

# Digoshen Recommends Dynamic Briefing

Generated 27 January 2022 for Exploring Leaders @ Digoshen

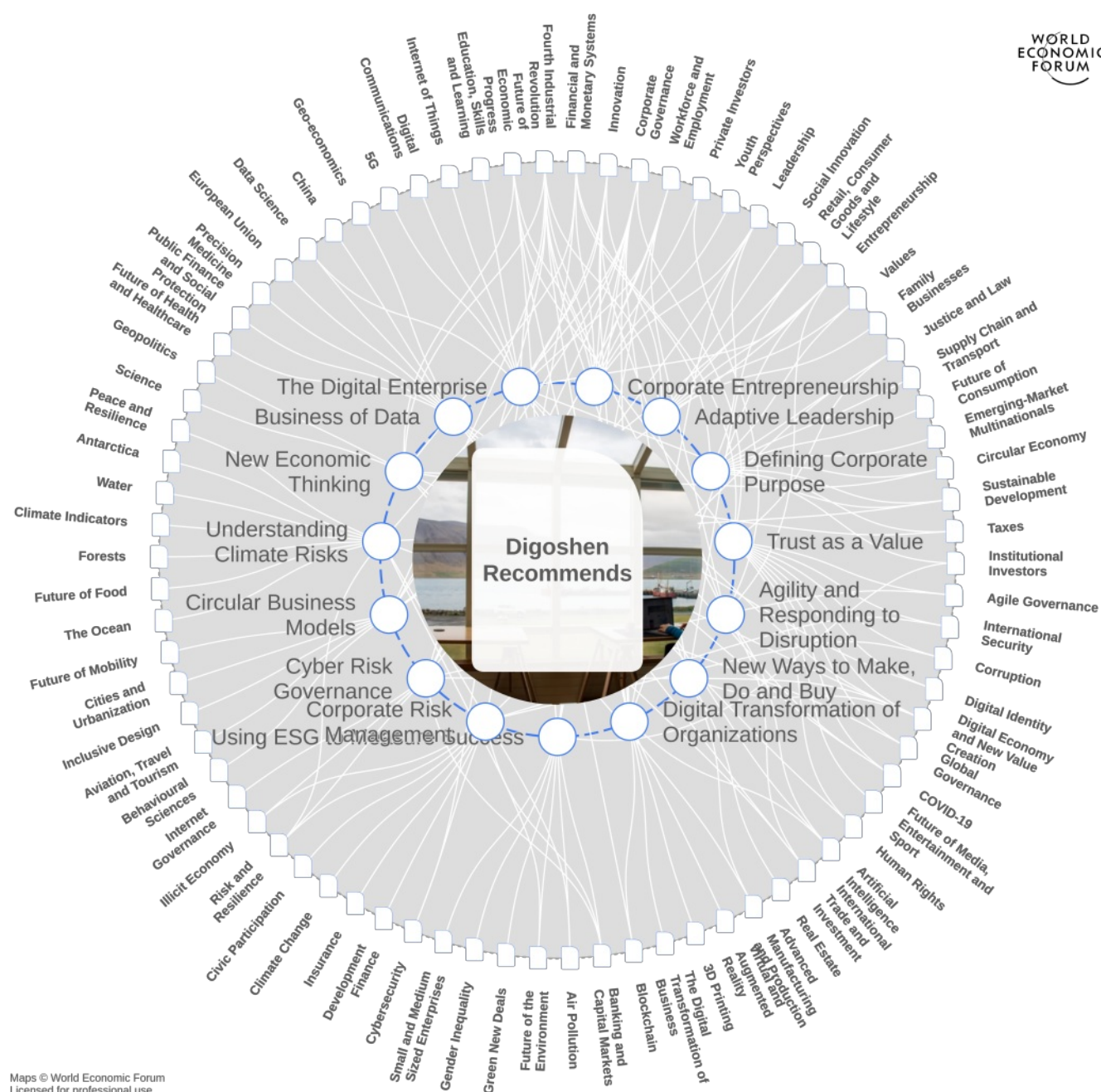


# Digoshen Recommends

Last review on Sat 01 January 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](https://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.



# Executive summary

Digoshen Recommends Intelligence Map - insights and perspectives curated by Digoshen via World Economic Forum Strategic insights and contextual intelligence.

---

## 1. Corporate Entrepreneurship

Large businesses are adopting more entrepreneurial mindsets and practices.

## 2. Adaptive Leadership

“Analyse, plan and implement” has given way to more adaptive leadership that relies on experimentation.

## 3. Defining Corporate Purpose

An organization’s reasons for being should extend well beyond financial gains.

## 4. Trust as a Value

Faith in institutions and in each other is vital during a crisis.

## 5. Agility and Responding to Disruption

The family enterprise system must evolve in order to remain competitive.

## 6. New Ways to Make, Do and Buy

Virtual and augmented reality are helping to improve quality in innovative new ways.

## 7. Digital Transformation of Organizations

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

## 8. Using ESG to Measure Success

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

## 9. Corporate Risk Management

For boards, the volatility of risk scenarios is only increasing.

## 10. Cyber Risk Governance

The number of corporate boards with a dedicated cybersecurity committee is expected to increase sharply by 2025.

## 11. Circular Business Models

Opportunities abound to reimagine consumption with products designed for sharing, durability, and reuse.

## 12. Understanding Climate Risks

Extreme weather, rising sea levels, and food and water scarcity are becoming a reality.

## 13. New Economic Thinking

Economic growth has made life better for millions, but trouble is on the horizon.

## 14. Business of Data

Innovative approaches to data stewardship manage trade-offs while creating inclusive value.

## 15. The Digital Enterprise

Becoming ‘digital at the core’ can potentially create more sustainable value.

# Corporate Entrepreneurship

---

## Large businesses are adopting more entrepreneurial mindsets and practices

The emergence of technologies such as artificial intelligence and nanotechnology, in combination with the introduction of new and innovative business models, has disrupted entire industries - and challenged previously well-established businesses. Despite their dominant market positions and significant financial resources, many corporate incumbents have been disrupted to the point of losing out on growth opportunities, due to an inability to keep up with more agile startups. Often, these large firms lose out due to an unwillingness to embrace innovation that may cannibalize their existing products and services. Meanwhile many are losing top talent, who move on to start their own ventures or join fast-growing startups. In order to keep up and to stay competitive, incumbent corporations are increasingly launching internal entrepreneurship initiatives that complement their businesses. By re-examining their organizational design and business models, these companies hope to co-opt startups' best practices. This is typically done by creating structures or units separate from the core business; a number of companies are increasingly availing themselves of corporate incubators, accelerators, and innovation labs in order to drive this innovation outside of the core business.

