



Total Enterprise Reinvention in High Tech

Navigating to a New Performance Frontier

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About the research

Accenture conducted a survey in November 2022 of 1,516 C-suite executives across 19 industries in 10 countries to explore [Total Enterprise Reinvention](#). Respondents included 79 high tech executives.

In August 2023, we conducted a high tech industry survey to understand reinvention efforts and capabilities more deeply. We surveyed over 150 global high tech executives from companies reporting at least \$500 million in annual revenues. All respondents were technology decision-makers (vice president level and above with an IT remit) involved in their company's supply chain digitization activities with knowledge of their company's responses to trade and geopolitical headwinds.



The case for reinvention

The high tech industry has been critical in shaping the modern world. But that world is now facing prolonged uncertainty and disruption due to climate change, geopolitical conflicts, inflation, increased costs of capital and raw materials. According to the Accenture Global Disruption Index, disruption rose by 200% from 2017 to 2022, while only increasing by 4% from 2011 to 2016!

The high tech industry is facing its own disruptions as well. During the pandemic, its products and services were a lifeline: the demand for electronic devices (e.g., computers, tablets, consumer electronics, among others) in both consumer and enterprise segments grew substantially. According to Gartner®, “While the overall outlook for enterprise IT spending is positive, devices spending will decline 10% in 2023 due to the ongoing impact of inflation on consumer purchasing power”.² The search for new revenue streams amid diverse demand, fierce competition and a breakdown of industry barriers is prompting ambiguity in the C-suite over future strategic decisions.

At the same time, demand for products like networking equipment and semiconductors is exceptionally high, leading to continuous material shortages and supply chain disruptions. Enterprise IT spending is expected to grow 4.3% to \$4.7 trillion this year.³ Most enterprises are likely to incorporate generative AI into their existing IT budgets through upgrades and updates.⁴ Generative AI improves efficiency, but also calls for more powerful servers, semiconductors and data centers — as well as a highly skilled workforce.

To keep up, high tech companies need to train and recruit talent, increase productivity, optimize costs, reduce lead times and invest in digitizing engineering and manufacturing — all at the same time.

Amid these challenges, there are bright spots on the horizon:


- **A transition to consumption-based subscription offerings**, creating an opportunity for high tech companies to shift from one-time sales and multi-year subscription-based revenue streams.
- **A redesign of supply networks**, enabling high tech companies to bring supply closer to the customer by nearshoring and onshoring strategies, thereby improving supply chain resiliency and reducing risk.
- **A blurring and breaking down of industry boundaries**, offering high tech companies access to new product opportunities and customers.
- **An over half-trillion dollar investment in 84 volume chipmaking facilities from 2021 through 2023**, to reduce risk, strengthen supply chains and promote national security.⁵

- **An almost \$400 billion private-sector investment in the US** in battery, electric vehicle and semiconductor production.⁶
- **An emergence of new technologies such as generative AI across industries**, redefining what is possible across product, customer and industry landscapes.

Our research indicates that high tech executives have an optimistic outlook. 80% of them expect the economy to improve and 60% prioritize investments in developing a digital core (e.g., cloud, data, AI, platforms, security) of modern technological capabilities.⁷ Turning these positives into long-term growth opportunities, however, will not be easy. Customers have high expectations: they want innovative products and services that simplify their lives and businesses and offer new experiences — all while reducing emissions and creating a more sustainable global economy.



David Packard, the co-founder of Hewlett-Packard and its legacy companies, said in his autobiography, “Since we participate in fields of advanced and rapidly changing technologies, to remain static is to lose ground.”⁸



Keeping up with today's demands and disruptions requires a new strategy, what we call [Total Enterprise Reinvention](#).

Total Enterprise Reinvention is a deliberate strategy that aims to set a **New Performance Frontier** for companies and in most cases, the industries in which they operate. Centered around a strong digital core, it helps drive growth and optimize operations. Reinventors are the leaders who adopt this strategy of continuous, dynamic change across every function and business area, unlocking potential through new ways of working and a digital core. According to our research, 8% of high tech companies — and 8% of companies across all industries

— are moving to adopt a Total Enterprise Reinvention strategy, and the same research showed that 38% of all high tech companies aim to set a new level of performance in the industry through their reinvention strategy and/or transformation program.⁹

Such a significant strategic change can seem daunting. The good news is that the high tech industry has a strong track record. These are the companies that defined the modern world and they can do it again. The executives who embrace Total Enterprise Reinvention aren't just improving their own business, they're reshaping their entire industry — and possibly the global economy.

