Signals of Change

The essential radar that leaders need to see and seize the future

Executive Summary

From insights to action, the path to extraordinary value starts here.
Contents

03  Introduction
08  01. Learning From the Future
12  02. Pushed to the Edge
16  03. Sustainable Purpose
19  04. Supply Unbounded
22  05. Real Virtualities
25  06. The New Scientific Method
31  What else will shape your Business Future?
34  About the authors
37  About the research
40  References
Choose to change
Out of global crisis comes a new world of opportunities.

This past year, business models have been reinvented. Supply chains have been restructured. Work that we assumed required being in an office has been reimagined. Productivity, we now know, can thrive virtually.

Meanwhile, promises of new scientific breakthroughs—from synthetic biology to machine learning—are suddenly realized. In 2020, an AI-developed drug reached clinical trial in just 12 months compared to the typical four and a half years.

In the process of tackling global challenges that even the most forward-thinking leaders never fathomed, organizations once resistant to change have transformed. Sixty-three percent of high-growth companies have moved away from focusing on where people physically work and have adopted “productivity anywhere” workforce models.

How do we capitalize on this new momentum? How do we accelerate the innovation we have tapped? How do we optimize for the new global reality?
Making sense of a new reality

As the world recovers from a global pandemic, leaders face an unprecedented challenge: to identify what works for a new and evolving today and what will be required to thrive tomorrow.
Longstanding trends like the increasing importance of experiences, greater adoption of cloud, and dramatic changes in buying patterns have been interrupted, accelerated, or reversed during the global COVID-19 pandemic. Now is the time to capitalize on changes and seize the future.

Companies stand to benefit from being forward-thinking. Accenture research has shown that organizations that invest in sustainability and digital transformation are 2.5x more likely to be among tomorrow’s strongest-performing businesses.

Decisions made over the next 12 to 18 months could determine the difference between thriving and struggling to survive in the next five years.

We give you the Signals.

Business Futures is Accenture’s structured approach to identify Signals of business change that are most critical for organizations to understand in order to shape successful futures. We highlight the Signals that are reshaping organizations globally and will be critically important as these organizations reinvent for a profoundly different tomorrow. In presenting these Signals, we aim to help leaders chart their best courses to profitable growth.

(See About the Research on page 37 for details about how we identified the Signals.)
## Signals that will shape your future

Six Signals stood out as essential to the future success of organizations.

<table>
<thead>
<tr>
<th>Learning From the Future</th>
<th>Pushed to the Edge</th>
<th>Sustainable Purpose</th>
<th>Supply Unbounded</th>
<th>Real Virtualities</th>
<th>The New Scientific Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>See change before it happens</td>
<td>Decentralize decision-making</td>
<td>Move from purpose-focused to purpose-run</td>
<td>Break physical limits of fulfillment</td>
<td>Redefine reality and place</td>
<td>Become a scientific company</td>
</tr>
</tbody>
</table>

### Learning From the Future

- **See change before it happens**
  Rather than focus on the past for insights, leading organizations use data analytics and artificial intelligence (AI) to make decisions and define strategies that anticipate the future.

### Pushed to the Edge

- **Decentralize decision-making**
  Leaders are responding to change and challenge by pushing decision-making authority to people at the “edges,” relying on highly networked teams to act with speed and agility.

### Sustainable Purpose

- **Move from purpose-focused to purpose-run**
  Responding to the call for businesses to serve stakeholders broadly, organizations are building sustainability into the fabric of their operations—and making social responsibility sustainable.

### Supply Unbounded

- **Break physical limits of fulfillment**
  To meet growing customer needs for fast, flexible, cost effective, and sustainable order fulfillment, companies are restructuring their supply chains and moving production to the point of demand.

### Real Virtualities

- **Redefine reality and place**
  As virtual environments enhance our physical worlds and redefine our sense of place, innovative organizations create new ways for people to work, consume, and socialize.

### The New Scientific Method

- **Become a scientific company**
  As scientific disruption enables the creation of better, cheaper, and more sustainable products and services, leading companies will become scientific companies—and apply science to tackle the world’s fundamental challenges.
All six Signals present opportunities—and incentives—to embrace change and find new ways to grow.