One of the first corporate innovation labs to support research and development efforts separate from the core business was Bell Labs, the legendary R&D unit that was once owned by AT&T and spawned the transistor and the laser. More recently, corporate-sponsored hackathons and accelerator and incubation programs have provided different types of entrepreneurship support. Companies have also established their own venture capital investment funds; in the Nordic countries alone, the number of corporate venture investments more than doubled between 2014 and 2018, to 109, according to a report published by Oxford Research. Meanwhile corporate ventures are being designed that pursue entrepreneurial opportunities but are embedded within a company's environment. For example, Bosch, the German multinational engineering and technology firm, has been increasing its investment in programs to support corporate ventures. One of their most successful examples is Bosch eBike System, which was established in 2009 as a corporate venture within Bosch and subsequently developed into one of the leading manufacturers of drive systems for pedelecs (electric bicycles where a motor assists the rider's pedalling).

---

Related insight areas: [Youth Perspectives](#), [Financial and Monetary Systems](#), [Private Investors](#), [Economic Progress](#), [Workforce and Employment](#), [Leadership](#), [Fourth Industrial Revolution](#), [Corporate Governance](#), [Innovation](#)



World Economic Forum

### Two ways corporates can support women entrepreneurs

20 January 2022

Women founders currently face serious challenges in accessing venture capital and this lack of investment in women means many opportunities are being missed. 2 main ideas emerged from our research: improve opportunities for women entrepreneurs via non-financial investment; grow the pipeline of women with skills to serve on investment teams. SAP, in collaboration with efino, McKinsey & Co. and PwC Germany, has developed an actionable idea to reduce the opportunity gap for women entrepreneurs. Corporate venture capital (CVC) teams are responsible for 24% of all venture capital investment, accelerating hundreds of startups a year. Yet CVC teams are potentially missing out on investment opportunities by not doing more to actively seek out and support women entrepreneurs with bankable projects.

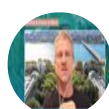


World Economic Forum

### Who Are the 'Ecopreneurs' Restoring the Amazon? | Sustainable Development Impact Summit

16 January 2022

With over 10,000 species at risk of becoming extinct, the Amazon's ecosystem requires a nature- and people-positive bioeconomy to mitigate existing threats. What action can governments and businesses take to implement "ecopreneurship" that promotes the changes needed to conserve and restore the Amazon?.



World Economic Forum

### The 15-Minute City | Sustainable Development Summit 2021

15 January 2022

A new model for developing mixed-use, walkable communities, known as the 15-minute city, is gathering momentum in the wake of the COVID-19 pandemic. How does this model work for businesses, workers, communities and our planet? Speakers: Carlo Ratti, Mike Haigh, Sally Capp, Arunabha Ghosh.



Project Syndicate

### An Entrepreneur and a Swindler

13 January 2022

For years, prosecutors have eschewed criminal cases against financial manipulators, and loose financial conditions have driven a desperate search for positive real returns. The situation was perfect for entrepreneurs like Elizabeth Holmes to raise funding for implausible ideas.



LSE Business Review

### Scenarios in innovation pitches: boon or bane?

13 January 2022

When an innovation pitch includes a range of best- to worst-case scenarios, does it affect its likelihood of being selected? The answer may vary depending on whether the project focuses on core innovation, which targets existing products and markets, or transformational ones, targeting new products and markets. Wim A. Van der Stede writes that scenario presentation can have ... Continued.



World Economic Forum

### ESG is coming to venture capital. Here's how startup founders can stay ahead of the curve

05 January 2022

Venture capital is crucial in shaping the future of our people, planet and society. However, venture capital has been a laggard in considering environmental, social and governance aspects when making investments. The tide is now turning as venture capital firms begin to push for adoption of ESG. Here's how to stay ahead as a startup founder. If you're a startup founder who has raised venture capital (VC) funding or is looking to do so, you know that global VC funding hit USD 454 billion in the first three quarters of 2021, up from USD 332 billion in 2020 over the same period.



World Economic Forum

### Meet the Pioneers of Sustainable Fashion | Sustainable Development Summit 2021

01 January 2022

Now more than ever, consumers care about the environmental and social consequences of their fashion spending and so too does a burgeoning group of investors. What's next in sustainable fashion for investors and consumers alike? The Sustainability Pioneers series showcases entrepreneurs and innovators tackling today's major challenges to achieve the Sustainable Development Goals. Speakers: Holly Syrett, Javier Goyeneche, Safia L. Minney.

# Adaptive Leadership

---

**“Analyse, plan and implement” has given way to more adaptive leadership that relies on experimentation**

The opportunities presented by the Fourth Industrial Revolution can be fleeting and difficult to anticipate - making traditional organizational planning less relevant. Successful platform companies like Uber and Airbnb, which have helped to fuel the sharing economy, were able to achieve systemic impact with relatively few resources and in a relatively short period of time, for example. These companies have also quickly created new challenges for urban policy-makers and traditional industries, illustrating the need for both economic actors and public officials to monitor systemic change and to place a premium on reacting with agility. For example, some traditional consumer goods companies have sought to adapt to the threat posed by Amazon and Alibaba by offering hyper-customized shopping experiences; Nestle is piloting a programme in Japan that collects DNA and blood samples, in order to sell food and beverage products that are personalized.