Why is reinvention needed now?

Several market imperatives make Total Enterprise Reinvention a necessary strategy for the future. Each imperative shows early signs of immense growth opportunity — as well as the costs of inaction.





Power of recurring revenue: leveraging consumption-based solutions

High tech customer demand is diverse. Enterprise needs are increasingly elastic, driven by primary industry size and operations. Individual consumers, on the other hand, have taken steps to pull back on discretionary spend on items such as new devices or by delaying upgrades. In each case, high tech companies can most effectively reach both the enterprise and consumer segments by expanding their As-a-service (AaS) offerings. These recurring revenue models offer customers increased flexibility and access to the latest technology — without large upfront capital investments.

Designing around recurring revenue models offers an opportunity to reinvent from product-led into service-led organizations. The shift creates stable, recurring revenue streams, proactive customer engagement and a more personalized sales experience. Our latest high

tech industry survey of over 150 executives found that only 1 in 4 (26%) survey respondents indicated their AaS offerings provide specific segments and clients one-off leases or product/service subscriptions, suggesting there's more to be done.¹⁰

High tech companies are often not prepared to orient themselves around recurring revenue product and service models. Revenue models are outdated and sales enablement strategies and incentive structures must be redesigned to enable these new solutions. Many also lack a cloud infrastructure capable of supporting these offerings. High tech executives expressed that the three main barriers preventing them from realizing the full potential of the cloud are security and compliance risks, legacy infrastructure and misalignment between business and IT.¹¹



Supply network redesign: localized and reconfigurable supply chain

Fueled by geopolitical shifts, the need to protect intellectual property, demands for sustainability and a host of other challenges, high tech executives are seriously exploring supply network redesign for the first time in decades. Digitization, manufacturing, nearshoring and onshoring are all on the table as ways to minimize disruptions and risk, and several countries have already taken legislative steps, such as the US Chips and Science Act and EU Chips Act, to ease and incentivize these changes. We surveyed more than 1,000 executives at companies with US operations and revenues of over \$1 billion across 32 industries and found 94% are planning a direct investment in nearshoring or onshoring. Executives need to design a supply chain that does it all — while being cost-efficient and sustainable.¹²

Companies that bring supply lines closer to customers can shorten hold times and lessen the strain on inventory while increasing

customer service. This can also reduce pressures on capital as products spend less time between the supplier and the end customer. In August 2023, drought conditions led officials to restrict the number of ships that could pass through the Panama Canal, leading to up to three weeks of delays as ships awaited passage.¹³ Bringing supply closer to customers through nearshoring, onshoring or other efforts may help to hedge against such disruptions.

Supply network redesign is complex, but the need is clear. Our recent research on resiliency shows that [54% of high tech executives](#) report it takes up to one week or more to be alerted to disruptions in production or supply chain.¹⁴ The same research shows that high tech companies missed out on the opportunity to capture 9.1% in additional annual revenue due to disruption impacting engineering, supply and production. This translates to \$269 billion in revenue for high tech G2000 companies.¹⁵



Partnerships and industry convergence: agile deals, faster growth

Industry boundaries are blurring and breaking down as customers seek more comprehensive offerings. High tech products and services are already ubiquitous across industries and convergence in industries like health, auto and financial services has yielded massive growth. The opportunity remains significant. 87% of high tech industry executives agreed that convergence enables growth.¹⁶ Multiple industries are ripe for technology-led disruption and it is high tech company skills and capabilities that will change those industries and create new opportunities.

Thriving in this environment means that high tech companies must be able to bring offerings from other industries into their own ecosystem through capability-driven M&A deals and new partnerships. Yet according to our latest high