In the following pages, we explain these Signals—their evolution, their impact, and our perspective on how organizations best respond and are already responding. We make sense of the new global reality and chart ideal paths toward a better future.
Signal 1: Learning From the Future

Rather than focus on the past for insights, leading organizations use data analytics and artificial intelligence (AI) to make decisions and define strategies that better anticipate the future.
Organizations are capturing new data sets—real-time data inside and outside and across the value chain—and using AI to identify patterns, anticipate future challenges, and make better decisions for the long term. We call this enhanced approach to decision-making “learning from the future.”
Learning from the future charts potential risks ahead and opens up growth opportunities. For example, China's MYbank uses AI to scrutinize more than 3,000 real-time variables to predict the credit worthiness of small and medium-sized enterprises (SMEs). After a business applies via mobile phone for a MYbank collateral-free loan, the company takes less than one second to approve or reject the application. Even though 80% of MYbank clients are first-time borrowers with no credit history, the company's default rate is just 1%—compared to an average 2.75% for its competitors.³

E-commerce giant JD.com retooled its algorithms to rely less on historical data and more on real-time news and social media data. The result: more relevant product recommendations to customers (i.e., hand sanitizer, rather than meds for sick people, when they buy masks), better click-through rates, and higher sales.⁴ Organizations that develop superior forward-looking capabilities serve their customers better and win in the marketplace.

Learning from the future enables organizations to make decisions faster and properly reshape for the future.

38% of C-suite respondents to our survey said that people across their organization consistently use real-time data in their day-to-day work.
What to do?

Comfort with the status quo, embedded organizational structures, and traditional decision-making constrain organizations from learning from the future and embracing change. To break free from these constraints, organizations should:

1. **Plan for a broader range of future possibilities.**
   Shed the past and old cultural mindsets. Take a “clean-sheet” approach to dynamic planning. Draw on inductive, AI-driven insights that enable plans to be adapted in real time. Think creatively about what the future may hold.

2. **Take a wide-angle approach to data use.**
   Track hundreds, even thousands, of variables. Foster open, collaborative data ecosystems.

3. **Make learning from the future a core capability.**
   Shift from experience-based, top-down decision-making to data-driven, bottom-up decision-making. Enable employees to augment their judgment and intuition with algorithmic recommendations.

---

**Wildcard**

**Could learning from the future lead to unexplainable strategies?**

Even the most autonomous algorithms need humans to provide contextual understanding. “What do we do” wondered Keith Dear, a former wing commander in Britain’s Royal Air Force, “when AI is applied to military strategy and has calculated the probabilistic inferences of multiple interactions many moves beyond that which we can consider, and recommends a course of action that we don’t understand?” No matter how far AI advances, humans will always be needed to interpret algorithmic data, explain it, and make sure that it reflects the intent.
Signal 2: Pushed to the Edge

Leads are responding to change and challenge by pushing decision-making authority to people at the “edges,” relying on highly networked teams to act with speed and agility.
To ramp up internationally, Netflix pushed decision-making to the edges of its organization—learning from, experimenting in, and creating content for local markets. This approach enabled Netflix to develop an unparalleled sensitivity for local preferences and adapt quickly to customers’ tastes. This global agility has paid off handsomely—in 2020, 83% of Netflix’s new subscriptions were from outside the United States and Canada.
Netflix is one example of what we call an “edge organization.” Edge organizations leverage the principles of “edge” computing, a decentralized form of computation and data storage that speeds up processing by moving intelligence closer to the point of use. Edge organizations are formed by moving decision-making to the edge, where teams are connected by networks. These teams are empowered to decide how to organize, work, meet corporate goals, and deliver on the mission, while optimizing for local performance.

Although many organizations have long strived to become Edge organizations, seeking to “think globally but act locally,” only now do several factors align to make Edge a potent reality. Vast improvements in technologies have enabled greater connectivity and securely managed information flows, helping organizations overcome the constraints of distance. The global pandemic—which triggered the biggest experiment in remote working at scale—has shown that it is possible to collaborate well at distance.

Meanwhile, growing regional fragmentation and changing consumer preferences have made the movement of decision-making authority to the edges not just possible, but necessary.

82% of C-suite respondents to our survey said that operating more like a broad federation of enterprises, in order to respond to increasingly fragmented business environments, will be important to their organization’s success.
What to do?