An ability to experiment with, and pilot new ideas and designs is essential for adaptive leadership. According to a study published in 2017 by Deloitte, one way of developing this ability is to cultivate diverse and inclusive teams, where people feel empowered to speak up. The study found that this generates more and better ideas, and innovative ways of working. Examples of agile corporate leadership include Careem, the most widely-used ride-hailing app in the Middle East, North Africa and Pakistan, which has been able to differentiate itself from Uber by incorporating local norms and needs; the company's leadership recognized the importance of women feeling safe when using the service, and the predominance of cash transactions in an under-banked region, for example. Piloting new ideas works most effectively when it is followed by a rigorous assessment of results. A “systems mindset,” which involves looking beyond the immediate impact of decisions in order to take into account all concerned stakeholders, can help to refine and sharpen initial ideas. An ability to self-correct is also key. History is filled with examples of leaders who failed to reverse course on ill-fated strategy - whether it was Kodak opting to not aggressively pursue digital photography, or US video rental chain Blockbuster passing on an opportunity to partner with then-nascent streaming service Netflix in 2000. On the other hand, Flickr is an example of successful adaptive leadership; it essentially started as a chat room space, but then evolved into the pure photo sharing platform that was acquired by Yahoo in 2005.

---

Related insight areas: [Family Businesses](#), [Values](#), [Retail](#), [Consumer Goods and Lifestyle](#), [Innovation](#), [Entrepreneurship](#), [Fourth Industrial Revolution](#), [Social Innovation](#)





[World Economic Forum](#)  
**Special Address by Naftali Bennett,  
Prime Minister of Israel | Davos  
Agenda 2022**

18 January 2022

Special Address by Naftali Bennett, Prime Minister of Israel with Børge Brende President of the World Economic Forum.



[World Economic Forum](#)  
**Special Address by António Guterres,  
Secretary-General, United Nations |  
Davos Agenda 2022**

17 January 2022

Special Address by António Guterres, Secretary-General of the United Nations with Børge Brende, President of the World Economic Forum #DavosAgenda. Simultaneous interpretation in English, Arabic, French, Mandarin Chinese, Russian and Spanish. .



[World Economic Forum](#)  
**Special Address by Narendra Modi,  
Prime Minister of India | Davos Agenda  
2022**

17 January 2022

Special Address by Narendra Modi, Prime Minister of India at the World Economic Forum's Davos Agenda 2022. .



[World Economic Forum](#)  
**Special Address by Xi Jinping,  
President of the People's Republic of  
China | Davos Agenda 2022**

17 January 2022

Special Address by Xi Jinping, President of the People's Republic of China with Klaus Schwab at the World Economic Forum's Davos Agenda 2022. .



[Project Syndicate](#)  
**More than Economists**

12 November 2021

While systematic thinkers close a subject, leaving their followers with “normal” science to fill up the learned journals, fertile ones open their disciplines to critical scrutiny, for which they rarely get credit. Three recent biographies show how this has been the fate of three great economists who were marginalized by their profession.



[London School of Economics and Political Science](#)

**The erasure of Vanessa Nakate shows  
why Africa needs a voice in climate  
debates**

12 November 2021

On 2 November 2021, an image of Scottish First Minister Nicola Sturgeon and Swedish climate change activist Greta Thunberg appeared on the internet, with Vanessa Nakate, a Ugandan Climate Change activist, cropped out the frame. The three women were having a conversation on Sky News at the COP26 international climate summit in Glasgow. The cropped image was tweeted by former British MP and educationist Thelma walker, who later deleted it when it attracted outrage. This incident follows similar displays of blatant racial representation, misrepresentation and non-representation of Black Africans by the Western press. This case also demonstrates the ongoing erasure of global South voices in climate debates.



[World Economic Forum](#)

**As COP26 unfolds, we need to  
demand more of our leaders**

09 November 2021

COP26 aims to tackle the critical issue of climate change, one part of a set of multidimensional crises including a health crisis, and a crisis of social and economic inequities. We need competent, altruistic leaders to address these challenges but all too often power brings out the worst in people. Empathy and humility must be cultivated in leaders if we are to effectively address the issues humanity faces. As world leaders meet in Glasgow at the UN's COP26 climate summit to tackle one of the most urgent crises of our time, will they have the courage to implement the bold changes that are needed to save human life on our planet, or will they yet again do too little, too late? This question that is on everyone's minds speaks to the kind of leaders we need today.

# Defining Corporate Purpose

---

**An organization's reasons for being should extend well beyond financial gains**

The Business Roundtable, an association of CEOs of the largest American companies, has departed from a longstanding view that corporations exist solely to serve their shareholders. In 2019, the organization declared that companies should benefit all stakeholders, including customers, employees, suppliers, and communities - in addition to shareholders. This strongly reinforced the idea that profits are not the sole purpose of a business, and that corporations should exist to solve problems and provide services. If they are successful at doing this, long-term shareholder returns can increase, as society in general is better served. Establishing purpose is not an abstract exercise; it has proven to be essential for guiding decision making and for establishing priorities. London Business School Professor Alex Edmans has noted that as virtually all of the major decisions a company makes involve trade-offs, one of the main benefits of having a strong purpose is to guide these trade-offs. Purpose must not only be explicitly defined, however - it must also be implemented. Shareholders must understand the organization's purpose, and be able to identify the metrics (both quantitative and qualitative) related to delivering on it.

Some of these metrics incorporate the traditional concepts behind corporate social responsibility (CSR), such as maintaining positive working conditions and employee satisfaction, cultivating workforce diversity, and focusing on client satisfaction and product quality. But purpose can go well beyond CSR - one example is the clothing company Patagonia, which states that its reason for being is to help protect life on Earth. This is (presumably) understood by its investors, and implemented by designing, producing and selling products in the most environmentally sustainable way possible, and by building its supply chains and customer service around the circular economy ideas of repairing, reusing, and recycling. Responsible corporations create value for society and are motivated by the desire to do so. Survey results published by researchers at Stanford Graduate School of Business in 2018 showed that 65% of Americans believe CEOs at large companies should use their positions to address broad social, political, and environmental issues. That is to say, most Americans realize that corporations need to be committed to providing solutions and value to everyone - and that businesses have a responsibility to society.

---

Related insight areas: [Institutional Investors](#), [Future of Consumption](#), [Supply Chain and Transport](#), [Taxes](#), [Sustainable Development](#), [Circular Economy](#), [Values](#), [Financial and Monetary Systems](#), [Justice and Law](#), [Emerging-Market Multinationals](#), [Leadership](#)





London School of Economics and Political Science

## Public support for a universal basic income is dependent on the way it is funded

25 January 2022

The concept of a universal basic income has received increased attention since the start of the Covid-19 pandemic. But what do the public think about the proposal? Drawing on a new study, Leire Rincón illustrates that a key factor affecting support for a universal basic income is the way it is funded, with more people ... Continued.