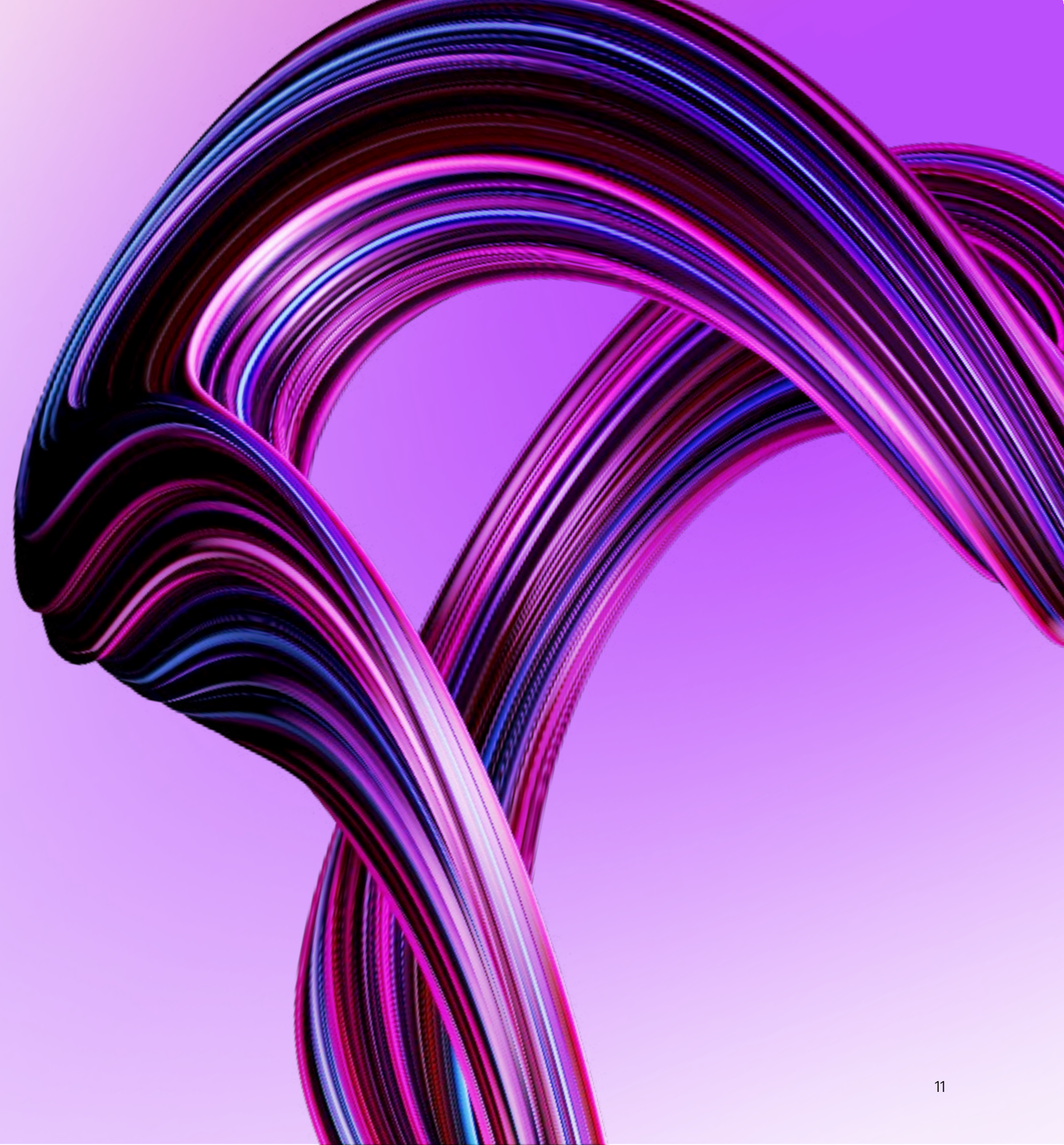
tech industry survey, a majority of respondents (41%) described their company's M&A strategy as horizontal integration to increase market share and reduce competitive threats.¹⁷ High tech companies focusing on the future will also embrace smaller, outcome-driven and agile deals to respond to new demands, capture new customers and enter new markets faster than before.

High tech executives must develop an "always on" mentality across their enterprise, continually monitoring for new opportunities, partnerships and innovations to drive relevance and growth. Acquisitions should focus on product capabilities and go-to-market strategies — and must ensure internal processes are in place to pursue avenues for growth with speed and efficiency.

