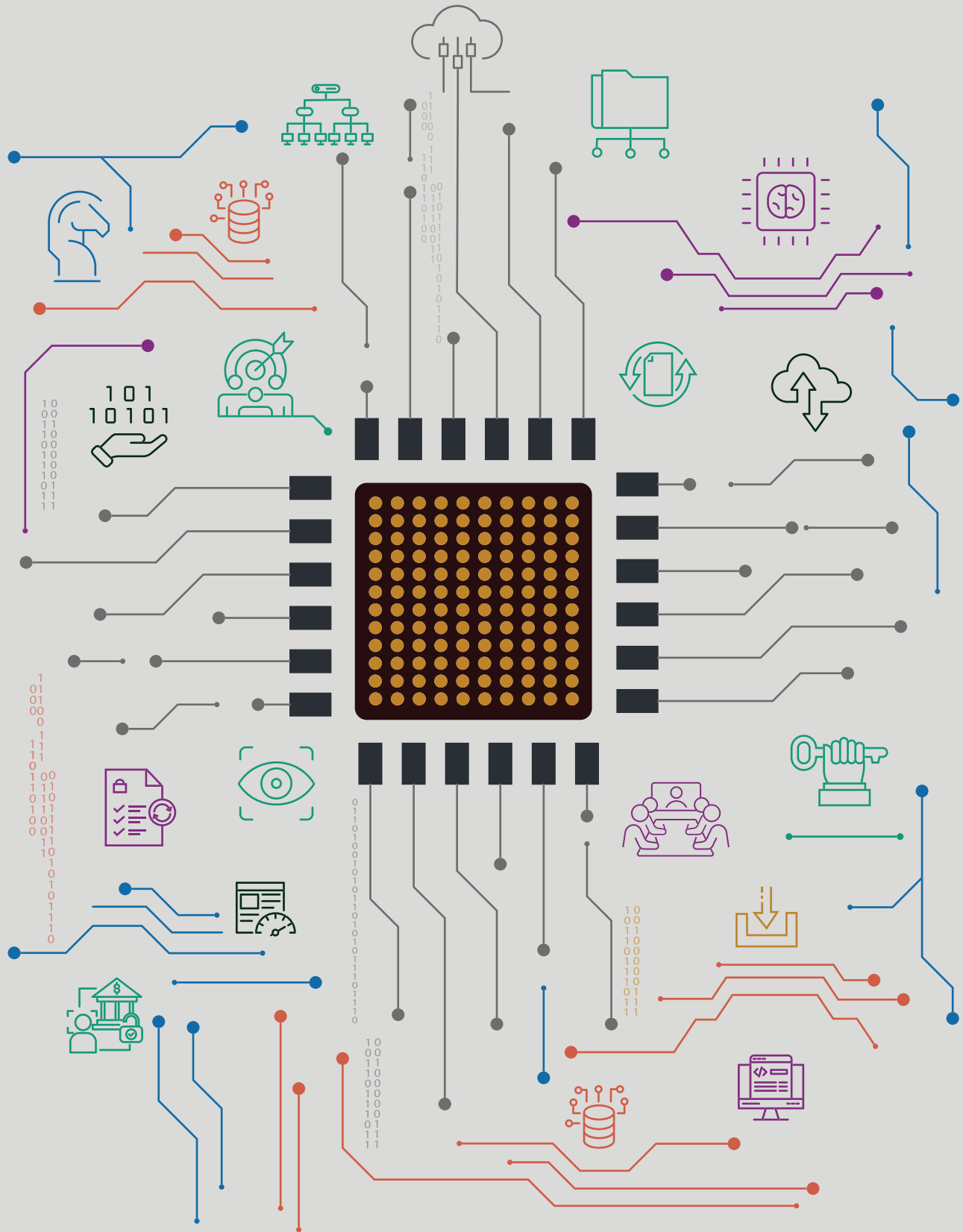


Source: Infosys Knowledge Institute

## Annual revenue



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