Wharton School of the University of Pennsylvania - Knowledge@Wharton

## How Risk-shifting by Underperforming Funds Distorts Stock Prices

18 January 2022

As fund managers of laggard mutual funds try to catch up with their peers, they tend to pursue high-risk stocks that may give higher than average returns. In the process, they push the prices of those risky stocks disproportionately higher than what the returns may justify, according to a new research paper by experts at Wharton and elsewhere. The research explored the relationship between risk-shifting by underperforming mutual funds and "risk anomalies" such as subpar risk-adjusted performance of stocks with high market betas, or high volatility.

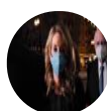


World Economic Forum

## Here's how to choose the right fund manager for the future

18 January 2022

One of the most important decisions for investors when constructing a portfolio is to choose a fund manager. Investors tend to look at a fund manager's track record in quantitative terms – but the numbers don't tell the whole story. The most sophisticated limited partnerships look at qualitative evidence to find a manager capable of executing a proposed strategy. In constructing a future-ready investment portfolio in private markets, one of the most important decisions an investor can make is choosing a fund manager. A key element of manager selection is understanding his or her past track record.



Project Syndicate

## Capital Is Not a Strategy

06 January 2022

After years of central banks keeping interest rates low and pumping liquidity into financial markets, asset valuations are at historic highs. While entrepreneurs and venture-capital founders tell themselves that "capital is a strategy," bubble finance is no substitute for a business plan that can achieve positive cash flow.



Wharton School of the University of Pennsylvania - Knowledge@Wharton

## Beyond Business: Humanizing ESG

13 December 2021

Smart firms are listening, learning, and changing longstanding practices that have caused decades of harm to people, according to participants in a recent "Beyond Business" panel discussion, hosted by Wharton Dean Erika James.

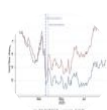


Harvard Business School Working Knowledge

## The Popular Stock Metric That Can Lead Investors Astray

06 December 2021

What if a bedrock method that investors have relied on for decades to find cheap-but-promising stocks to buy low and sell high no longer works well? The book-to-market ratio has been used since at least the Great Depression to identify undervalued stocks. It has become so detached from a modern economy driven by research and intellectual property that it no longer accurately signals so-called value stocks, suggests new research from Charles C.Y. Wang, Harvard Business School's Glenn and Mary Jane Creamer Associate Professor of Business Administration. Investors use book-to-market ratios to spot potentially underpriced stocks, and major stock indexes and institutional investors lean on the metric as well.



VoxEU

## Bank leverage constraints and bond market illiquidity during the COVID-19 crisis

27 November 2021

The onset of COVID-19 led to heightened uncertainty and a 'dash-for-cash', particularly in the mutual fund sector which faced fire sale pressure. Typically, banks trading securities absorb such pressure and support market liquidity, but regulation may limit their ability to do so. This column analyses the role of bank leverage constraints as an amplifier of bond market illiquidity. It concludes that leverage ratio regulation can have negative side effects by increasing bond market illiquidity in times of economic distress, suggesting that the optimal leverage ratio is procyclical.

# Trust as a Value

---

## Faith in institutions and in each other is vital during a crisis

The COVID-19 pandemic has made clear that trust in institutions and between institutions is necessary to cope with global challenges. Trust impacts our ability to make decisions and take risks. Indeed, an entire nation's well-being, as well as its ability to compete, is conditioned by the level of trust inherent in society. Some scholars have noted the role of trust in collective action situations, and the important role it plays in maintaining social networks and building communities. The role of trust is widely recognized as a pillar of public organizations. When the World Health Organization, for example, seeks to provide guidance on how to limit the spread of a new type of virus about which relatively little is known, it cannot fulfil its role if it does not enjoy a certain level of trust from both people and governments. In an increasingly globalized world, trust among governments is a fundamental ingredient necessary to cope with any mega-challenge, whether it is related to health, the environment, peace and security, or economic and financial stability.

Trust is not a simple concept, however. It is multi-layered, and comprised of a range of attributes: credibility, faithfulness, information sharing, and the expectation of cooperation between partners. Trust is also a feeling, and an attitude; it expresses an awareness of safety and security and helps form a frame of mind that influences behaviour, personal relationships, a sense of community, and confidence in leaders. It provides the glue for the social context in which communities function and businesses operate. It has been suggested that in addition to skills and knowledge, a distinct portion of human capital - the value of a workforce - has to do with an ability to associate with other people, which can be critical not only for business but for other aspects of everyday existence as well. The ability to associate depends, in turn, on the degree to which communities share norms and values - and are able to subordinate individual interests to those of the larger group. Trust can be a result of these shared values, and it has a potentially large and measurable economic impact.

---

Related insight areas: [Justice and Law](#), [Future of Media](#), [Entertainment and Sport](#), [Corruption](#), [Global Governance](#), [Digital Identity](#), [Economic Progress](#), [The Digital Economy](#), [International Security](#), [Agile Governance](#), [COVID-19](#), [Financial and Monetary Systems](#), [Human Rights](#), [Corporate Governance](#)



### International Service for Human Rights Civil society's expectations for the Human Rights Council in 2022

25 January 2022

Since 2019, we have expressed our concerns regarding the Council's adoption of efficiency measures to address the UN's financial shortfalls and the COVID-19 pandemic that followed. Civil society organisations have consistently raised their concerns that the special emergency measures and budget constraints heavily restrict civil society participation in the work of the HRC.



### SpringerOpen Beyond race?

14 January 2022

While at the moment the world seems to be divided along racial lines, in this article we ask whether it is thinkable to go 'beyond race'.



### UNESCO How to address online #HateSpeech with a human rights based approach?

12 January 2022

Some people use messages that violate other people's rights to dignity, equality and safety. When does free speech become criminal 'hate speech' and how do we best respond to it? Navigating that fine line isn't easy. But, in the interests of protecting human rights for all we can - and must- work together more intensively to address the problem. .