Navigating to a New Performance Frontier for high tech

High tech companies hoping to respond to these imperatives will need a new strategy: Total Enterprise Reinvention. It requires re-envisioning the company as a boundaryless organization. Our latest high tech industry survey found that 57% of respondents agreed or strongly agreed that transformation at their company is traditionally done within functional siloes. Yet 86% believe that holistic transformation executed across functions can create accelerated results.¹⁸

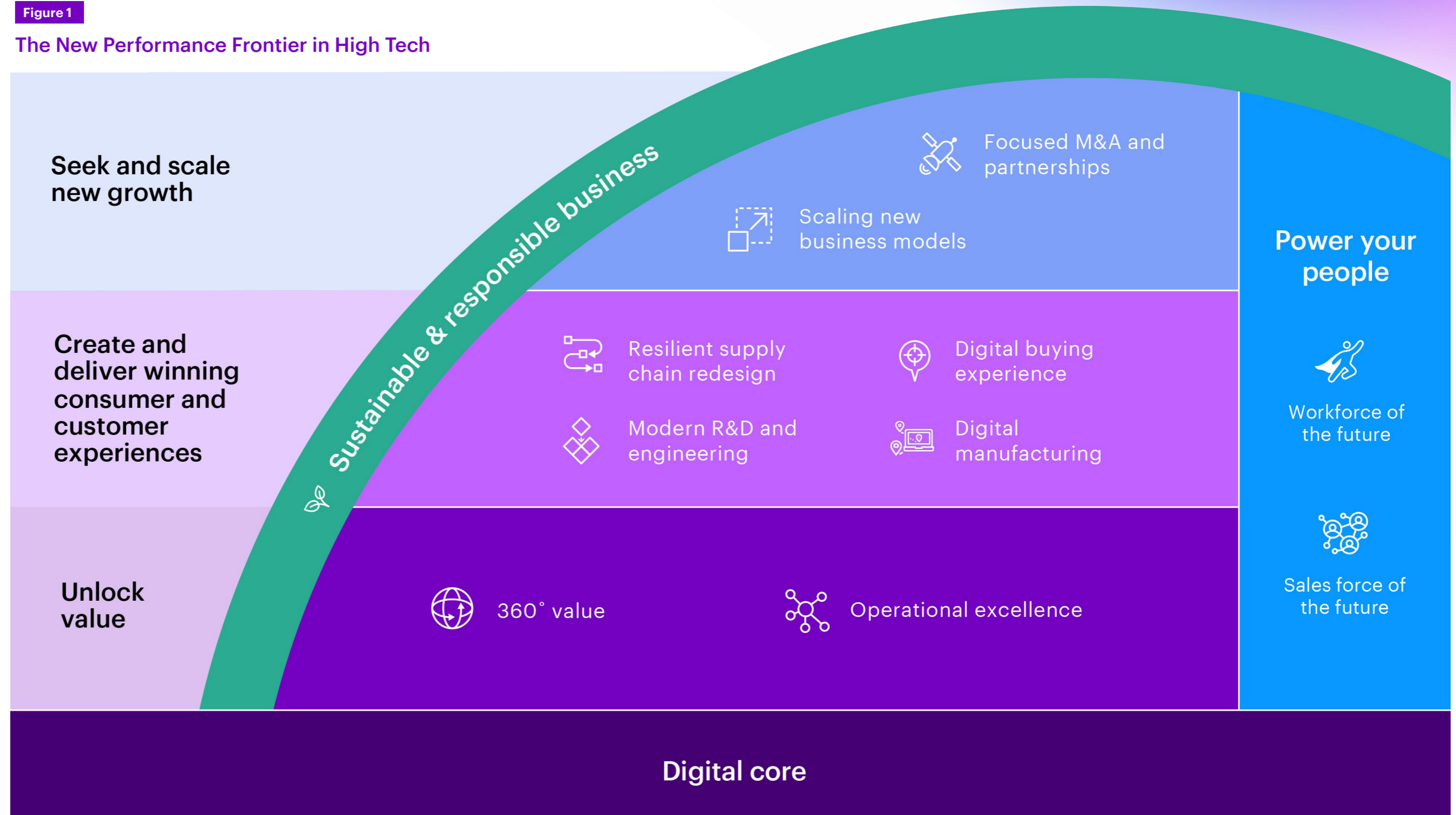
Reinvention also requires the use of next generation technologies like generative AI to form a strong digital core: The digital core consists of 3 layers: an infrastructure and security layer, a data and AI layer and an applications and platforms layer. High tech leaders believe the digital core is the key enabler of reinvention: 90% of high tech executives (compared to 79% of executives across all industries we surveyed) said the pace of technology innovation accelerated their organization's reinvention strategy.¹⁹