More than ever, adaptability and speed are essential to succeed. To move toward the “edge,” organizations should focus on three things:

1. Go flat to empower the edge.
   Structure your organization to make it flatter and faster. Shift away from hierarchies toward networks of empowered, multidisciplinary teams focused on customer outcomes.

2. Move decision-making closer to the edge.
   Delegate most decision-making as locally as possible to give employees at the edges agency and accountability for actions that they are equipped—and best placed—to take.

3. Give range to people at the edge.
   Reskill your workforce. Use technology to equip your employees to take on more complex roles that will empower your multidisciplinary teams and enhance their performance.

Could organizations move too far to the edge?

In theory, companies might move to the edge too quickly, restructuring in ways that fail to consider the complexities of decentralization. For example, catering to local contexts may risk a company’s overall brand identity if local values clash between regions or with the values of the company itself.
Signal 3: Sustainable Purpose

Responding to the call for businesses to serve stakeholders broadly, organizations are building sustainability into the fabric of their operations—and making social responsibility sustainable.
BlackRock, the world’s largest asset manager, has asked companies to disclose a plan for how their business model will be compatible with a net-zero economy. BlackRock’s action reflects a growing consensus that the interests of society and investors are best served by organizations that focus on multi-dimensional value creation for the benefit of all stakeholders, not just shareholders.8

Many organizations speak about purpose, but too few are demonstrating it in their DNA. We calculated that for 43% of 521 of the world’s largest companies, their ability to deliver multi-dimensional value—as measured by environmental, social, and governance (ESG) indicators—has not matched their intent. While these companies devoted an above-average share of their earnings calls to ESG topics, their actual performance on ESG indicators was consistently below average over the past three years.9

Adopting an authentic stakeholder-centric purpose is not a choice between doing well and doing good. Companies with consistently high ratings for ESG performance had operating margins 3.7x higher, on average, than lower ESG performers in the period from 2013 to 2020. These strong ESG performers also generated higher annual total returns to shareholders, outperforming lower ESG performers by 2.6x.10

Microsoft is one such example. The company is considered to be a consistent top performer in creating value for all stakeholders, not just shareholders.11 Microsoft integrates its goal to create multi-dimensional value into the core of its business model, developing profitable and sustainable products and services that make people and the planet better off. The company reports on its progress, enabling stakeholders to evaluate its success in achieving its goals, and it embeds its commitment to purpose in its governance structures, corporate policies, and processes. Microsoft makes its mission to create multi-dimensional value part of the “lived experience” of everyone who works for the company, not just the CEO and his senior leaders.12

of C-suite respondents to our survey said that rethinking the management of their organization to advance a multi-dimensional view of value creation will be important to their success over the next three years.
What to do?

To move from having a purpose to delivering on purpose, organizations should do three things:

1. **Clarify: Find a purpose and commit to it.**
   Identify and communicate your purpose. If required, change governance guidelines to clearly assert stakeholder primacy.

2. **Measure: Put a value on your purpose.**
   Look beyond shareholder return to measure stakeholder return. Track and publicly disclose your ESG performance.

3. **Manage: Engineer accountability across your ecosystem.**
   Embed purpose into the core of your organization and its ecosystem. Make your board and your C-suite accountable for delivering on purpose. Develop incentives for employees and partners to help you advance your mission.

---

### Wildcard

**Could stakeholder capitalism lead to “conflict capitalism”?**

Balancing the competing needs of different stakeholders is a big challenge: Customers call for lower prices while employees want higher pay. Shareholders demand dividends while local communities want philanthropy. Could this tension lead to a world where the needs of stakeholders are set off against one another, in a form of “conflict capitalism”?
Signal 4: Supply Unbounded

To meet growing customer needs for fast, flexible, cost-effective, and sustainable order fulfillment, companies are restructuring their supply chains and moving production to the point of demand.
The global pandemic transformed supply chain management. Walmart, Amazon, and Instacart collectively hired more than 1 million workers in the United States to meet new and surging demand. A COVID-19 response platform created by agile manufacturing company 3YOURMIND matched requests from hospitals short of medical equipment to local 3D-printer farms. Sysco, a foodservice distribution giant, built a new supply chain in less than a week to serve grocery stores. Companies invented new business models to meet shifting demand.