### Wharton School of the University of Pennsylvania - Knowledge@Wharton Falling Flat: Why Startups Need Hierarchical Structure

10 January 2022

Wharton management professor Saerom (Ronnie) Lee has a word of warning for aspiring entrepreneurs who envision an egalitarian workplace where there are no bosses and every employee ranks the same. According to his latest research, startups with flat organizational structures often fail. Many entrepreneurs dislike the notion of hierarchical structure and managers, they ultimately do need managers, and do need to plan ahead and design the appropriate hierarchical structure way earlier than they think," he told the wharton business daily show on siriusxm.



### Wired Covid Will Become Endemic. The World Must Decide What That Means

31 December 2021

A month ago, it felt like we could see the future. Boosters were rolling out. School-age kids were getting their second shots in time to see grandparents over winter break.



### MIT Sloan Management Review Six Ways Leaders Can Adapt to the Workplace of 2022

28 December 2021

For most companies and managers, responding effectively to the impact of COVID-19 was still the biggest challenge of 2021.



### Social Europe Value-based engineering v the Silicon Valley Zeitgeist

22 December 2021

Sarah Spiekermann is chair of the Institute for Information Systems and Society at Vienna University of Economics and Business. Her latest book is Digital Ethics: A Value System for the 21st Century (Droemer). From 2016 to 2021 she was vice-chair of the IEEE 7000 Standard, the first global model for ethical IT system design.

# Agility and Responding to Disruption

---

## The family enterprise system must evolve in order to remain competitive

Despite their market dominance and abundant resources, established businesses - including many family businesses - are increasingly uncertain about the future, and are struggling to adapt to the new reality of technological disruption. Many have missed out on growth opportunities, as they fail to match the speed of execution of new entrants. If they want to stay alive for generations, they need to actively address these issues before it is too late. Family businesses are not viewed as being particularly innovative. For them, innovation and developing new ways of creating value can be particularly challenging. Family tradition, and a family's emotional attachment to a founder's legacy, can prevent a business from making changes with sufficient quickness. In addition, being well-established in a local community and adhering to prevailing industry logic can prevent an organization from quickly reacting to market trends by getting outsiders involved, by making strategic changes, or by shifting geographic or industry focus. Family firms also generally have an inherent desire for independence, which can curb their willingness to raise outside capital and therefore hurt their ability to invest sufficiently in innovation. There is also a tendency for risk appetite to wane as an organization grows, and its ownership becomes more dispersed across branches of a family.

Although responding to disruption can be challenging for family businesses, they can generally count on an enhanced degree of loyalty and trust among their workforces. In addition, their established industry connections can benefit innovation, while their relatively prudent investment strategies can lead to more efficient innovation, and their relative independence from external capital can accelerate related decision-making. Family businesses must foster innovative, entrepreneurial behaviour among all employees and family members. Their leaders need to focus on a culture of innovation, to capture the organization's full collective creativity. One way to access ideas and specific skills is through open collaboration. The World Economic Forum's 2015 report Collaborative Innovation: Transforming Business, Driving Growth notes that when firms share resources, significant value can be created for both parties as well as for the economies in which such collaborations take place. Another approach to innovation available to family businesses is to directly invest in startups, which families are increasingly interested in doing individually, through their family offices or through dedicated venture capital firms. This may present a particularly interesting opportunity to families hoping to diversify their portfolio, or to hedge against the risk of disruption.

This key issue is curated in partnership with Dr. Peter Vogel, Professor of Family Business and Entrepreneurship, IMD International.

---

Related insight areas: [Private Investors](#), [Trade and Investment](#), [Entrepreneurship](#), [Artificial Intelligence](#), [Innovation](#), [Fourth Industrial Revolution](#), [Workforce and Employment](#)

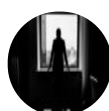


Science Direct - family business strategy

## Bringing entrepreneurship and family business fully into a home in management departments

15 January 2022

Issues around the perception of academic disciplines, and their related journals' quality, are socially constructed over time (Astley, 1985; DuBois & Reeb, 2000). Associate and full professors today typically have a socially constructed view of their discipline and journal quality based in large part on something that some senior faculty member taught them in their doctoral program years ago (Lowry et al., 2013; Rainer & Miller, 2005). This engrained view of the positioning of disciplines and journals is particularly relevant to entrepreneurship and family business faculty as these domains are relatively new and their faculty primarily reside in management departments (Priem & Alfano, 2016).



University of St. Gallen

## Do CEOs really stay in the job for too long?

20 December 2021

20 December 2021 . How long should CEOs remain in office? Do some of them stay on for too long? This is an ongoing debate among academics and practitioners, often triggered by headlines about long-serving CEOs who perform badly and destroy company value. A recent example is Société Générale's Frédéric Oudéa, who is currently the longest-serving CEO of a major European bank despite having overseen a 75% drop in the company's share price during his 13-year reign, giving it the lowest price-to-book ratio of any European bank.



INSEAD Knowledge

## The Unexpected Role of PE Firms in Reducing Within-Firm Pay Inequality

07 December 2021

The incentives that drive PE firms have an interesting by-product: a reduction in income inequalities, such as the gender wage gap. After the global financial crisis, private equity (PE) ownership was much maligned. Among other things, it has been blamed for the demise of Toys "R" Us, Payless Shoes and RadioShack. Even pop star Taylor Swift called out "the unregulated world of private equity" when accepting Billboard's "Woman of the Decade" award in 2019. While there is ample evidence that PE firms excel in increasing the performance and efficiency of their portfolio companies, the question is: Do the benefits that accrue to shareholders come at the expense of other stakeholders, such as the workers, especially the most vulnerable ones?.



McGill University

## Closing the Inventor Gender Gap with John-Paul Ferguson, Lucy Gilbert, and Negin Ashouri

19 November 2021

Social inequalities are responsible for the loss of millions of ideas and inventions over hundreds of years. This loss over time is measurable today in a decline in innovation, slowing economic growth, and repercussions on all sectors, from technology to health care. The gender gap among inventors affects what gets invented—and consequently who benefits from innovation. In this episode of the Delve podcast, Desautels Professor John-Paul Ferguson investigates how women inventors may be more likely to patent inventions targeted toward women's needs and interests. We also hear the first-hand experience of surgeon and McGill professor Dr. Lucy Gilbert, who developed the DOvEEgene genetic pap-test, and Negin Ashouri, CEO of FemTherapeutics, inventor of a 3D-printed gynecological device.