Total Enterprise Reinvention leverages the digital core and new ways of working as the foundation of a New Performance Frontier: a new level of performance on key business capabilities that goes beyond today's benchmarks, but which will be the default practice in 5 to 10 years' time. In high tech, we have identified **10 distinctive capabilities** that allow companies to seek and scale new growth, create and deliver winning experiences, power their people to be human agents of change and unlock value through dynamic investment — all in service of becoming a sustainable, responsible company. (see Figure 1)

Figure 1

The New Performance Frontier in High Tech



Source: Accenture

1 Seek and scale new growth

The high tech business leaders of tomorrow must develop and refine the enterprise's ability to acquire new capabilities and partnerships at speed. They need to focus on identifying, building and delivering products and services for the customer, not to them. They will need to revise their internal metrics to closely track real customer needs — a core part of a maturing AaS mindset.

How to do it:

Focused M&A and partnerships: Pursue smaller, capability-focused deals to stay ahead of the curve and grow the company's software, IoT and AI offerings. Build M&A strategy into an enterprise core competency by continuously monitoring for opportunities to enhance the company portfolio. Adopt an agile approach to integrate the core talent and structure of acquisitions. Long-term, large-scale M&As are too slow and costly to keep up with today's pace of change as companies compete to acquire the most essential capabilities. [Our M&A research](#) shows that a decade ago, for example, only 25% of acquisitions focused on acquiring technology. That figure rose to 36% of M&A deals by 2020–21.²⁰

Scaling new business models: Invest in a robust cloud infrastructure to reduce manual processes, increase data visibility and enable the company's shift toward recurring revenue offerings. Move from a hardware- to a software-based sales approach. Refocus the company's mentality by shifting compensation and performance metrics away from revenue and shipments — focusing instead on a reinvented sales approach and AaS-relevant metrics like churn, conversion rates, customer acquisition cost and customer lifetime value. [Our latest cloud report](#) found that 79% of high tech companies have increased their cloud initiatives in the past two years.²¹ Adoption doesn't translate into value, however, companies need to ensure their infrastructure can scale these new business models.

Who's doing it:

Most of GE HealthCare's revenue comes from MRI, ultrasound and other medical equipment, with \$1 billion of its \$18 billion yearly in sales coming from its software.²² The company sought to offset near-term margin pressure with new sources of software-driven growth by augmenting its product portfolio. The company leveraged a focused strategy designed to infuse technology and AI into its product suite and grow revenue by acquiring Caption Health's AI capabilities,²³ IMACTIS's computed tomography products²⁴ and BK Medical's surgical visualization offerings.²⁵

Under its TruScale brand, Lenovo offers both DaaS (Device-as-a-Service) and IaaS (Infrastructure-as-a-Service). This initiative allows the company to continue to build more repeatable solutions with Lenovo IP and provide a more flexible model to deliver its offerings to its customers. In doing so, TruScale allows Lenovo's customers to move away from onsite IT infrastructure, which in turn means smarter and more affordable technology. This enables them to gain a competitive advantage, increase productivity and empower their workforce.²⁶

2 Create and deliver winning consumer and customer experiences

High tech companies may not have effectively placed the customer at the center of their processes, products and platforms. They must be willing to innovate and invest across the enterprise, from manufacturing to R&D, to create delightful customer experiences. A relentless customer focus provides faster reactions to changes in demand, supply network challenges and feedback while fostering a cutting-edge engineering environment.

How to do it:

Modern R&D and engineering: Design R&D and product development with a fully customer-centric lens to build bespoke solutions. Root out institutional biases that may favor existing and traditional offerings. Keep customer interactions within the company's ecosystem by coupling hardware and software offerings with cloud infrastructure and platform support. Deliver software-led solutions at speed in direct response to customer demand. Tailoring product specifications by market, for example, places the end user at the heart of design. Our high tech industry survey found that 7 out of 10 respondents indicated their company is adopting a platform-based approach to manufacturing that includes adding software capabilities in most hardware products.²⁷ These capabilities create a natural opportunity to improve customer experience.

