

Business Strategy & Transformation Dynamic Briefing

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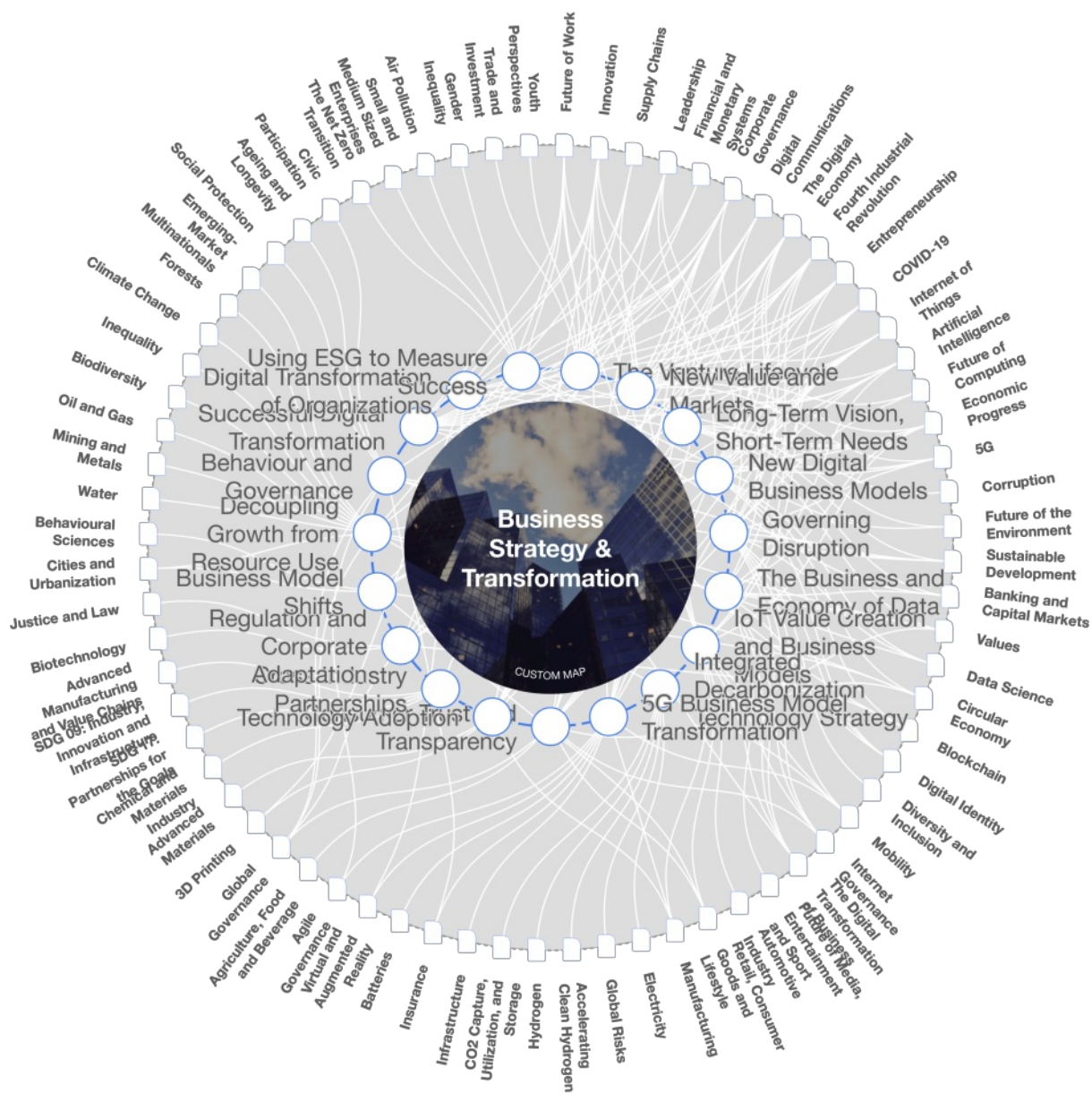


Business Strategy & Transformation

Last review on Wed 23 February 2022

About

This dynamic briefing draws on the collective intelligence of the Forum network to explore the key trends, interconnections and interdependencies between industry, regional and global issues. In the briefing, you will find a visual representation of this topic (Transformation Map – interactive version available online via intelligence.weforum.org), an overview and the key trends affecting it, along with summaries and links to the latest research and analysis on each of the trends. Briefings for countries also include the relevant data from the Forum's benchmarking indices. The content is continuously updated with the latest thinking of leaders and experts from across the Forum network, and with insights from Forum meetings, projects communities and activities.



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Executive summary

Business Transformation , Managing Transformation in Digital, Human, Sustainability Uncertainty
Intelligence Map - insights and perspectives curated by Digoshen via World Economic Forum Strategic insights and contextual intelligence.

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The Venture Lifecycle

Whether it remains independent or is acquired, a venture will follow its own development path

The typical lifecycle of an entrepreneurial venture begins with an initial idea stage and ends with either having to close down a failed company, getting acquired, or growing into a mature entity. Each stage of the lifecycle comes with associated risks and challenges - and while every company may have its own unique path, there are many common patterns and waypoints. Initial ideation is fundamental, and is ideally followed by founder commitment and incorporation, product development and testing, pilot projects and customer feedback, business model development, market launch and initial sales, market expansion, product line expansion, and organizational growth. The details of any development process are both idiosyncratic and unpredictable, and final outcomes are inevitably influenced by the skills and ambitions of the venture's founding team. Lifecycle patterns also differ by industry and geographic location. At each stage, there are considerable potential risks. The same entrepreneurs who define their business plans, garner resources, and develop operations must also de-risk their venture by achieving milestones and gradually establishing the economic viability of a fledgling business.

There is a learning process for any entrepreneur, which involves testing different hypotheses and responding to feedback by either pushing ahead with the original plan, pivoting in a new direction, or abandoning ship. Company leadership will learn over time whether it should remain independent, or would benefit from being acquired. Even after an acquisition, a venture will continue along its own development path - though that becomes part of the acquiring company's lifecycle. For ventures that remain independent, staged financing usually keeps step with development. The most successful ventures reach an "exit" event, where investors reap a return either through an acquisition or an initial public offering of stock. The startup lifecycle is sometimes linked to broader industry cycles, particularly when there is a parallel development of new ventures and new markets. The latter requires establishing some necessary infrastructure and a sufficient understanding of the benefits and risks of a new product category. The innovation introduced by entrepreneurial companies must often compete with - and sometimes displace - the mainstays of industry incumbents. That process is commonly referred to as "creative destruction."

Related insight areas: [Trade and Investment](#), [Youth Perspectives](#), [Future of Work](#), [Innovation](#), [Supply Chains](#), [Leadership](#), [Financial and Monetary Systems](#), [Corporate Governance](#)



World Economic Forum

6 ways volunteering can improve your skill set and make you a better entrepreneur

27 February 2023

Volunteerism is a powerful tool in a time of technological change as it can help address the skills gap and support a workforce in adapting. Volunteerism presents a unique opportunity for people to leverage their experiences to diversify their workplace skills for the future. Attributes such as design thinking and soft skills are also invaluable for entrepreneurship, which is an important driver of economic growth. Entrepreneurship has long been acknowledged as an important driver of economic growth, job creation and innovation. In today's rapidly changing world, the importance of entrepreneurship has become even more pronounced.



World Economic Forum

7 ways governments can foster entrepreneurship

14 February 2023

Starting and running a business can be challenging, but governments can help foster entrepreneurship and create an environment to support it. Better access to funding, the provision of education and training, and reducing bureaucratic red tape can help entrepreneurs overcome crucial challenges. Governments can foster a culture of entrepreneurship, stimulate networking between entrepreneurs and add legal support to create a better environment for entrepreneurship. Entrepreneurship plays a vital role in driving economic growth and job creation. It is the engine that propels innovation, generates new businesses and brings fresh products and services to the market.



INSEAD Knowledge

The Impact of Investor Gender on Female Founders

07 February 2023

One of the challenges female founders face is raising funds. This is particularly true when it comes to venture capital (VC), which has a reputation of being a boys' club and a tough place for women to break into. Women make up only 13 percent of investing partners at VC firms in the United States and two thirds of VC firms have no female partners at the table. This means that female founders end up pitching to male investors –usually with little success. In 2020, less than three percent of VC funds went to female-led startups, while female entrepreneurs are 63 percent less likely than men to obtain venture capital financing.



Harvard Business School Working Knowledge

Time to Move On? Career Advice for Entrepreneurs Preparing for the Next Stage

10 January 2023

So many people shift from one job to the next, with little time to consider how the experience changed them and what they want out of future ventures. Julia Austin recommends that entrepreneurs look within and reflect on these questions before they jump into a new opportunity.