Harvard Business School Working Knowledge

## 5 Principles for Scaling Change from IBM's High School Innovation

18 November 2021

P-TECH has bolstered graduation rates for students of color while creating a new tech hiring pipeline. Rosabeth Moss Kanter and program architect Stanley Litow discuss the social impact lessons for other organizations.



Harvard Business School Working Knowledge

## Is the Business World Finally Ready for the Wisdom of Shibusawa?

05 November 2021

Legendary financier Eiichi Shibusawa advocated for business prosperity that would also benefit society. One hundred years after his death, his message is resonating with a new generation of leaders, say Geoffrey Jones and Rei Morimoto.

# New Ways to Make, Do and Buy

---

## Virtual and augmented reality are helping to improve quality in innovative new ways

Virtual and augmented reality tools have been readily adopted by manufacturers aiming to improve efficiency, safety, and connectivity as they develop and repair their products. According to a report published by PwC in 2016, more than a third of US manufacturers surveyed were either already using virtual reality technology, or planned to do so in the next three years. In terms of product design, the technology facilitates remote collaboration, and many products can be “experienced” before they are actually made - potentially increasing product quality for consumers. In 2016, MIT Technology Review reported that commercial construction companies had begun using augmented reality technology to help them identify and avoid problems before starting work at a site; one senior manager at a firm in Rhode Island was able to use a Microsoft HoloLens head-mounted display unit in order to look at a mockup of a project and see that steel frames he planned to order would actually be too long to fit the design. His company then asked the supplier to cut the frames shorter in advance of delivery, enabling it to save thousands of dollars in unnecessary labour costs.

While virtual reality can help businesses visualize store layouts before they are built, augmented reality can fundamentally change the way retailers deliver their products to consumers. The functionality and quality of products can be assessed from anywhere, anytime. A Harvard Business Review article published in 2016 presented several possible use cases: virtually trying on clothing in the comfort of one’s own home; testing out the look and fit of furniture at home; and potentially enabling people in different locations to go shopping together. The free augmented reality app KabaQ, released in 2017, can render compelling 3D models of food - which enable people to preview their meals on a tablet before ordering. AR may ultimately prove to be the easiest option for retailers seeking to bolster their services, given that the technology can be accessed on any smartphone. Virtual reality, on the other hand, still requires special equipment and so may be more suitable for other types of businesses - at least, for now. However, as the technology inevitably matures, virtual reality shopping will likely take off.

---

Related insight areas: [The Digital Economy](#), [Advanced Manufacturing and Production](#), [Fourth Industrial Revolution](#), [Corporate Governance](#), [Real Estate](#), [Retail](#), [Consumer Goods and Lifestyle](#)





World Economic Forum

### Net zero means trusting partners you haven't met and technology that doesn't yet exist

18 January 2022

For many companies, the biggest net-zero challenge is the emissions generated by partners along the value chain. The trust firms have built with their partners will be key to tackling this issue. New partners with new ideas and approaches will also be needed – which will require a shift in mindset for many organisations. COP26 saw world leaders seeking new ways of saving lives, livelihoods and habitats from the climate emergency we all face. We can debate the success or otherwise of the agreements reached, but what is clear is that governments need business to play a central role in driving down emissions.



World Economic Forum

### How to address digital safety in the metaverse

14 January 2022

With digital risks already being high, especially for vulnerable groups, safety risks could be more prevalent in the metaverse. There are numerous ways such risks could be exacerbated in the metaverse. Unwanted contact could become more intrusive. The rise of virtual currencies is another challenge. Finding ways to incentivize better behaviors and reward positive interactions may need to become a bigger part of a safer digital future.



The Conversation

### Real estate in the metaverse is booming. Is it really such a crazy idea?

06 January 2022

The idea of spending thousands or even millions of dollars to buy fictitious “land” in a virtual world sounds, to be frank, absurd.



The New Yorker

### Money in the Metaverse

04 January 2022

Anna Wiener writes about the metaverse, and how the use of money is developing in a space that combines virtual reality, augmented reality, the Internet, entertainment experiences, gaming, and remote work.



Harvard Business Review

### How Brands Can Enter the Metaverse

03 January 2022

There are quite a few people who believe that the latest paradigm shift for the internet is already well underway: the metaverse, they say, is almost here.



The Conversation

### Six Big Digital Trends to Watch in 2022

01 January 2022

According to recent McKinsey research, 2021 was a year of transformation: people, corporations and society began to look ahead to influencing their futures rather than just surviving the present. It was the year that premature hopes for herd immunity, an end to pandemic lockdowns, and a return to normality were dashed at least for now. Aside from the great social media resignation, during which burnt-out gen z workers quit their jobs on tiktok and instagram, the rise of non fungible tokens (nfts), and the introduction of the metaverse, the world's space-going billionaires were as wealthy and productive in business and technology as ever. While it's hard to make accurate predictions in the unpredictable environment we've been experiencing over the last two years, the year ahead will bring many surprises.



Frontiers

### Editorial: Intelligence and Safety for Humanoid Robots: Design, Control, and Applications

20 December 2021

Humanoid robots attract growing research interests from different communities, both as tools for artificial intelligence research and neurocognitive interaction assessment and as enabling technology with high societal impacts as personal robots for health, education, and entertainment. These robots, modelled on the basis of the embodiment of neural systems in software and hardware devices, are characterized by a high number of degrees of freedom, complex end effectors and locomotion mechanisms on the hardware side.

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



London School of Economics and Political Science

### Investment in technology is not enough to guarantee e-participation in politics

24 January 2022

There have been a number of efforts to promote 'e-participation' in politics to give citizens a better voice in policymaking. Yet the success of these initiatives has varied substantially across the world. Pragati Rawat and John C. Morris argue that investment in technology alone is not enough for citizens to embrace these new avenues for ... Continued.