Amidst this acceleration of innovation, customers are demanding sourcing closer to the point of sale, with sustainable options. The best organizations are transforming centralized, linear supply chains into decentralized networks that use on-demand production. We call this new type of supply chain “supply unbounded.”

Executives pointed to physical constraints, such as bottlenecks in ground infrastructure, length of supply chains and geographic distribution of customers as the top three barriers to meeting customers’ shifting expectations. In response, organizations are conducting a range of experiments that break these physical limits, decoupling their supply chains from distance, ground infrastructure, and packaging and inventory waste.

Chinese tech-construction company Winsun started making building components via 3D printing on location—enabling management to dramatically reduce materials and labor and also expand rapidly into 10 countries. Other companies are delivering more orders from smaller footprints. Walmart, for instance, has been scaling its micro-fulfillment centers, which are 20,000 square-foot modular warehouses built within or added to existing stores, versus traditional standalone warehouses 20 to 50 times bigger. Other sustainability-focused companies such as IKEA are testing product-as-a-service business models. Customers buy access to furniture on a subscription basis, and IKEA retains ownership of the products and raw materials for future use.

Of C-suite respondents to our survey said they are scaling approaches that will help them separate supply from ground infrastructure.
What to do?

Breaking the physical limits of their supply chains enables organizations to do more with less and meet customers’ growing expectations for cost-efficient and flexible order fulfillment. To achieve this, organizations should prioritize three things:

1. **Redefine the purpose of physical infrastructure.**
   Redefine the role of each node in your fulfillment network.

2. **Rethink supply networks.**
   Work with partners, such as local couriers and on-demand delivery firms, to improve overall supply chain performance.

3. **Redesign products and services.**
   Align your product design with unbounded supply chains. Design with reuse and remanufacturing in mind—using simpler, recyclable materials.

---

**Wildcard**

**Will decentralized supply chains destabilize emerging economies?**

If production is moved closer to the point of demand, talent needs and training requirement needs will shift. Companies will have to work with stakeholders to identify risks to the livelihoods of vulnerable people in emerging economies and work to mitigate those risks by supporting long-term skills development.
Signal 5: Real Virtualities

As virtual environments enhance our physical worlds and redefine our sense of place, innovative organizations create new ways for people to work, consume, and socialize.
Integrating the physical world with virtual interfaces will create all sorts of enhanced experiences. The Deutsche Fußball Liga, which operates Germany’s Bundesliga, partnered with Vodafone to develop an augmented reality app for fans at the stadium, overlaying statistics and match analysis in real time. The goal is to give fans who are physically at the match an even richer data-packed experience than viewers at home.19

Blended physical and virtual worlds enable companies to enrich the customer experience and deliver greater value.18

Innovative organizations are working to blend virtual and physical worlds, to build what we call “real virtualities.” As this integration happens, virtual worlds will become increasingly realistic, imbued with a greater sense of the physical. For instance, OVR Technology, an “Olfactory Virtual Reality” company, developed mask-scent devices that emit scent particles. Users walking through, say, a virtual park with the OVR’s virtual reality headsets can smell grass and flowers.18

of C-suite respondents to our survey said that building virtual and more immersive physical environments that redefine the spaces where people work, learn, socialize, and shop will be important to their organization’s success.
What to do?

To seize the opportunities that Real Virtualities offer, organizations should focus on three things:

1. **Rethink competitive advantage.**
   Consider how the shift to virtual changes how you compete—and who you compete with. Offer your customers enhanced experiences through blended virtual and physical environments. Identify opportunities to extend those offerings to entirely new markets.

2. **Activate new opportunities.**
   Evaluate how your talent across many fields—from sales to marketing to accounting to research—can best operate in a world of Real Virtualities. Reorientate your innovation investments and processes, addressing both core technologies like VR and underlying infrastructure like network capacity.

3. **Lean on ecosystem partners.**
   Invite your partners, depending on their expertise, to rethink and innovate with you.