New Value and Markets

Technology is restructuring industries and redefining business value

The average tenure of a company in the S&P 500 Index of large, US-traded firms is expected to decline to just 12 years by 2027, from 24 years in 2016. Companies are increasingly being disrupted by more digitally-innovative peers, or by new entrants able to create business value in novel ways - and corporate leaders face an unprecedented combination of disruptive technologies, changing customer behaviour, and social and environmental issues. However, these leaders also have a significant opportunity to help create new value; the use of artificial intelligence will generate an estimated \$2.9 trillion in business value in the year 2021 (the equivalent of 6.2 billion hours of worker productivity), advanced 5G telecom networks are expected to generate more than \$600 billion in new business by 2026, and the market for distributed “edge” computing is expected to more than triple to \$9 billion between 2019 and 2024. By 2025, 75% of the world's population will be interacting with data every day, according to one estimate, and everyone online will have at least one data interaction every 18 seconds. New value is already emerging in previously only theoretical scenarios, like readily-available virtual meetings.

Customer expectations are changing as technology is embedded in everyday life (according to an Accenture study, more than half of consumers say technology plays a prominent role or is ingrained in almost all aspects of their daily lives). As a result, people increasingly expect technology to be personalized and on-demand. This has altered traditional roles and shifted the distribution of value. For example, the producers of digital entertainment, like Hollywood studios, can increasingly build a direct, online relationship with audiences, while traditional distributors of content like Amazon or Netflix increasingly look to create their own. People also increasingly want transparency on how companies source their products and ensure safe working conditions, and clarity on their stances regarding environmental and social issues. Accenture has found that a decline in stakeholder trust can severely impact an organization's competitiveness, and significantly undercut revenue. While this dynamic may vary according to customer needs, income levels, and geography, organizations everywhere need to come up with new ways to identify and create a genuine appeal for people, while helping secure a future for more than just their own profit.

Related insight areas: [Digital Communications](#), [The Digital Economy](#), [Corporate Governance](#), [Fourth Industrial Revolution](#), [Entrepreneurship](#), [COVID-19](#), [Innovation](#), [Future of Work](#), [Internet of Things](#), [Artificial Intelligence](#), [Future of Computing](#), [Economic Progress](#), [5G](#)



International Telecommunication Union

Tailored support key to digital inclusion, Barcelona pilot finds

06 February 2023

Providing people with devices and connectivity is important to close digital access gaps but training support makes the real difference, according to the conclusions of a pilot carried out by Barcelona City Council. The Connectem pilot involved almost 350 people in the Trinitat Nova neighbourhood of the Nou Barris district, which is [...] The post Tailored support key to digital inclusion, Barcelona pilot finds appeared first on ITU Hub .



INSEAD Knowledge

Twitter's Remarkable Mission in a Divided World

23 December 2022

While the world continues to hotly debate climate change, there's another change that should be on our radar: a "societal climate change" fuelled by people and technologies, mainly the internet and artificial intelligence (AI) that can spin truth from fiction and erode trust in each other as well as our political institutions. What if a global "digital town square", as Elon Musk calls Twitter, divides us further and erodes civilisation towards its demise? To liberally paraphrase the Chief Twit: It no longer matters whether our existence is threatened by climate change if civilisation has already collapsed. A collapse may happen, not because of AI killer machines or another bad tech as many fear, but because people are losing sight of reality.

Long-Term Vision, Short-Term Needs

Balancing short- and long-term pressures is one of the most difficult business leadership challenges

There is a commonly-held view that investors pursue short-term profit at the expense of long-term value. According to the results of a survey published by the Rock Center for Corporate Governance at Stanford University in 2019, 70% of CEOs and CFOs at S&P 1500 Index companies were facing pressure to maximize short-term returns at the expense of long-term growth. When firms focus on the short term, it often translates into lower investment in the long-term sustainability of a company at the expense of other stakeholders. Management has to be able to both articulate a long-term strategy and deliver sufficient short-term returns in order to ensure support and continued investment. Consistent metrics for measuring the success of long-term strategies are important. Corporate governance can play an important role in this regard by implementing incentives and pay aligned with these long-term metrics. Another means to tilt the balance towards a longer-term approach has been the increased adoption of Environment, Social and Governance (ESG) criteria in corporate strategies and investment decisions - which can draw the attention of shareholders zeroing in on firms with a longer-term, socially-conscious approach.

According to a white paper published by the World Economic Forum in 2019, quarterly reporting requirements are not the sole reason for short-termism - though corporate leaders describe them as a “necessary evil.” According to the white paper, these leaders must become better storytellers about their companies, by framing each quarter as a step in a longer-term story. Management and their boards must engage in constant conversation about how the company will grow, and the risks it will take to get there. Leaders of global companies have been signing a World Economic Forum compact for responsive and responsible leadership, committing them to ensure that their boards oversee the definition and implementation of corporate strategies that pursue sustainable long-term value creation, to encourage the periodic review of corporate governance, long-term objectives and strategies at the board level, to promote meaningful engagement between the board, investors, and other stakeholders that builds mutual trust and promotes the highest possible standards of corporate conduct, and to implement policies, practices, and long-term strategies aimed at cultivating sustainable growth for the benefit of all stakeholders.

Related insight areas: [Corruption](#), [Leadership](#), [Future of the Environment](#), [Sustainable Development](#), [Banking and Capital Markets](#), [Values](#)



[Harvard Kennedy School – Journalist's Resource](#)

How neighborhoods fare when institutional investors buy single-family homes: A research roundup

21 February 2023

Since the Great Recession, the single-family home rental market has flourished in the Southeast and Southwest. Here's what the research says about how institutional investors affect neighborhood dynamics. The post [How neighborhoods fare when institutional investors buy single-family homes: A research roundup](#) appeared first on [The Journalist's Resource](#).



[Harvard Business School Working Knowledge](#)

Does It Pay to Be a Whistleblower?

14 February 2023

In 2013, soon after the US Securities and Exchange Commission (SEC) had started a massive whistleblowing program with the potential for large monetary rewards, two employees of a US bank's asset management business debated whether to blow the whistle on their employer after completing an internal review that revealed undisclosed conflicts of interest. The bank's asset management business disproportionately invested clients' money in its own mutual funds over funds managed by other banks, letting it collect additional fees—and the bank had not disclosed this conflict of interest to clients. Both employees agreed that failing to disclose the conflict was a problem, but beyond that, they saw the situation very differently.

New Digital Business Models

Technology-enabled models can help companies provide value and build resilience

Most executives see innovation as critical for their business. And, according to the McKinsey Global Innovation Survey, 80% think their current business models are at risk of disruption. COVID-19 has only accelerated the shift to online and touchless experiences, and spurred innovative uses of technology and data that will increasingly underpin business models. Digital subscription models, like Dollar Shave Club or Netflix, have already risen to prominence, as have on demand models like Uber or TaskRabbit - while technology has made it increasingly easy to adopt platform models upon which users and even other companies can build their own presence (examples include Facebook or YouTube). The World Economic Forum estimates that 70% of the value created over the coming decade will be based on digitally-enabled platform business models, due to the rapid digitalization of economies around the world. Collaboration can also unlock value - research shows that digital “ecosystems” are expected to account for more than 30% of global corporate revenue by 2025. One example is Project Connected Home, a joint effort led by Amazon, Apple, Google and the Zigbee Alliance to set standards for smart home technology.

“As-a-service” business models are an increasingly prevalent and effective way for companies to turn what might otherwise be one-off purchases into more predictable, longer-term, and typically larger revenue streams. Microsoft, for example, now offers its Office 365 product through software-as-a-service subscriptions, as an alternative to purchasing an entirely new version of Office version every few years. Meanwhile Amazon offers its AWS product in a way that provides infrastructure as a service (IaaS) on a subscription basis. Thanks to increased digital connectivity and internet use, there has been a surge of data that can potentially provide value not just to companies but to society in general. Many companies are exploring innovative ways to unlock the value of this data in a responsible way by embedding trust, privacy, and security into their models. A company called Points Technology has for example used a confidential computing framework based on TEE (trusted execution environment) and other encryption technology to make data usable but not visible - in order to ensure privacy, security, and compliance when it comes to banking, government-led data-sharing initiatives, and marketing campaigns.

Related insight areas: [Entrepreneurship](#), [Fourth Industrial Revolution](#), [Digital Communications](#), [Economic Progress](#), [Data Science](#), [COVID-19](#), [Circular Economy](#), [Blockchain](#), [Digital Identity](#), [5G](#), [The Digital Economy](#), [Innovation](#), [Internet of Things](#)



Cities Today

Tailored support key to digital inclusion, Barcelona pilot finds

31 January 2023

Providing people with devices and connectivity is important to close digital access gaps but it is IT support and training that makes the real difference, according to the conclusions of a pilot carried out by Barcelona City Council.