World Economic Forum

### 5 early insights for using digital public goods for development

20 January 2022

Digital public goods (DPGs) and digital public infrastructure (DPI) are an emerging agenda for digital cooperation. Current implementations of DPGs and DPI have yielded lessons that countries can adopt for their own success. DPGs are not meant to be blueprints but should be springboards for customized digital foundations per country context through a whole-of-society approach. Digital transformation is critical for accelerating the sustainable development goals (SDGs) and the UN has learned that digital public infrastructure (DPI) is becoming increasingly important to countries as they seek to establish their digital foundations. It allows basic functions essential for service delivery such as identification, data exchange, payments and more as countries explore the Web 3 agenda.

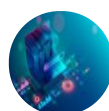


World Economic Forum

### 3 strategies to responsibly scale the manufacturing industry

19 January 2022

The Fourth Industrial Revolution is set to transform manufacturing operations, and leading manufacturers are revising their operations in ways that can serve as beacons for others. The grand challenges of the coming decades require deep, responsible industry transformation along entire value chains. By putting system failure at the centre of their transformation journey, leaders in manufacturing can unlock responsible and transformational growth. The Fourth Industrial Revolution is set to transform manufacturing operations, and leading manufacturers are revising their operations in ways that can serve as beacons for others. The grand challenges of the coming decades require deep, responsible industry transformation along entire value chains, however, including the creation of quality jobs, and environmental sustainability.



VoxEU

### Digitalisation and the future of banking

19 January 2022

New technologies are changing how banks produce and provide financial services. These changes have implications for traditional banks, creating novel sources of systemic risk which could in turn pose regulatory and policy challenges. This column introduces a new report by the Advisory Scientific Committee of the European Systemic Risk Board that discusses the impact that digitalisation may have on the structure of the European banking system. Based on three scenarios for the future development of European banking, the authors derive an array of macroprudential policy recommendations.

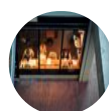


United Nations

### Online Global Dialogue on Digital Inclusion for All

14 January 2022

Digital divide still persists between more and less connected countries, communities, and people. Enabling all the world's people to access and use digital technologies (the Internet including mobile technologies) – and closing digital divides – remains a challenge that needs to be addressed if the world community is to achieve the United Nations Sustainable Development Goals (SDGs) by 2030. Building on the outcome of the meeting UNDESA's Division for Inclusive Social Development, in partnership with ITU, is organizing an online global dialogue on "Digital Inclusion for All". The event gathers high-level technical experts, as well as representatives of Governments, civil society, academic institutions, and the private sector to discuss the urgency of addressing digital inclusion for all.



World Economic Forum

### 4 ways to promote workforce equality in the new digital economy

13 January 2022

The COVID-19 pandemic and the rise of automation have increased the significance of the new digital economy, impacting both the supply of and demand for jobs globally. Governments, businesses and higher education institutions must co-operate to build more equality into the workforce as it adapts to suit the new digital economy. Many organisations are partnering on technology-based solutions and moving from ideas to action to train and upskill employees in this new era. The combined forces of automation and the pandemic have profoundly reshaped the labour market, displacing millions of workers, disrupting local economies, and worsening social inequities worldwide. Today's workplace requires modern skills and workers are looking for well-paying careers with mobility and remote work potential.

# Using ESG to Measure Success

---

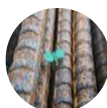
## Environmental, Social and Governance performance is not captured in quarterly earnings reports

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 50 companies have so far adopted 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: [Future of the Environment](#), [Institutional Investors](#), [Small and Medium Sized Enterprises](#), [Air Pollution](#), [Gender Inequality](#), [Corporate Governance](#), [Green New Deals](#), [Workforce and Employment](#), [Banking and Capital Markets](#), [Economic Progress](#)



LSE Business Review

### For organisations that tackle grand societal challenges, hope can be a double-edged sword

25 January 2022

Non-profit organisations, medical institutions, think tanks, and companies' corporate social responsibility teams many times attempt to tackle big challenges such as climate change, social inequity, and finding the cure for illnesses. In these situations, emotions are likely to mount when setbacks are encountered. Katina Sawyer and Judith Clair write that propagating hopeful thoughts and behaviours may ... Continued.



Harvard Business School Working Knowledge

### How Footwear Startup Allbirds is Decarbonizing Fashion

25 January 2022

In 2021, the footwear startup Allbirds was extending its product range into apparel and expanding beyond its online store to open more retail stores around the world. It was also freely sharing its know-how and material innovations with its competitors to try to scale its efforts to decarbonize fashion, by substituting natural materials for conventional petroleum-based materials and leather. But the company also had to find ways to remain differentiated, based on design and comfort. Professor Mike Toffel and Allbirds co-founder and CEO Joey Zwillinger discuss the growing environmental impact of the fashion industry and how the company managed the tension between advancing its environmental mission and staying ahead of competitors in the case, Allbirds: Decarbonizing Fashion.



LSE Business Review

### The morality of business and the risk of a dead planet

18 January 2022

The Friedmanite view on business still reigns supreme. But who deals with the negative externalities of doing business? Is a car company liable for the CO<sub>2</sub> emissions it enables? Is a consumer goods company responsible for the tropical forest farmers cut down to meet the multinational's demand? Is a financial company liable for the wealth inequality ... Continued.



London School of Economics and Political Science

### Corporations can't afford to stop donations to candidates, even those who still support Trump.

17 January 2022

After the January 6, 2021 US Capitol insurrection, many companies stopped their donations to candidates who supported President Trump and other enablers of the attack. Melissa M. Smith writes that the need for effective lobbying by these companies means that these donations were only paused. As we head into a midterm election year, and with campaign finance reform still mostly [...].



Eco-Business

### Steel industry: the decarbonisation imperative

12 January 2022

As days pass, there is increased evidence and response to GHG emissions and global warming leading to climate change. The Paris Agreement, 2015, has set the framework for a global response to climate change among world leaders to strive for keeping atmospheric temperature increase well below 2 °C and to pursue efforts to limit it to 1.5 °C. The 194 national governments and the European Union have signed the agreement which include some of the world's biggest polluting industries. Every manufacturing sector is exploring ways and means to reduce the carbon footprint of their operations. The steel industry, the backbone of all infrastructural developments, is tipped to play a major role in the above decarbonization agenda.