**Wildcard**

**Will blended worlds encourage deception?**

The same technologies that are used to create realistic virtual worlds could be used for digital deception to create “deepfakes.” Fake, yet realistic, AI-generated videos of a CEO spreading misinformation about a company could go viral and damage your brand, your relationship with your customers, and your share price.19
Signal 6: The New Scientific Method

As scientific disruption enables the creation of better, cheaper, and more sustainable products and services, leading companies will become scientific companies—and apply science to tackle the world’s fundamental challenges.
When the COVID-19 pandemic hit, researchers sequenced the virus’ genome within three days. Soon after, mRNA vaccines were sequenced in only two days. Many scientists are optimistic that the technology behind mRNA will transform medicine more broadly, with work underway to create vaccines for malaria and other infectious diseases.
Scientific innovation is back at the top of the agenda for government and business. In the second quarter of 2020, for the first time in over a decade, American companies spent more on software and R&D than on fixed assets. We believe that today’s sharpening focus on science is just a hint of what’s to come.

Companies that embrace science meet market demands and meet humanity’s needs more sustainably. Food, for instance, can now be designed from the molecule up, rather than breaking down and reconstituting bulk food products, as in traditional food processing. Companies such as Impossible Foods are showing what is possible. Without compromising on taste, the company’s plant-based burgers, based on genetically engineered yeast, use less water and land compared to conventional beef burgers.

Biological materials similarly promise to replace the carbon-intensive manufacturing of products ranging from fertilizers to polyester. Take concrete—the most consumed material in the world. Concrete’s core ingredient, cement, accounts for 8% of global CO2 emissions. US-based Biomason is using microorganisms to grow bio-cement-based construction materials that eliminate emissions. The company’s concrete is three times stronger than traditional concrete blocks and possesses self-healing properties. The microorganisms in the bio-cement source nutrients from their surroundings, such as seawater, to fill cracks when they develop in the construction material.

Companies must go beyond today’s proven digital technologies to innovate at the next frontiers of science. Combining advances from across the sciences is a far greater engineering and organizational challenge than pure-play digital solutions. Science depends on fundamental research as well as requisite skills, knowledge, and infrastructure. In the past decade, every company became a digital company. In the coming decades, every company will need to become a scientific company.
What to do?

The “new scientific method” requires organizations to apply breakthroughs to the real world much faster. To do this, companies should prioritize three areas:

1. **Reimagine the design-build-test-learn cycle.**
   Apply AI to product requirements in order to identify optimal designs. Combining machine-learning algorithms with robotics, you can synthesize, build, test, and refine relatively quickly and cost-efficiently.

2. **Open up to drive the ecosystem forward.**
   Pursue new models of collaboration that span the sciences and draw on the expertise of startups, universities, government agencies, and other companies.

3. **De-risk via alternative investment vehicles.**
   Seek a wider range of investment partners. Scientific innovation requires different infrastructure, skills, resources—and greater funding capacity over a longer timeframe.

Wildcard

*Will an anti-science wave lead to public mistrust of scientific companies?*

In the wake of the global pandemic, there is renewed focus on scientific ethics in everyday life. Science can address factual questions (“What can we do?”), but it cannot address ethical questions (“What should we do?”). If these ethical questions are not addressed properly, public opinion could turn against scientific innovation.
How to use these Signals

Four basic steps will help you assess what the Signals mean for you and how to design your response, act quickly, and optimize change.

1. Assess

Start by understanding what the Signals mean for your business.

How strong are the Signals in your industry and geographic markets? Will they shift sources of competitive advantage? Will existing profit pools dry up and others form? Which parts of your organization face the greatest impact?

Adopt a structured approach to assess the impact on different parts of your business, from customers and competitors to your balance sheet. Distill insights into a shared perspective that properly informs the leadership team, highlighting key issues, critical uncertainties, and fundamental decisions to be made.

Openly discuss and realistically evaluate the choices available, encouraging dissenting opinions that look beyond the obvious to envision the full breadth of potential opportunities and risks the Signals create.

2. Design

Design your strategic response to the Signals, aligning on and communicating a plan for how to build your future.

How will the organization capitalize on the Signals? What future does your organization want to build toward—and at a high level, how will it get there from its current position? What, if any, broad changes in your business and operating model are necessary to support the strategy? How will you mitigate potential wildcards?

These decision points require clear choices about strategic direction that can steer and empower your teams to bring your plan to life. The choices should be reviewed against existing initiatives, determining what should be accelerated, continued as planned, or stopped.
3. Respond

Respond to the Signals through swift execution—and consistent iteration—of the strategic plan.