Harvard Business School Working Knowledge

The 10 Most Popular Articles of 2022

19 December 2022

The most-read stories about Harvard Business School faculty research and ideas point to a year filled with pandemic soul-searching, but also conviction to move forward with business priorities, such as digital transformation.

Governing Disruption

Organizations must be able to evolve and adapt, as the COVID-19 crisis has illustrated

A board of directors has the responsibility to drive the continuous reinvention of an organization - in a way that ensures it is fit for purpose relative to shifting customer demands, social expectations, and unexpected calamities. Technological innovation at the core of the Fourth Industrial Revolution is changing the way we live, work, and relate to one another - and forcing the decision-makers guiding organizations to rethink how they can create value and reinvent the ways they function. As the global economy weathers the impact of the COVID-19 pandemic, for example, many organizations that had previously focused on maximizing resilience through technologies like cloud computing may find themselves in better shape than others. Innovation impacts many of a board's core responsibilities, including long-term planning, fostering a corporate culture, executive compensation, setting strategy, and making investments and acquisitions. While established incumbents are at risk of lacking sensitivity to evolving technology needs and responsibilities, younger players need the financial resources and data enjoyed by their older counterparts - and each can gear their corporate governance efforts towards sharing resources in a way that creates value.

New collaborative models may require entirely new corporate governance approaches that are much less based on traditional vertical control and siloed mechanisms - while still maintaining accountability to shareholders. The United Nations has emphasized the critical potential for breakthrough innovation to help achieve the Sustainable Development Goals, which are designed to enable a more sustainable global economy by 2030. It is a matter of corporate governance to consider how this innovation can both enable sustainable economic growth and help fulfil a specific organization's purpose. In terms of investor stewardship, for example, shareholders must be engaged on the topic of innovation in order to better understand long-term prospects both for the business and for society as a whole. Some organizations have specific board committees dedicated to technology and innovation, while others bring on consultants or other external advisors. Boards at the most forward-looking companies consider the long-term prospects of a business alongside its internal capabilities - essentially looking into the future in order to assess whether a company might be impacted by a paradigm shift in technology and business models, or a global crisis, and whether there are related opportunities and risks.

Related insight areas: [Leadership](#), [The Digital Economy](#), [5G](#), [Data Science](#), [Fourth Industrial Revolution](#), [Diversity and Inclusion](#), [COVID-19](#), [Mobility](#), [Digital Identity](#), [Internet Governance](#), [Sustainable Development](#), [The Digital Transformation of Business](#)



Wharton School of the University of Pennsylvania
- Knowledge@Wharton

How Divestiture Can Create Corporate Value

17 January 2023

Divestiture is an important strategy for a company seeking healthy financial growth, one that is often overlooked. In her new book, Wharton's Emilie Feldman explains why sometimes the best way to add value is through subtraction. ... [Read More](#).

The Business and Economy of Data

Legitimate questions have been raised about advantages afforded to digital incumbents

The global economy is now largely built on a foundation of data. It is completely redefining the ways business is done, economies function, and societies interact. Data has a number of unique properties that distinguish it from the physical resources that have traditionally shaped economies in recent centuries, which have created new possibilities but also new threats and troubling consequences. While social media platforms like Facebook and TikTok have grown exponentially in recent years, enabling people to find each other and information quickly and often at no direct cost, the related rise of online advertising has made people the product - more specifically, their personal data. As a result of the ascendance of related business models and services, relatively novel ethical considerations have come into play (according to one estimate, digital ads accounted for 58% of all media ad spending by 2020). Legitimate questions have been raised about advantages afforded to digital incumbents, based on network effects and economies of scale, unequal access to user data, a general lack of transparency, conflicts of interest, and vertical integration.

The collective nature of data means most people are more impacted by other people's than their own. Much like climate change, the threats stemming from the collection and use of data are both globe-spanning and personal. On one end of the spectrum, companies have been accused of misusing data and exploiting the public's lack of understanding about the subject, while on the other organizations are trying to act more responsibly and finding ways to create shared value (many are doing a bit of both, intentionally and unintentionally). Regardless of motivation, the practices common in the data economy raise difficult questions, including whether businesses are mere stewards or owners of data, what their proper role is in terms of enforcing data rights, and whether data should be treated as a utility, an asset, or something else entirely. Finding the right answers demands that we - as consumers, citizens, corporations, and civil society - actively engage with the troubling issues at hand to ensure that data-based economies benefit everyone, while protecting them from the unintended and intended harm omnipresent in the digital realm.

Related insight areas: [Economic Progress](#), [The Digital Economy](#), [Corporate Governance](#), [Values](#), [Artificial Intelligence](#), [The Digital Transformation of Business](#), [Future of Media](#), [Entertainment and Sport](#), [Banking and Capital Markets](#), [Internet Governance](#), [Digital Identity](#)



[Harvard Kennedy School – Journalist's Resource](#)

Far-right, far-left media offer easier-to-read political news coverage than mainstream outlets, study suggests

04 January 2023

The study provides insights into "what journalists at reputable organizations might want to consider when they're writing news about heavily partisan politics," says researcher Jessica Sparks. The post Far-right, far-left media offer easier-to-read political news coverage than mainstream outlets, study suggests appeared first on The Journalist's Resource .

IoT Value Creation and Business Models

The Internet of Things can help a number of industries thrive

The Internet of Things can improve efficiency and productivity as it connects everyday machines via the web - but it cannot create value out of nothing. It requires significant innovation, greater investment, and broader participation in every industry where it is poised to have an impact. The IoT draws from multiple disciplines in order to build something greater than would be possible through siloed innovation; as a result of its deployment, technology providers can see increased hardware and service sales, marketing firms can grow through improved analytics, and consumers can directly benefit through improved health and wellness monitoring, or by reducing monitored fuel consumption. While there is a continual need to innovate via the IoT, and to capitalize on its power to disrupt, its greatest potential is to create sustainable, shared value. For example, smart thermostat providers can turn a profit through an initial sale and subsequent offering of data analytics, while the homeowner buying the device can reap monthly savings from smart energy management and improved consumption data. Meanwhile so-called conversational commerce conducted with businesses by that homeowner via devices on his or her walls and shelves, can drive retail sales and create ongoing customer relationships.

Vehicles that are connected via the Internet of Things can collect data about themselves, help dealerships proactively schedule required maintenance, and improve efficiency while streamlining auto manufacturers' spare parts supply chains. Governments can meanwhile partner with technology companies to form public-private partnerships to draw capital investment needed to build infrastructure that utilizes the IoT to improve public services. An important part of drawing this investment is an ability to change conventional business models. For example, what was once a one-time sale can become a service models; for proof of this, look no further than to the IoT-fueled transition from selling individual vehicles, to car sharing, to shared mobility services, and eventually towards autonomous mobility services. Subscription-based services can also pair seemingly dissimilar technologies together to create more value both for the companies selling them and for the people buying them - for example, by coupling an internet-enabled smoke detector with a home security webcam. Data analytics is another disruptive business model ingredient stemming from the IoT, where so-called "information exhaust" (the data footprints we leave online by using sites and services) can be turned into insights to develop better products or target ad campaigns. To be sure, though, only a balanced and transparent approach to making use of this data is appropriate.

Related insight areas: [Fourth Industrial Revolution](#), [The Digital Transformation of Business](#), [Innovation](#), [Entrepreneurship](#), [Future of Work](#), [Automotive Industry](#), [Mobility](#), [Retail](#), [Consumer Goods and Lifestyle](#), [Internet Governance](#), [Supply Chains](#), [Economic Progress](#), [Manufacturing](#)



Boston Consulting Group

Digitization Pays Dividends for Industrial Machinery

03 February 2023

Compared with many other sectors, industrial machinery's digital transformation has hardly been swift. To be sure, suppliers of everything from manufacturing equipment to tractors have begun the journey. They're embedding digital technologies and connectivity into their hardware and mining data to predict maintenance needs, deliver value-added services to customers, and equip factories of the future. Thus far, most machinery and industrial-automation oems are achieving only incremental advances from their digital endeavors—not blockbuster leaps. They're behind the curve when it comes to full digital transformations that span their operating models, processes, technology platforms, ways of working, and customer engagement.