Digital manufacturing: Redesign supply chains and manufacturing processes to incorporate technology — including automation, machine learning, scalable robotics, sensors and more — across all company systems and processes to provide end-to-end visibility. Reimagine the factory floor through use of digital twin capabilities and other emerging technologies. This effort enables unprecedented visibility, foresight and agility across the manufacturing capability and real-time response to potential failures and changing customer needs. Our high tech industry survey found that 56% of respondents indicated they are planning new investments in AI and Machine Learning for their manufacturing capabilities.²⁸

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Who's doing it:

Applied Materials' new R&D center in Silicon Valley is designed with collaboration at its core to re-engineer and accelerate semiconductor manufacturing and development. By bringing together key industry players, challenges can be addressed holistically, semiconductor roadmaps can accelerate and the talent pipeline can grow, among other benefits. Commercialization is no longer linear. Companies can increase the commercial success rate of new innovations and the return on R&D investments for the entire semiconductor ecosystem faster than before.²⁹

Every Tesla vehicle has a digital twin that uploads data collected from its sensors to the cloud. By transferring real-time usage data to its gigafactories, the company's AI algorithms can continuously optimize battery usage, determine where faults are most likely to occur, analyze how owners are using the car's equipment and offer "over-the-air" service updates. The uninterrupted transmission of the relevant data between the vehicles and the manufacturer ultimately improves product quality and customer satisfaction.³⁰

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How to do it:

Digital buying experience: Digitize and streamline the customer engagement model by focusing on the customer's end-to-end journey. Combine technological advancements with frictionless experiences to offer customers an advisory, outcome-driven conversation underpinned by AI and analytics. Leverage generative AI to create automated and personalized product and service recommendations at scale. Activate recurring revenue offerings by evolving sales effectiveness and customer success metrics based on client historical data to deliver a more complete view of the customer. Our high tech industry survey found that 1 in 3 respondents (34%) viewed siloed operations as the most significant challenge to improving the digital customer experience — suggesting the push must come from within the enterprise.³¹

Resilient supply network redesign: Explore nearshoring and onshoring opportunities to bring manufacturing, R&D, engineering and distribution closer to the customer and suppliers and to mitigate risk. Deploy AI and analytics to proactively identify challenges, provide greater visibility and reduce interruptions to ultimately secure the advantages of any redesign. As disruption and upheaval become the new normal, companies with resilient supply networks will find the ability to reliably create and deliver for customers, turning it into a competitive differentiator for their business. In our high tech industry survey, 51% of executives indicated they redesign their supply chain network every 2 to 5 years, suggesting a need to take a fresh look at their approach and deliver a new strategy that unlocks greater resilience from the outset.³²

Who's doing it:

Cisco's Customer Experience (CX) group has 20,000 employees who help customers best select, implement and maximize the technology they purchase. CX Cloud leverages AI, machine learning, analytics and use cases to create customer visibility into product usage, demand, refresh cycles and needs. Eventually, CX Cloud will manage AaS offerings and customer data to provide even more targeted services and recommendations. This insight creates opportunities to support the sales process and increase customer retention.³³

HP's supply chains can be considered as "holistic and interconnected" as the company continues to evolve and expand its resilient supply chain operations. The company's goal is to reach customers with what they need, when they need it and where they need it. HP's multi-source risk mitigation strategy includes investing in sites with longtime operations, expanding manufacturing sites and shifting to alternative sites where necessary. From China to Mexico or from India and Southeast Asia to the US, the company is committed to its global footprint and its local clients.³⁴

3 Power your people

High tech companies recognize leveraging the right talent is key to staying competitive. To power their workforce, they must prioritize the recruitment, development and retention of teams equipped with the right skill sets and mindsets. They need to better understand how workers use and acquire skills — and how those skills drive growth for the organization. Companies can start by leading with purpose, engaging workers more deeply with their products and services and highlighting their most critical competitive differentiator: their people.

How to do it:

Workforce of the future: Address the talent shortage in high tech by becoming skills-driven and skills-literate organizations that are attractive to new and existing talent. Build virtual factory floors and engage teams across the company to adapt new skillsets for integrating technologies like generative AI that can aid product development and expedite speed to market. Demonstrate the company's future vision by welcoming employees into active beta testing programs for new products and strategies. Action is critical as talent shortages, especially in fields like manufacturing, R&D and software engineering, are dire. According to Gartner, “The demand for tech talent greatly outstrips the supply, which will continue until at least 2026 based on forecasted IT spend.”³⁵

Sales force of the future: Create solutions that focus on customer outcomes by realigning company incentives to shift from product-based selling to solution-based selling. Create a runway for the sales force to balance customer needs and product life cycles to deliver profitable, sustainable and scalable approaches. Leverage investments in a strong cloud infrastructure to gather the full suite of real-time metrics (margins, future profitability, compensation, etc.) used by the sales force. Foster a greater client-centric mindset with current customers as use cases for this new approach. Current customer relationships can be further activated and cultivated by technology and this new approach — the success rate of selling to existing customers is 60%-70%, compared to 5%-20% for new customers.³⁶