Identify leaders within the organization who will drive the response to the Signals and hold them accountable for delivery. Cascade strategic responses to the Signals into your planning process. Reallocation resources across business units, so teams have access to what they need to respond effectively.

Teams at the edges of your organization should then test actions that they believe will realize leadership’s strategic intent. Based on their findings, teams can then adapt their actions to optimize your organization’s objectives and share their insights.

4. Reinforce

Put in place clear measurements and incentives to encourage change.

Track the effectiveness of your responses to the Signals. Look constantly for indicators that the Signals are gaining or declining in strength. Tie these indicators back to specific strategies and actions—detailing how various levels of Signal strength indicate how and when certain responses should begin and end. Feed the insights that you gained into reassessments of the Signals and your organization’s evolving strategies.
What else will shape your Business Future?

In addition to the six Signals detailed in this report, 19 other Signals are on our radar.
Today

Signals of business change that are already reshaping business

**Skilling at Speed:** Organizations are building new skills among their workforces, as more traditional forms of work (e.g., cashiers) become obsolete.

**From Places to Spaces:** Organizations are reexamining their physical assets, as new behaviors like remote working affect when and how people use physical locations (e.g., offices, parks, stores).

**Tell Me More:** Organizations are more transparent about their operations (e.g., product sourcing, safety), as people increasingly seek clarity from, and confidence in, organizations that they interact with.

**CEO as Statesperson:** CEOs must respond to the demands of multiple stakeholders, particularly for engagement in ESG issues.

**Doubling Down on Diversity:** Organizations are enacting employment and leadership targets for all underrepresented groups, recognizing the interrelatedness of diversity, inclusion, and financial success.

**The Return of the Problem-Solving Generalist:** To solve complex, cross-industry problems, organizations are developing more employees with flexible and broad-ranging skills rather than narrow technical competence.

**Fair-Trade Data:** Organizations respond to customer demands for privacy by developing new business models that restrict use of customer data and provide a clear return for the data they do use.

**Company as Caregiver:** Organizations are expanding ways to reward employees, catering not just to their financial needs but also to their needs around mental and physical health, life purpose, and employability.

**The Zero Fixed-Cost Economy:** Organizations are tapping into the benefits of digitization by using “as a service” models to reduce their fixed costs, or to replace their fixed costs with variable-cost alternatives.

**The Peak Performance Workforce:** To optimize productivity, organizations are investing in technologies that enhance the cognitive and physical performance of their employees.
Tomorrow

Signals of business change that will impact organizations in the next three years

**From Remote Work to Virtual Presences:** As remote work becomes the norm, organizations will embrace and integrate virtual work environments, modeled on reality (e.g., Digital Twins, Augmented Reality, Virtual Reality).

**Rebirth of a Salesperson:** Organizations will redefine the roles of salespeople, their toolkits, and their skill sets to respond to the shift to online B2B selling.

**New Collectivization:** Organizations will share a broader range of resources with each other—from people to infrastructure to manufacturing sites—to serve their customers better, faster, and more cost-efficiently.

**Re-bundling the Unbundled:** Organizations will aggregate their offerings, to tap into the growing consumer appetite for simplicity and ease.

**Multipurpose Infrastructure:** Organizations will redesign their physical infrastructure (e.g., real estate, manufacturing plants) to use it for multiple purposes. Agility in execution will be key.

**Changing of the Guard:** Serving culturally and geographically diverse multi-generational workforces, organizations will reconsider their approaches to leadership development.

**Capabilities are the New Industries:** Organizations will redefine their competitive landscapes around core capabilities and services, rather than historical industry affiliations.

**Remaking the Gig Economy:** Organizations will tap the gig economy (e.g., ridesharing platform workers, independent contractors) to employ more people with creative and technical skills.

**The Externality-less Company:** Organizations will go beyond eliminating their carbon emissions, intentionally managing the impacts that their operations have on society and the world, especially related to biodiversity, mental health, and social justice.
About the authors

Annette Rippert
@Annette Rippert

Annette Rippert is Accenture’s Group Chief Executive, Strategy & Consulting. S&C works with C-suite executives and boards of the world’s leading organizations, helping them accelerate their digital transformation to enhance competitiveness, grow profitability and deliver sustainable value. Annette’s global team of more than 40,000 people includes strategists and consultants, industry and function experts, data scientists and human performance professionals—with a collective mission to help clients apply data, analytics, artificial intelligence, assets and innovation to deliver business outcomes at speed and scale.