World Economic Forum

A digital revolution for Japan... and the world

12 January 2023

Achieving a digital revolution requires more than just upgrading technology; increasingly, we're finding it requires a legal revolution, too. Omnibus legislation is guided by 5 'digital principles': every law and regulation has to tick 5 boxes before being adopted. Centralized coordination of the "digital legal revolution" is crucial, with a Digital Legislation Bureau to ensure new laws conform to digital goals. Two years ago, Japan declared a digital revolution. Despite a well-earned reputation for high-tech hardware – think robots, automobiles and high-speed trains – our country had fallen behind in the digital era.



Boston Consulting Group

Put Talent at the Top of the Sustainability Agenda

11 January 2023

Reach the Next Level by Learning How to Learn Companies that build advanced continuous-learning organizations can attract and keep the best talent—and create lasting competitive advantage. Companies that build advanced continuous-learning organizations can attract and keep the best talent—and create lasting competitive advantage. Every company's sustainability journey starts with a small group of talented leaders and individuals working on sustainability as a key strategic priority. Sustainability journeys—and the transition of the global economy—will succeed only when leaders and individuals throughout an organization have embraced sustainability as an inherent component of their everyday work.

Integrated Decarbonization Technology Strategy

No single technical approach will successfully decarbonize all hard-to-abate sectors

The Transitioning Industrial Clusters towards Net Zero initiative supports a multi-technology approach in assessing and implementing decarbonization technologies in cross-sectoral industrial clusters. No single technology or decarbonization level will abate all industrial emissions; it is necessary that a spectrum of technology levers - applied within a holistic value approach – work in tandem to optimize emission reduction.

Factors such as technology readiness, environmental performance, community equity, and cost effectiveness should be incorporated into a multi-phase decarbonization technology deployment roadmap. The Transitioning Industrial Clusters initiative has identified four key decarbonization levers – supported by digital technology – with the highest impact potential in abating industrial emissions.

The first lever - Systemic Efficiency and Circularity – captures opportunities to increase circularity within an industrial cluster through cross-entity waste utilization as well as to integrate processes within an industrial cluster to share energy and material streams. For more on Systemic Efficiency and Circularity, read about Signatory Industrial Cluster Brightlands Circular Space.

The second lever - Direct Electrification and Renewable Heat – includes programs to electrify low-to-medium temperature and pressure processes, to generate low-cost renewable electricity and heat onsite, and to pursue shared energy infrastructure. For more on Direct Electrification and Renewable Heat, read about Signatory Industrial Cluster Net-Zero Basque Industrial Super Cluster.

The third lever – Hydrogen – represents initiatives which leverage electricity and heat from nearby zero carbon sources to produce low-to-zero carbon hydrogen from the most economical source. This hydrogen can then be used as an alternative fuel for hard-to-electrify industrial processes, building heating, and transport. For more on Hydrogen, read about Signatory Industrial Cluster Zero Carbon Humber.

The final lever - Carbon Capture, Utilization, and Sequestration (CCUS) – encompasses all opportunities to capture carbon from energy and hydrogen production, to use captured carbon for industrial and manufacturing processes, and to store carbon underground where feasible. For more on CCUS, read about Signatory Industrial Cluster HyNet North West.

Related insight areas: [Electricity](#), [Global Risks](#), [Circular Economy](#), [Accelerating Clean Hydrogen](#), [Hydrogen](#), [CO2 Capture](#), [Utilization](#), and [Storage](#)



Fraunhofer-Gesellschaft

Economical and resource-saving green hydrogen

01 March 2023

Large quantities of hydrogen will be needed to ensure a successful energy transition. As part of the HighHy project, an international team of researchers from Germany and New Zealand is working on improving the efficiency of the emerging AEM electrolysis technology to produce green hydrogen. To make this possible, scientists from the Fraunhofer Institute for Manufacturing Technology and Advanced Materials IFAM in Dresden have turned to the readily available and resource-saving metals manganese and nickel in a bid to introduce this promising electrolysis process to large-scale industry. The new technology offers a number of other advantages in addition to reduced costs when compared to the existing processes.



World Economic Forum

The Voluntary Carbon Market: Climate Finance at an Inflection Point

17 January 2023

This briefing paper by the World Economic Forum and Bain & Company provides insight into the critical challenges delaying the voluntary carbon market from achieving scale. It also recommends actions that corporate leaders can adopt to address these challenges as part of a decarbonization agenda. The paper serves as the basis for further dialogue and action in 2023.



The Conversation

Rishi Sunak's reorganisation: history shows creating government departments in response to short-term problems is rarely a good idea

08 February 2023

UK prime minister Rishi Sunak has announced a major reorganisation of Whitehall, creating a new department dedicated to energy and another for science and innovation as well bringing various business and trade portfolios under one roof. Reorganisations of this kind tell voters a great deal about the government of the day and its priorities. Sunak's announcements are revealing not only as signals of his aims ahead of the next election but also of the pressures he faces. The life and times of a department The evolution of the departments dealing with housing over the years is a case study in how priorities are reflected in departmental reorganisation, and can help us understand what is going on now.



Carbon Brief

Vacancy: Section Editor (Policy)

20 January 2023

Carbon Brief is seeking an experienced candidate for a brand new editorial role. You'll help us explain and analyse the latest developments in climate and energy policy around the world. Are you a journalist or editor with deep expertise in climate and energy policy? Do you want to contribute to accurate and timely coverage of climate change and energy? Do you have experience managing teams and editorial workflow?.

5G Business Model Transformation

The technology is a critical enabler of driverless cars, efficient factories and smarter power use

5G is a potential game changer for a number of industries, though they will have to adapt their business models in order to harness its true potential. The technology will initially exist as an overlay on existing 4G networks, and will likely only start achieving meaningful scale sometime in the early 2020s. Some important services made possible by 5G will include “digital twin” technology that creates a digital mirror of a physical object in order to predict its performance, augmented and virtual reality (thanks to better download and upload speeds), and predictive maintenance in factories. 5G is also expected to support high-density autonomous vehicle platooning (to improve aerodynamic performance and traffic flow), remote vehicle control, remote driver health monitoring, in-car infotainment, and smart traffic control. The energy sector could meanwhile use 5G for the real-time monitoring of utility networks with drones, sensing hazards and maintenance needs, and monitoring residential smart meters. Each individual use case has the potential to impact additional industries; autonomous vehicles will not only have an impact in the automotive sector, but may also impact the mobility space more broadly. The insurance industry, for example, may benefit as vehicle accident rates decrease.

Ride-hailing platforms like Uber, Lyft, and Didi are expected transition within the next decade from human-driven, internal combustion engine cars to autonomous electric vehicles - potentially spawning millions of driverless cars on the roads, and potentially thousands of pilot-less vertical take-off and landing aircraft. An aggressive transition to self-driving vehicles is not a given, however. For such a transition to occur, political and regulatory support will be required. This will in turn largely determine the investment available for necessary infrastructure like vehicle charging stations and 5G connectivity. Intel has predicted the rise of a “passenger economy” worth \$800 billion by 2035, as people in cars have more time on their hands to shop and secure everything from entertainment to doctors' appointments. As related technologies like artificial intelligence and virtual reality come to the fore, software companies and other industry players are expected to play a major role in designing new 5G business models. Those models will in turn rely on having a set of standardized regulations for 5G data monetization, related to cross-border data and services-sharing.

Related insight areas: [Manufacturing](#), [Innovation](#), [Infrastructure](#), [Insurance](#), [Batteries](#), [Corporate Governance](#), [Virtual and Augmented Reality](#), [Entrepreneurship](#), [Internet of Things](#), [The Digital Economy](#), [Agile Governance](#), [Mobility](#), [Digital Communications](#)

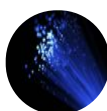


LSE Business Review

Avoiding regret: how mobile phone companies (and others) can learn lessons from overbidding in spectrum auctions

13 February 2023

Participating in auctions to acquire vital spectrum licences has become an increasingly important part of everyday business for mobile telecommunications companies. In his new open-access book, Geoffrey Myers demonstrates the importance of learning lessons from past mistakes. In the UK's 3G auction in 2000, after 150 rounds of bidding over 36 days, five mobile telecoms companies together spent £22.5 billion – adjusted for inflation, about £45 billion today – to win licences providing rights to use specific radio spectrum frequencies. As I explain in my new book, observers at the time were amazed as prices continued to go up and up to become the 'biggest auction ever'. News reports referred to 'staggering sums of money', which were an order of magnitude larger than the official pre-auction revenue forecast of only £1-3 billion.



Cities Today

New homes in England must be built with gigabit connectivity

09 January 2023

The UK government has brought new laws into force to ensure that new homes are built with gigabit broadband connections and to enable telecoms firms to get faster internet to people living in blocks of flats.