Who's doing it:

ASML expanded its “academic-industrial collaboration” partnership with Eindhoven University of Technology in the Netherlands to engage current and potential employees in new ways. The partnership includes creating additional research capacity in key and emerging areas, offering top engineering talent as “hybrid teachers” and expanding company internships.³⁷ Planning for a new facility, including a state-of-the-art clean room and research laboratory will be shared between the company and the university.³⁸

Xerox trained its sales force to think for the long term by changing from a product-driven to an outcome-driven mindset. Rather than selling products from the outset and engaging with outcomes, the sales force is acting differently. They offer to manage an enterprise’s entire environment — often an OEM competitor — and to provide equipment via AaS. As the customer’s technology ages and the leases roll off, however, their strategy is to replace it with Xerox equipment.³⁹

4 Unlock value across the enterprise

To better compete and succeed and meet the evolving expectations of customers and partners, high tech companies must deliver more than just financial performance. They must create multi-dimensional value — what we call 360° value — by redesigning operations to eliminate waste, increase productivity and recognize untapped value across financial, customer, employee and sustainability metrics.

How to do it:

360° value: Develop a dedicated and continuous value management capability that analyzes all types of value outside of financial metrics. Sustain savings and build resilience by creating a function that constantly identifies, plans and tracks unlocked internal and external value pools. Leverage emerging technologies like generative AI to identify opportunities across a range of potential outcomes for dynamic resource allocation and reinvestment. Assign and reinvest savings based on financial, customer, sustainability and employee metrics. Our high tech industry survey found that almost 50% of respondents cited both innovation and revenue growth as important enterprise value management initiatives to achieve the company's strategic goals within the next 2 to 3 years, suggesting companies need to continue looking beyond financial metrics to create more enterprise value.⁴⁰

Operational excellence: Unlock productivity within the company in preparation for an environment of continuous change. Deploy automation, predictive analytics, Augmented Reality/Virtual Reality and AI across the enterprise to create new ways of working and increase gains in manufacturing, R&D and delivery. Introduce lean operating principles into the company's technology stack to create an operational advantage. Companies that do this will have created new systems and ways of working to drive operational excellence and proactive, real-time decision-making.

Who's doing it:

As part of Intel's IDM 2.0 strategy, Intel Foundry Services manufactures chips for internal customers and external fabless customers. The company combined its manufacturing groups into a single reportable segment with its own financials as part of this restructuring to drive \$8 billion to \$10 billion in savings by 2025. The new structure enables more than just cost savings and financial visibility into trapped value: it incentivizes accountability and delivery of the world-class foundry service customers expect.⁴¹

Toshiba uses data and analytics for predictive maintenance to identify mechanical issues like downtime and maintenance costs (among others) before they become problems. The company collects and analyzes data from various equipment sources and sensors in real-time. Its approach to predictive maintenance optimizes equipment performance, extends its lifespan, better manages energy consumption and identifies areas for improvement. With plant downtime potentially averaging over \$172 million annually, companies taking a proactive approach could benefit from significant cost savings.⁴²

Reaching new heights in the high tech industry

As levels of uncertainty, connectedness and technological innovation reach new highs, high tech's executives will have to do more with less. The solutions of yesterday have no guarantee of working tomorrow. To thrive in this new era, company leaders will need to be agile, adaptable and nimble.

That's why Total Enterprise Reinvention is essential to the future of the high tech industry. [Our research](#) found that Reinventors report generating 10% higher incremental revenue growth, 13% higher cost-reduction improvements and 17% higher balance-sheet

improvements compared to companies that transform only parts of their business and treat reinvention as a finite program rather than a continuous strategy.⁴³

High tech is the industry that transformed our world, and it can be the industry that shapes the future of business. Doing so requires reaching a New Performance Frontier that will define the high tech company of tomorrow. High tech leaders must aim over the horizon, think boldly and act decisively. The journey to tomorrow starts today.





Ready to get started?

Reach out to talk with one of our industry experts about Total Enterprise Reinvention and to complete a diagnostic to assess your organization's performance and ambition against industry peers.

[Contact us](#)

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