Annette co-sponsored the launch of Accenture’s Cloud First initiative to address how businesses operate, connect with customers and embed continuous innovation. A strong champion for 360-degree value for clients, Annette directs her team to address not only economic value but also the value for their people, stakeholders and communities. Annette is a member of Accenture’s Global Management Committee.

Kathleen O’Reilly
@Kathleen O’Reilly

Kathleen O’Reilly leads Accenture Strategy, which creates shareholder value and enables competitive agility by partnering with boards, CEOs and C-suite executives to define and answer their most strategic business questions, including growth, profitability, technology-driven transformation, M&A, operating models and sustainability. Kathleen’s global team of more than 5,000 people includes strategists in 40 countries, serving clients across Accenture’s global footprint in more than 120 countries and 40 industries. She is passionate about bringing innovation to clients, attracting and developing top talent, advancing inclusion and diversity in every aspect of her work, and strengthening Accenture’s impact in local communities.

Kathleen has been recognized as one of Consulting Magazine’s “Top 25 Consultants,” named “Working Mother of the Year” by Working Mother Magazine and honored by The Stevie Awards as “Female Executive of the Year.” She is also a member of Accenture’s Global Management Committee.
Rachael Bartels is responsible for developing the talent and offerings of function networks and programs across Accenture. She has over 30 years of experience in consulting, specializing in leading projects in supply chain, business and operations strategy, and customer relationship management. Rachael is passionate about harnessing new technologies and processes to drive innovation and create growth for clients, and she has been instrumental in developing new business areas for Accenture and new approaches to worker safety. With deep expertise in chemicals, mining, and energy, Rachael spends most of her time working with senior executives on transformational and disruptive change. A frequent speaker at conferences and events, Rachael has published on disruptions reshaping the chemical industry and the emerging opportunities for sustainable new revenue streams in the circular economy. She is also a member of Accenture’s Global Management Committee.

Koen Deryckere leads Accenture’s Industry Networks and Programs with responsibility for industry consulting, cross-services industry programs, and industry convergence globally. Supporting our work with clients in Strategy & Consulting across 19 industries, Koen sets the vision for our networks and develops integrated multi-service solutions for our clients using data, analytics and applied intelligence to drive fact-based insights to improve business performance. He is intensely focused on the opportunities companies have now to adopt solutions from across industries to deliver impactful results, helping our clients gain a competitive advantage. Throughout his career, Koen has embraced technology to deliver tangible business outcomes in large transformation programs. He is also a member of Accenture’s Global Management Committee.

Eva Sage-Gavin is a Senior Managing Director in Accenture’s Talent and Organization/Human Potential practice. In her Advisory role, Eva helps clients harness digital technologies and evolve their workforces to innovate, unlock human potential, and drive transformation. Being passionate about lifelong skills development, DEI, and future workforce, she is also a faculty member and mentor at Santa Clara University for the Corporate Board Ready Program to prepare women and racially diverse candidates for Board Director opportunities. She is also a Fellow of the National Academy of Human Resources (NAHR), the highest honor granted in HR. The National Association of Corporate Directors recognized Eva as one of the most influential leaders making a significant impact in boardrooms. HR Executive recognized her as a top 100 HR Tech Influencer. Eva is also a William B. Groat Award recipient for lifetime achievement in HR.
Paul Nunes is the Global Managing Director of thought leadership in Accenture Research, and a well-known and highly regarded thinker, author and speaker on topics of business strategy. He is coauthor of four award-winning and international-bestselling books: *Pivot To The Future*, *Big Bang Disruption*, *Jumping the S-Curve* and *Mass Affluence*, and he has authored hundreds of articles on marketing and business strategy, including regular contributions to *Harvard Business Review*, *MIT Sloan Management Review*, *The European Business Review*, *Ivey Business Journal*, *Rotman Management*, *strategy+business* and more. His research has also been featured in top global news publications like *The New York Times*, *The Wall Street Journal*, *Financial Times*, *Bloomberg BusinessWeek.com*, *Inc.com* and *Forbes.com*, where he had a regular column with coauthor Larry Downes.