Asian Development Bank

Last Mile Connectivity: Addressing the Affordability Frontier

16 December 2022

LAST MILE CONNECTIVITY ADDRESSING THE AFFORDABILITY FRONTIER Jonathan Brewer, Yoonee Jeong, and Arndt Husar 83 December 2022 ADB SUSTAINABLE DEVELOPMENT WORKING PAPER SERIES ASIAN DEVELOPMENT BANK ADB Sustainable Development Working Paper Series Last Mile Connectivity: Addressing the Affordability Frontier Jonathan Brewer, Yoonee Jeong, and Arndt Husar 83 | December 2022 Jonathan Brewer consults for the telecommunications industry on the design, build, and operation of broadband, public safety, and Internet of Things networks. His customers are operators, governments, nongovernment organizations, and users throughout the Asia and Pacific region.

Consumer Trust and Transparency

In countries where consumer spending is needed to fuel the global economy, trust in businesses is lagging

Large emerging markets like India and China, where an expanding middle class is expected to buoy the global economy with growing consumer spending in the coming years, are home to notable lags in public trust among the “mass population” in businesses and government, according to the 2019 Edelman Trust Barometer - a survey of 33,000 respondents conducted in more than two dozen markets. According to the barometer, more than two-thirds of respondents agreed that they might be encouraged to buy products from a company with a good reputation - but unless they genuinely came to trust the company behind the product, they would stop buying it. As global consumers become more connected and empowered thanks to digital innovation, they will only place more scrutiny on businesses. For corporate leaders, this means having to strike the right balance between short-term gains and long-term value creation. According to the Edelman Trust Barometer, one means of winning external trust is by investing internally in employees; 78% of barometer respondents agreed with the idea that the way a company treats its employees is one of the best indicators of its level of trustworthiness.

People have fundamental concerns about the safety and quality of the goods they consume. In China, for example, worries about food and medicine safety have become significant (particularly among wealthier consumers) in recent years, according to a report published by the World Economic Forum in 2018. In addition, these affluent, urban-dwelling consumers in China have particular concerns related to the historical role of fake products in the country, according to the report. Another growing area of consumer concern is related to transparency in supply chains - whether it's tied to sustainable sourcing or ethical labour standards. In the apparel sector, efforts have been made by the Sustainable Apparel Coalition and Better Work, a collaboration between the UN's International Labour Organization and the International Finance Corporation, to improve working conditions and sustainability by, for example, introducing standards to measure social and environmental impact. Data privacy is also a serious consumer concern. A relatively small group of companies including Facebook and Amazon (or, in China, Alibaba and JD.com) control large amounts of consumer data - which will present trust issues, as new means of refining and selling that data emerge.

Related insight areas: [Internet of Things](#), [Values](#), [Future of Computing](#), [Digital Communications](#), [Artificial Intelligence](#), [Agriculture](#), [Food and Beverage](#), [Retail](#), [Consumer Goods and Lifestyle](#), [Global Governance](#), [Corporate Governance](#), [Leadership](#), [Internet Governance](#)



VoxEU

Welfare gains from increased product variety at a large digital platform

04 March 2023

E-commerce sales have grown rapidly in recent decades, making new products more readily available worldwide. This column examines data from the largest digital platform in China and finds significant increases in product variety. In particular, the number of available book titles almost doubled between 2015 and 2019, while prices fell modestly. Accounting for the low elasticity of niche products, which includes most new books, consumers saw larger gains than predicted by conventional analyses. The gain from increased product variety was 40 times the gain from lower prices, with rural consumers enjoying the greatest benefits.



Cities Today

Barcelona to impose public space tax on delivery firms

15 December 2022

Photo: christian-wiediger-unsplash Barcelona to impose public space tax on delivery firms 15 December 2022 by Christopher Carey Barcelona City Council is set to introduce what it calls a "pioneering tax" to regulate the use of public space by large e-commerce delivery companies.



MIT Sloan Management Review

How E-Commerce Companies Can Reduce Returns

01 March 2023

How E-Commerce Companies Can Reduce Returns
Research shows that product returns decrease when online shoppers receive orders in a single, consolidated delivery. Retail executives love the lack of friction in online shopping that makes it fast and easy for customers to complete a purchase, and promising free returns is part of that. The costs of those returns add up: of the approximately \$1.29 trillion in u.s. online retail sales in 2022, it's estimated that \$212 billion worth of goods — 16.4% of sales — were sent back. While that represents a reprieve for retailers from 2021, when the rate shot up to 20%, returns are up still significantly, from just 10.6% in 2020.



Duke Fuqua School of Business

The consequences of being called a hero

15 February 2023

You might think that people viewed as positive stereotypes would benefit from these benevolent generalizations. Professor aaron kay of duke university's fuqua school of business has a history of research connecting positive stereotypes to inequality. Now, a new paper that he co-authored with matthew stanley, a duke post-doctoral research associate, adds a new focus to this line of inquiry -- how the heroization of veterans can often lead employers to funnel them into lower-paying jobs. Past research had explored negative stereotypes and their adverse implications for the transition of veterans to civilian life (including a 2019 paper co-authored by Kay.) Never before had the hero label been studied as a positive stereotype.

Technology Adoption

None

- Introducing digital technologies into manufacturing processes has the potential to unlock new pathways for value creation, sustainability, and resilience.
- One of the major challenges to unlock this potential is the scaling of technology throughout manufacturing operations – up to 70% of projects get stuck in “pilot purgatory”
- Frameworks to help manufacturers of all sizes and industries to measure readiness and to provide guidance for scaling up technology transformation are crucial
- At the same time, new production paradigms such as additive manufacturing or biomanufacturing are continuing to grow and are starting to impact value chains

Technology Adoption – Related Initiatives

1. The Global Lighthouse Network

Objective

- Accelerate inclusive technology adoption and dissemination in manufacturing by building a cross-industry network that includes some of the most advanced factories and connected value chains worldwide
- Provide the current community of 103 Lighthouses with a unique global learning journey and opportunity for collaborative projects
- Share first-hand insights, strategies, and challenges from the Lighthouses’ digital transformations

Deliverables

- 2 White papers in 2022, latest is “The Global Lighthouse Network Playbook for Responsible Industry Transformation” (Mar 2022)
- 2 rounds of GLN assessments in 2022
- 8 Go & See Workshops and 1 CxO Workshop for 2022

- 2 Lighthouses Live 2022 (livestreamed event) to engage community and public audience (e.g. Lighthouses Live 2022)

How to engage

- Submit one of your production sites or value chain to be assessed and designated as a Lighthouse
- Join the project Steering Committee and collaborate in the Global Lighthouse Network Workshop Series to learn from existing Lighthouses and share your own learnings
- Propose a new collaboration to amplify ongoing efforts from your organization in this field

2. Global Smart Industry Readiness Index Initiative

Objective

- Accelerate the deployment and adoption of SIRI as the internationally recognized standard for Industry 4.0 benchmarking and transformation.
- Catalyze the adoption of new methodologies and technologies across the global manufacturing community
- Provide quantitative indicators for international benchmarking

Deliverables

- >200 Certified SIRI Assessors by end of 2022
- >1,000 companies to undertake the Official SIRI Assessment (OSA) by the end of 2022.
- Sharing of the insights, findings, and benchmarks from the 2021 Manufacturing Transformation Insights white paper published during the Annual Meeting 2022

No Knowledge

We don't have any recent, relevant knowledge available on Technology Adoption, but you can check back later using Strategic Intelligence if you would like to monitor Technology Adoption in real-time. You can find more information on how by looking at the "Continue the experience online" page later on in this briefing.

Cross Industry Partnerships

Developing technology, human and market solutions to accelerate the energy transition to the pace needed requires cross-sectoral, cross-geographic collaboration

The Transitioning Industrial Clusters towards Net Zero initiative supports rapid industrial decarbonization across the hardest-to-abate sectors through promoting and enabling collaboration across industries and geographies. Multi-stakeholder partnerships spanning sectors are necessary to seed and scale new complex emissions-reduction solutions, especially those where new markets and regional infrastructure are required, such as in the case of clean hydrogen or carbon.

Core to the Accelerating Industrial Clusters Playbook is the value of beginning all decarbonization initiatives with collaborative business model development to map our funding, technology responsibility, and proactive offtake agreements, where possible. Derisking investment through this kind of collaboration is demonstrably one of the most effective means by which to accelerate clean technologies and processes.

In each Industrial Cluster, active representatives and participants in the initiative are intentionally engaged across the value chain – accelerating use case development, secured commitments, removal of regulatory hurdles and de-risked capital deployment. These stakeholders are broadly categorized as: Off-taker (energy off-taker and end-user; virtual off-taker); Developer / Asset Owner (project developer and asset owner); Parts Supplier (equipment & parts manufacturer); Labor & Community Stakeholders (workforce, local government, NGOs); Financier (debt / equity investor from public or private sector); and Local Development Agency (public, private, and third sector actors).

Partnerships within and across the stakeholder groups are commonly manifested across six themes: shared infrastructure development; industrial cluster infrastructure planning; shared commercial projects; cross-industry funding; knowledge sharing; and reskilling the workforce. Each Industrial Cluster will collaborate on a subset of these themes based on the unique stakeholder makeup and System Value prioritization.

Related insight areas: [Chemical and Materials Industry](#), [Supply Chains](#), [SDG 17: Partnerships for the Goals](#), [SDG 09: Industry, Innovation and Infrastructure](#), [Advanced Manufacturing and Value Chains](#)

No Knowledge

We don't have any recent, relevant knowledge available on Cross Industry Partnerships, but you can check back later using Strategic Intelligence if you would like to monitor Cross Industry Partnerships in real-time. You can find more information on how by looking at the "Continue the experience online" page later on in this briefing.

Regulation and Corporate Adaptation

Shifts in regulation can have profound corporate governance implications

A wide variety of legal and regulatory environments have been constructed around the world; the OECD Corporate Governance Factbook contains information about nearly 50 different national institutional, legal, and regulatory frameworks. Some institutional and legal settings have proven to be more conducive to effective corporate governance than others. Enhancing governance reform in the many places where it is lacking is a potential source of value creation both for individual companies and broader economies. One example of legal governance reform is 2002's Sarbanes-Oxley Act in the US, which expanded disclosure and auditing requirements and the responsibilities of the boards at all publicly-traded companies. Sarbanes-Oxley triggered similar reforms around the world: Australia in 2004, India in 2005, and Japan in 2006. Since then, other important reforms have been put in place - such as the Dodd-Frank Act enacted in 2010, in response to the banking industry excesses that resulted in the financial crisis, and the Jumpstart Our Business Startups, or JOBS Act, which was designed to facilitate the funding of small businesses in the US by exempting them from certain regulatory requirements.

The right mix of legislation, regulation, and self-regulation depend on a country's specific circumstances, history, and culture. The corporate governance structures developed in response typically cover the ownership of publicly-listed companies and stock exchanges, shareholder rights and responsibilities, takeover rules, board structures and composition, and information disclosure. Technological progress has created situations where regulatory needs are not necessarily black and white. Services like Uber and Lyft, for example, have made it unclear if drivers should be treated like regular employees or contractors under the law. Legislation passed in California in 2019 requires these ride-sharing platforms to treat drivers in that state as employees when it comes to wage and benefit protections, creating uncertainty about the financial prospects of the broader "gig economy" amid the possibility that other states and countries might follow suit. This shift could impact many boards and the ways they approach compliance, risk management and corporate strategy. Other areas of technological development with significant corporate governance implications include artificial intelligence, blockchain, the Internet of Things, and biotechnology - all of which are likely to trigger new regulations and corporate governance needs.

Related insight areas: [Financial and Monetary Systems](#), [Future of Work](#), [Biotechnology](#), [Fourth Industrial Revolution](#), [Justice and Law](#), [Internet of Things](#), [Global Governance](#), [Artificial Intelligence](#), [Blockchain](#)

No Knowledge

We don't have any recent, relevant knowledge available on Regulation and Corporate Adaptation, but you can check back later using Strategic Intelligence if you would like to monitor Regulation and Corporate Adaptation in real-time. You can find more information on how by looking at the "Continue the experience online" page later on in this briefing.

Business Model Shifts

Shared and integrated mobility models are challenging the traditional car industry

The increasing pace of life, technology innovation, and evolving customer expectations are creating demand for new business models that provide access to cars, rather than ownership - and this is already having an impact on vehicle sales volumes. Millennials, for example, have proven to be more pragmatic about car buying than previous generations, and have a relatively lower rate of car ownership. It is possible that we may have even reached peak auto sales, at least in developed markets. Sharing economy-related mobility services include e-hailing (US-based Uber, or China-based Didi), carpooling (France-based BlaBlaCar), and parking and fleet management (US-based Luxe or Netherlands-based LeasePlan). The technologies underpinning these services are empowering consumers, and challenging the traditional sales and servicing model relied upon by car dealerships.

As urban populations expand - 66% of the world's population will be living in cities by 2050, compared with 54% in 2014, according to a United Nations estimate - demand for urban transport and automobile access (if not automobile purchases) will only increase. That will present a new set of social and environmental challenges, which can be addressed with an intelligent mix of new operating models that are based on sharing and increased asset utilization. Relatively young companies are also applying technology innovation in order to revamp traditional auto industry models. The website TrueCar, for example, is bringing transparency to the new car-buying process by showing people how much others have paid for a car they are interested in purchasing. Meanwhile a new generation of automotive insurers are offering peer-to-peer products that leverage social media in order to enable group purchasing of policies, thereby reducing administrative costs and dividing up risk.

Related insight areas: [COVID-19](#), [Cities and Urbanization](#), [Circular Economy](#), [Entrepreneurship](#), [Corporate Governance](#), [Retail](#), [Consumer Goods and Lifestyle](#), [Behavioural Sciences](#)

No Knowledge

We don't have any recent, relevant knowledge available on Business Model Shifts, but you can check back later using Strategic Intelligence if you would like to monitor Business Model Shifts in real-time. You can find more information on how by looking at the "Continue the experience online" page later on in this briefing.

Decoupling Growth from Resource Use

Science suggests breaking the destructive link between economic growth and natural resource use is possible

Natural resources underpin the global economy, as biomass, fossil fuels, metals, minerals, arable land, and water supply everything from the food we eat to the buildings we live in. These resources are also a bridge between economic activity and climate change, biodiversity loss, pollution, and poor health. As the global economy and population have expanded, the use of natural resources has more than tripled over the past five decades - with dire consequences for the environment and human health and well-being. According to the International Resource Panel's report *Global Resources Outlook 2019*, the extraction and processing of materials including metals, minerals, fossil fuels and biomass are responsible for half of all global climate change, more than 80% of water stress and land-related biodiversity loss, and a third of all air pollution. According to IRP estimates, barring drastic change, global resource consumption will double by 2060. This rate of growth would not only be catastrophic for the climate and for biodiversity, it would also further undermine notions of fairness and equality - as these resources would be used up inordinately by high-income countries, while related negative impacts are primarily absorbed by the less fortunate.

The average person living in a high-income country consumes 60% more natural resources than their counterpart in an upper-middle-income country, and more than 13 times that of a counterpart in a low-income country. In every type of economy, the decoupling of natural-resource use (and related environmental impacts) from economic growth and human well-being is necessary to transition to a more sustainable future. Better resource management is key in this regard - for example, IRP modelling shows that by implementing proper resource efficiency, circular economy practices, and sustainable consumption and production policies, the growth of global resource use could slow by 25%, greenhouse gas emissions could decrease by 90%, forested areas and natural habitats could increase by 11%, and the global economy could grow by 8%, all by the year 2060. In particular, by managing natural resource use in more efficient and sustainable ways along some of the most resource-intensive value chains, such as those used for food, construction, mobility systems, and textiles (among others), we can better ensure economic competitiveness, bolster social equality, more aggressively tackle environmental challenges, and advance the Agenda 2030 Sustainable Development Goals.

Related insight areas: [Water](#), [Mining and Metals](#), [Oil and Gas](#), [Economic Progress](#), [Biodiversity](#), [Global Governance](#), [Inequality](#), [Climate Change](#), [Forests](#), [Corporate Governance](#), [Supply Chains](#), [Emerging-Market Multinationals](#), [Values](#), [Cities and Urbanization](#), [Circular Economy](#), [Mobility](#)



The Conversation

Long COVID linked to air pollution exposure in young adults – new study

07 March 2023

Although COVID-19 infections are typically less severe in young adults, that doesn't mean they aren't still at risk of complications from COVID-19. For example, around one in 25 adults aged over 16 have reported suffering from long-term COVID-19 symptoms after their first infection. For some, these symptoms lasted for almost two years. While we are getting closer to understanding some of the genetic and immunological mechanisms that cause long COVID, there's still a lot we don't know about the condition – including why people with otherwise mild COVID-19 infections go on to develop long COVID. We also now know about some of the risk factors that make people more likely to develop long COVID – including suffering from chronic diseases and having an unhealthy lifestyle.