### Acknowledgments

#### Research Lead
Mike Moore

#### Research Team
Tomas Castagnino
Xiao Chang
Ajay Garg
David Kimble
Omaro Maseli
Athena Peppes
Shital Sharma
Guillaume Simon

#### Marketing + Communications Lead
Karen Wolf

#### Marketing + Communications Team
Bradley Nixon
Wendy O’Donnell
Tristan Spek
Jessica Wolfe
About the research

Accenture’s Business Futures program is designed to track the Signals of business change that we think will shape the possible futures of organizations.

A three-step process was taken to compile Business Futures:

01. Crowdsource:
Our team of over 400 researchers constantly scans organizations, looking for examples of emerging business trends. We drew on the collective insights of our research team through a crowdsourcing exercise, with researchers submitting more than 400 Signals of business change. We also conducted in-depth interviews with members of Accenture’s expert network—including representatives from across business, academia, and civil society—to understand the Signals of business change that they saw shaping the futures of organizations. The combined input was categorized and consolidated, resulting in an initial list of 30 Signals.

02. Prioritize:
We stress-tested the Signals observed by our researchers with our global community of over 2,000 managing directors from across Accenture’s Strategy and Consulting services, as well as representatives from Accenture’s broader businesses. They ranked the business impact and maturity of the 30 Signals through an online survey and put forward suggestions for additional Signals to consider. Leaders from across Accenture then discussed this input via a series of virtual workshops run by a team of design-thinking experts from our flagship R&D and global innovation center, The Dock. The workshops were used to further refine the list of Signals down to 25, of which six were prioritized based on four criteria: 1) their relevance to CEOs; 2) their potential business impact; 3) the breadth of their impact across industries and markets; and 4) their uniqueness.
03. Test and substantiate:

We used mixed research methods to test and further substantiate the six prioritized Signals and their implications for how organizations may work in the future. These included a survey of 2,650 C-suite executives situated in 18 countries and spanning 20 industries, in-depth interviews with our expert network, case study development, data science, and economic modeling. We also drew on quantitative analysis of 155 underlying forces driving the Signals across six thematic areas: societal, economic, geopolitical, environmental, technological, and consumer.

Going forward, we will continue to track all of the Signals on the Business Futures radar, using natural-language processing techniques to monitor the extent to which each of the Signals is covered by the media, as well as by company reports and earnings calls. These insights will also be used to identify new Signals.
Signals of business change

We used the responses from our C-suite survey to place the Signals on our radar based on two criteria:

**Impact:**

How important will the Signal be to the future success of organizations? The Signals are categorized into two areas: 1) changes to how businesses work, primarily affecting operating models; and 2) changes to how businesses grow, primarily affecting business models.

**Maturity:**

In what time horizon will the Signal mature and have its greatest business impact: today, or tomorrow (within the next three years)?
About Accenture

Accenture is a global professional services company with leading capabilities in digital, cloud and security. Combining unmatched experience and specialized skills across more than 40 industries, we offer Strategy and Consulting, Interactive, Technology and Operations services—all powered by the world’s largest network of Advanced Technology and Intelligent Operations centers. Our 537,000 people deliver on the promise of technology and human ingenuity every day, serving clients in more than 120 countries. We embrace the power of change to create value and shared success for our clients, people, shareholders, partners and communities.

Visit us at www.accenture.com

About Accenture Research

Accenture Research shapes trends and creates data-driven insights about the most pressing issues global organizations face. Combining the power of innovative research techniques with a deep understanding of our clients’ industries, our team of 300 researchers and analysts spans 20 countries and publishes hundreds of reports, articles and points of view every year. Our thought-provoking research—supported by proprietary data and partnerships with leading organizations, such as MIT and Harvard—guides our innovations and allows us to transform theories and fresh ideas into real-world solutions for our clients. For more information,

visit www.accenture.com/research

This document makes descriptive reference to trademarks that may be owned by others. The use of such trademarks herein is not an assertion of ownership of such trademarks by Accenture and is not intended to represent or imply the existence of an association between Accenture and the lawful owners of such trademarks.