The Conversation

How fish evolved to walk – and in one case, turned into humans

03 March 2023

When you think about human evolution, there's a good chance you're imagining chimpanzees exploring ancient forests or early humans daubing woolly mammoths on to cave walls. We humans, along with bears, lizards, hummingbirds and the tyrannosaurus rex, are actually lobe-finned fish. It might sound bizarre but the evidence is in our genes, anatomy and in fossils. We belong to a group of animals called land-dwelling sarcopterygians, but vast amounts of evolutionary change have obscured our appearance. We think of fish as expert swimmers, but in fact they have evolved the ability to "walk" at least five times.



Eco-Business

People power: monitoring pollution in China

01 February 2023

Appeals to Chinese regulators via social media can reduce emissions violations by companies and bring down levels of air and water pollution, researchers from the University of Chicago have found. The team used open data to identify violations and recruited volunteers to file public appeals for action to local regulators, via social media platform Weibo, and private appeals, via a government hotline or messages to government officials or firms. The researchers received 1,161 official responses from nearly 3,000 appeals.



Eco-Business

Fairprice Group appoints its first chief sustainability officer

30 January 2023

Singapore's largest food retailer and supermarket operator Fairprice Group has named its first chief sustainability officer. It is the first grocer in Singapore to have a dedicated sustainability function in its team. Modelled as a social enterprise, Fairprice Group runs NTUC Fairprice, which is the largest food retailer in the country, with more than 100 supermarket stores and over 160 convenience store outlets island-wide. Responding to queries from Eco-Business, the group confirmed that the former chief executive for its food services business Chan Tee Seng has taken up the new role, with effect from January 2023. It said that the new appointment seeks to make sure that it can contribute to Singapore's national sustainability agenda "in a more concerted way".

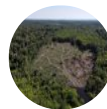


Eco-Business

Economic Development Board appoints Jamie Chan from Singapore Environment Council

26 January 2023

Singapore's government body for attracting overseas investment, Economic Development Board (EDB), has appointed Jamie Chan from non-profit Singapore Environment Council (SEC) to its environmental sustainability team. Chan takes on the role of senior manager, environmental sustainability strategy at EDB. She joins EDB's environmental sustainability division, the function of which is to chart the vision and strategy for Singapore to transit to a low-carbon economy and leverage environmental sustainability trends to spur growth. Part of the Ministry of Trade and Industry, EDB positions Singapore as a regional sustainability hub to attract international businesses and investors. Key focus areas include alternative proteins, sustainable aviation fuel, and carbon services and trading.



World Economic Forum

Data analytics can help protect the Amazon Basin. Here's how

12 January 2023

Destruction of the Amazon will cause irreversible climate damage unless we intervene. Environmental crimes, such as illegal logging and wildlife trafficking, are major problems in the region. Better data insights can support environmentally responsible economic opportunities. The Amazon is approaching a dangerous tipping point of emitting more carbon dioxide than it absorbs. The resulting feedback loops could irreversibly transform the world's largest tropical rainforest into dry savannah, and severely jeopardise international efforts to keep global warming below 1.5C.

Behaviour and Governance

Behavioural insights are informing policy-making and encouraging civic participation

The design of health, safety, financial, and education-related public systems and services can benefit from taking into account the psychological traits of the people meant to benefit from them. Past approaches to policy-making often relied too much on simple financial rewards and punishments. Now, the behavioural-science toolkit has expanded significantly; it includes social incentives like “nudges,” or subtle changes in the environment that gently push people to make better decisions while retaining their freedom of choice. These behavioural tools take into account the fact that decisions do not always result from a purely rational weighing of cost versus benefit, but instead are often influenced by simplistic reasoning, intuition, and social motives. Behavioural designs are often more effective, and less costly, than traditional approaches that rely on financial incentives or persuasion. For example, millions of people in the United Kingdom and the US have increased their retirement savings in response to a simple change in the way certain pension plans are being presented to them. These new “Save More Tomorrow™” plans have people commit to allocating a portion of future salary increases towards their retirement savings. The sting of these paycheck reductions is dulled by the fact that they only kick in after raises, making people much more willing to agree to them.

Behavioural science can also help increase civic participation, by motivating people to volunteer, donate, sign petitions, participate in rallies, interact with their government representatives, and vote. Leveraging people’s sense of identity can increase voter turnout, for example; in a study published in Proceedings of the National Academy of Sciences in 2011, researchers demonstrated that when items in a pre-election survey were phrased to invoke the respondent’s identity (by asking, “How important is it to you to be a voter in the upcoming election?” as opposed to, “How important is it to you to vote in the upcoming election?”), respondents were in fact more likely to vote, according to records associated with two state-wide elections in the US. Another study on increasing voter turnout, published in 2010 in Psychological Science, was based on the 2008 US presidential election; it showed that if calls made to potential voters not only encouraged them to vote but also prompted them to make a specific plan for casting their ballot, turnout increased among single-eligible-voter households by 9%. Other ways that the behavioural sciences can inform the design of better-functioning societies include motivating people to pay their taxes, preventing people from dropping out of college, increasing vaccination rates, and promoting recycling and the consumption of healthier food. Further collaboration between behavioural science researchers, governments, and civil society institutions could ultimately foster a more successful journey through the Fourth Industrial Revolution.

Related insight areas: [Agile Governance](#), [Social Protection](#), [Global Governance](#), [Ageing and Longevity](#), [Sustainable Development](#), [Civic Participation](#), [Corporate Governance](#), [Data Science](#), [Insurance](#), [Values](#)

No Knowledge

We don't have any recent, relevant knowledge available on Behaviour and Governance, but you can check back later using Strategic Intelligence if you would like to monitor Behaviour and Governance in real-time. You can find more information on how by looking at the "Continue the experience online" page later on in this briefing.

Successful Digital Transformation

Companies that double down on digital transformation may be better able to weather COVID-19

According to the results of a survey published by SAP, while nearly all corporate leaders think digital technologies will drastically disrupt their industry, just 44% believe they are prepared for that disruption. Soon, just about every company will need to think like a technology company - or risk extinction. Many companies struggle to realize a return on their investment in digital transformation. Companies collectively spent an estimated \$1.2 trillion on transformation efforts in 2019, according to IDC, yet research published by MIT found that only 13% of business leaders believe their organizations are truly equipped to compete in the digital age. Evidence suggests that the most successful efforts do not approach transformation simply as a way to experiment or cut costs, but rather as a fundamental tool to create new value. Artificial intelligence, 5G, and autonomous vehicles have all amplified opportunities to create value; an estimated 80% of all emerging technologies will have foundations in AI by 2021, while the number of 5G connections in the world is expected to triple by 2023, and more than half of all passenger vehicles will be electric by 2040.

As the financial and business impact of COVID-19 spreads, companies that double down on responsible digital transformation efforts may be better able to thrive. However, strong leadership will be required. Fostering cultural changes and a “digital at the core” mindset will be necessary, as will crowdsourcing and co-creating and piloting new ideas and business models among different teams. Large companies that are not digital natives often find it difficult to replace legacy structures and processes with digital-first approaches. At all of these companies, leaders need to be equipped with digital skills to keep pace with technology advancements, and to make timely decisions. However, according to the results of a survey published by the MIT Sloan School of Management, only 9% of executives strongly believed their leaders had the right skills to thrive in a digital economy. The need for digital skills at all levels applies to even the most traditional of businesses; the European Central Bank, for example, has recommended that banks need to adopt new and diverse skills and experience when it comes to technology and digital innovation - especially at the board level.

Related insight areas: [5G](#), [COVID-19](#), [Digital Communications](#), [Future of Work](#), [Entrepreneurship](#), [Innovation](#), [Fourth Industrial Revolution](#), [Artificial Intelligence](#), [Internet of Things](#), [Sustainable Development](#), [The Digital Economy](#)



World Economic Forum

EDISON Alliance: 1 Billion Lives Challenge

18 January 2023

The EDISON Alliance – a global movement of public and private sector leaders committed to prioritizing digital inclusion – launched the 1 Billion Lives Challenge to improve 1 billion lives globally through affordable access to digital solutions across healthcare, finance, and education by 2025. In its first impact report, the EDISON Alliance will share the number and nature of lives improved across 90 countries worldwide.

Digital Transformation of Organizations

The average lifespan for traditional companies is declining, while the revenue share for 'digital ecosystems' is expanding

The Fourth Industrial Revolution has reshaped entire industries - as sources of value shift across value chains and accelerate the need for greater agility, adaptability, and transformation.

According to McKinsey & Company, an emerging set of "digital ecosystems" modelled after firms like Facebook and Airbnb could account for more than \$60 trillion in revenue by 2025, or more than 30% of all global corporate revenue. Traditional organizations need to quickly reimagine ways to create and capture new business value in the face of this digital disruption. The average tenure of a company in the S&P 500 Index of large, US-traded firms is expected to decline from 24 years in 2016 to 12 years by 2027, as corporate leaders deal with an unprecedented combination of disruptive technologies, changing customer behaviour, and an impending climate crisis. However, disruptive technologies are also creating significant new value opportunities. Advanced 5G telecom networks are expected to generate more than \$600 billion in new business by 2026, for example, while the market for distributed "edge" computing is expected to more than triple between 2019 and 2024, to \$9 billion.

People increasingly expect technology to be personalized, convenient, and on-demand; and, according to the research firm Nielsen, nearly half of all consumers are now more likely to try new brands than they were five years ago. These people also expect companies to play a constructive role in society. According to a study published by Accenture, 62% of consumers say their purchasing consideration is driven by a company's ethical values and authenticity, and 74% want more transparency on companies' stances on environmental and social issues, and on how they source their products and ensure safe working conditions. In response, many business leaders have transformed their organizations to create new value. While nearly 96% of organizations are in some phase of transformation, according to research firm IDG, and 90% of enterprises have already adopted a "digital-first" business strategy, the results have so far been mixed; less than half of executives now believe they can extract and maintain the planned value from their transformation initiatives. Companies of all types now have a shared opportunity to exchange information and co-create new frameworks, tools, and partnerships to successfully transition to a new business normal.

Priorities for collaboration:

- Accelerate successful business transformation to respond to technological and social disruption.

- Identify collective learnings and strengthen collaboration across industries.

- Co-create new insights, models, decision frameworks, and tools.

Related insight areas: [Leadership](#), [Economic Progress](#), [Corporate Governance](#), [Artificial Intelligence](#), [The Digital Transformation of Business](#), [Entrepreneurship](#), [Innovation](#), [Virtual and Augmented Reality](#), [3D Printing](#), [Blockchain](#), [Fourth Industrial Revolution](#)



World Economic Forum

State of the Connected World 2023 Edition

17 January 2023

The World Economic Forum with the Council on the Connected World produce the only publication that tracks governance gaps related to the Internet of Things (IoT). This report surveyed more than 270 experts from around the world to understand the current state of play and to highlight the need for universal governance protocols to secure connected devices—especially as cyberattacks and data breaches have rapidly increased since the pandemic. The report enumerates areas of concern – such as ethical use of data and universal access – and makes recommendations for the public and private sectors to secure these devices collaboratively.



World Economic Forum

Central Bank Digital Currency? How money could be redesigned

17 January 2023

Can a Central Bank Digital Currency serve as a bridge to greater financial inclusion? Will it deepen the digital divide? The answer is not straightforward. We're cautiously optimistic a carefully designed CBDC could give a new payments tool with best features of cash, digital payments and crypto. Success will require thoughtful design of the CBDC intermediary ecosystem, and supporting options like self-custody and strong privacy.



World Economic Forum

In a fragmented world, it's technology that brings us together

12 January 2023

In an increasingly fragmented world, technology plays a vital role in bringing us together. Read more on how The Digital Transformation of Business is affecting economies, industries and global issues.

Using ESG to Measure Success

Environmental, Social and Governance performance is not captured in quarterly earnings reports

At its root, ESG is about expanding our appreciation of a firm's performance and impact. While quarterly earnings reports might convey key figures, they leave much hidden related to both the causes and effects of the firm's success. By widening our view, we may see that a mining firm's profits come at the expense of workers, communities, and the environment, for example - while another firm in the same industry may be investing in worker safety and environmental efforts in ways that aid long-term performance, but do not show up in a balance sheet. This wider view helps determine whether firms can be considered "sustainable," and so it is essential to enable broad access to it. While firms can constrain their own future success if they negatively impact the people, customer and community trust, or natural resources they depend upon, one key challenge relates to how broad the view of these impacts and risks should be. What should be in scope when assessing "non-financial performance" for technology firms, relative to automotive companies, mining interests, or financial firms? And, how long should our time horizon be when considering related risks and impacts?

There are no easy answers to these questions, and different countries and institutions define sustainability differently. ESG has become an umbrella concept for hundreds of issues, practices, and metrics used to hold firms accountable. One MIT study of ESG rating agencies found that 50% of the significant divergence in ratings was caused by differences in scope and definition. The World Economic Forum and its partners have sought to lessen these differences by developing the "Stakeholder Capitalism Metrics," designed to make ESG metrics comparable across industries and regions; more than 170 companies have so far adopted them and more than 70 have reported against them. Writing and publishing reports may increase transparency, but it does not change practices. And while buying and selling equities based on ESG information is increasingly common, the effects on firms (and society in general) are indirect at best. ESG information can only improve the world under certain conditions: when C-suite executives actually use it to guide decision making, when it attracts the best employees, customers, suppliers, and capital, when it influences regulatory action, or when it impacts shareholder voting - which can make non-financial information truly material.

Related insight areas: [The Net Zero Transition](#), [Economic Progress](#), [Small and Medium Sized Enterprises](#), [Air Pollution](#), [Banking and Capital Markets](#), [Corporate Governance](#), [Gender Inequality](#), [Future of the Environment](#), [Future of Work](#)



London School of Economics and Political Science

To explore the gendered nature of public sexual harassment we need more inclusive quantitative methods

28 February 2023

Empirical research on public sexual harassment relies on categorical (mostly binary) methodological approaches to gender. Ioanna Gouseti suggests shifting from categorical to continuous measurements of sex and gender and utilising interdisciplinary methodological perspectives, can help provide a more thorough understanding of the gendered nature of public sexual harassment and help develop more effective responses. Public ... Continued.



RAND Corporation

Types of Sexual Assault and Sexual Harassment in the Active-Duty Army

24 February 2023

This report describes results of analyses that identify different types of sexual assault and sexual harassment experiences and assess how common each type is in the Army. It uses data from the 2018 Workplace and Gender Relations Survey.



VoxEU

A theory of fair CEO pay

27 January 2023

Performance-related pay provides an ex-post reward to CEOs and can ensure that they feel fairly treated. If a CEO's pay falls short of what is perceived as fair, it can be a strong demotivator. This column studies how fairness concerns affect optimal CEO contracts. The most efficient contract resembles performance shares, which provide fair wages if performance is good.



World Economic Forum

How 'Positive Leaders' can deliver sustainable, equitable economic impact

12 January 2023

We need to create a more diverse talent pipeline, so leaders emerge who better represent the population, with broader lived experience. Positive Leadership is a combination of positive psychology, neuroscience and mindfulness, underpinned by decades of research. We must all ensure we create organizations that deliver profitable solutions for people and planet. Being a Positive Leader starts with you. The 2022 "Global Workforce Hopes and Fears" survey by PwC highlights that the "Great Resignation" is far from over.



RAND Corporation

Sexual Harassment and Sexual Assault in Military Settings

09 January 2023

This brief describes three evidence reviews on psychological interventions for victims of sexual assault and harassment in the military, barriers and facilitators to care, and links between assault or harassment and specific mental health conditions.



MIT Sloan Management Review

The Transparency Problem in Corporate Philanthropy

19 December 2022

The Transparency Problem in Corporate Philanthropy Companies contribute billions annually to the public good, but most of them aren't reaping the full value of their largesse. Despite increasing demands by employees, investors, and communities for environmental, social, and governance transparency, philanthropy remains an often overlooked and almost entirely opaque sphere of corporate activity. This is no small issue: In 2021, corporate giving in the U.S. alone is estimated to have exceeded \$21 billion. To explore the dimensions of this problem and understand the use of disclosures in corporate philanthropy more broadly, I studied transparency in the philanthropic foundations of Fortune 100 companies.

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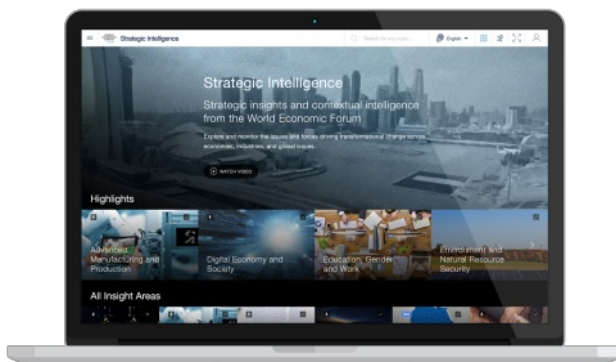
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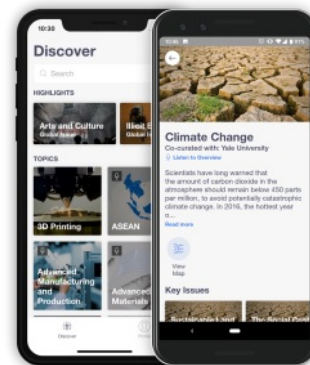
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