Eco-Business

### Plastic to go? All eyes on world's first compulsory deposit return scheme for takeaway cups in South Korea

11 January 2022

Details on the legally-binding policy, set for a June launch this year, are scant. Insiders familiar with its workings are worried that a less-than-ideal cup recovery rate will hamper a larger movement towards a circular economy.

# Corporate Risk Management

---

## For boards, the volatility of risk scenarios is only increasing

Every organization is confronted with some type of risk - operational, financial, technological, environmental, regulatory - which can have devastating consequences. Effective corporate governance requires continuous and systematic management of all types of risk, both current and anticipated. First, risks must be prioritized, and here the board of directors can play a key role by deciding in what priority they should be addressed, what is to be deemed simply unacceptable, and how they should be addressed from a structural perspective. For example, evidence gathered from the 2007 global financial meltdown indicates that banks with boards that had identified a need to establish a separate risk management committee managed the crisis better than those with integrated committees. The benefits of this type of separation have become only more evident as fiduciary duties have come to include oversight of a broad range of matters, including compliance with international accounting rules and stability measures that require banks to set aside capital in case of potential losses. Implementing a robust risk management system requires the integration of different parts of an organization, including the board's risk committee, internal auditing, finance, legal, and operations.

Increasingly complex and rapidly changing economic, environmental, social, and technological conditions have multiplied potential risk scenarios. Worsening climate change, geopolitical tensions, trade wars, and social upheaval like the protests that spread in Hong Kong in 2019 require corporate governance that is proactive when it comes to identifying risks and addressing them. Determining an appropriate board structure and approach to risk management will depend upon both a company's industry and stage of its life cycle; risk exposure is very different for financial institutions than it is for petrochemical firms. Even within the financial sector, different approaches are required - from insurers exposed to extreme weather events related to climate change, to retail banks making loans to small businesses during volatile periods. Organizations are dealing with complexity and litigiousness like never before, forcing their boards to assess current and past organizational exposure. Still, there are some strategic advantages to taking risks; after all, achieving sustained growth requires some degree of risk-taking. Incorporating risk management into corporate strategy is therefore crucial.

---

Related insight areas: [Illicit Economy](#), [Cybersecurity](#), [International Security](#), [Financial and Monetary Systems](#), [Development Finance](#), [Climate Change](#), [Corruption](#), [Risk and Resilience](#), [Civic Participation](#), [Insurance](#), [Justice and Law](#), [Banking and Capital Markets](#)





### Australian Institute of International Affairs The World's Oldest Democracy Debates How It Functions

19 January 2022

President Biden's speech to Atlanta last week saw a renewed focus on protecting the "heart and soul" of American democracy – voting rights. What does this strategy reveal about Biden's plans for 2022?.



### World Economic Forum Stakeholder Capitalism - EP.5 | Stakeholder Capitalism at Work | World Economic Forum

13 January 2022

In this concluding episode we ask how can the idea of 'stakeholder capitalism' work in the real world. Joining hosts Peter Vanham and Natalie Pearce are: Emily Bayley, project lead of the World Economic Forum's ESG Initiative Jonas Prising, CEO of Manpower Group Geraldine Matchett, CFO and co-CEO of Royal DSM .



### London School of Economics and Political Science Senate opposition means Democrats will struggle to pass voting rights bills.

10 January 2022

Democrats have begun 2022 with a renewed effort to pass voting rights legislation. And while President Joe Biden and senior Senate Democrats have been pushing for two key voting rights bills and changes to Senate rules to enable them to pass, they continue to be blocked by Republicans. Julie Norman discusses the context and content of the bills, the options [...].



### World Economic Forum Stakeholder Capitalism | EP3 - Planet vs. Profit: Can Growth be Green?

06 January 2022

While the value of big tech companies has soared, what problems has that created? A lack of market competition and the impact that has on economies; data protection concerns; falling public trust. Is big tech too big, and what should be done? .



### Social Europe Tax justice—a crucial tool to advance human rights

10 December 2021

Magdalena Sepúlveda is executive director of the Global Initiative for Economic, Social and Cultural Rights and a member of the Independent Commission on International Corporate Tax Reform (ICRICT). From 2008 to 2014 she was United Nations rapporteur on extreme poverty and human rights.



### VoxEU Socially responsible investors amplify the positive externalities of regulatory enforcement

08 December 2021

Whether socially responsible investors have any impact on the environmental, social, and governance policies of portfolio firms has become a much-debated issue. This column shows that firms reduce emissions at their local plants following enforcement actions by the US Environmental Protection Agency against nearby plants of firms operating in the same market, and that the emissions reduction is twice as large if a nearby 'socially responsible' mutual fund owns shares of the parent firm of the peer plants. The threat of exit by these funds appears to have real consequences for how the local plants respond to the enforcement action.



### Project Syndicate Building a One-Earth Balance Sheet

30 November 2021

While all politics is local, it is shaped by a fast-changing global landscape. Only a one-Earth balance sheet – a bottom-up reset of how we measure global wealth – can ensure that countries work toward a better future for all.

# Cyber Risk Governance

---

**The number of corporate boards with a dedicated cybersecurity committee is expected to increase sharply by 2025**

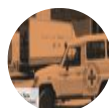
Governance relies on risk-based decision making as a fundamental means to both drive the efficient use of resources, and to improve confidence in an organization's ability to achieve strategic objectives. All organizations rely on their employees' ability to navigate a world of growing uncertainty, and to dodge threats to their ability to achieve its collective goals.

Unfortunately, complex organizations can easily be overwhelmed; each risk demands a distinct analysis and potential investment of additional resources, to respond in ways that adequately reduce exposure. A good governance structure will provide a framework that enables the right managers to make the right decisions, which will help prioritize and allocate resources as needed. All risks don't necessarily require analytic rigour or subsequent investment - immediate hazards like icy sidewalks or commonplace cyber incidents like phishing emails can be addressed at lower management levels. That is not the case for strategic risks like global pandemics or advanced, persistent cyber threats that have the potential to disrupt or damage an organization indefinitely. A structure that effectively prioritizes and adjudicates risks to the right organizational level is required.

Responsibility for risks is typically apportioned in accordance with an organization's willingness to accept them, also called "risk appetite." A risk-appetite statement can be used to direct employees and clarify who has the necessary level of authority to decide how to respond to any given situation. The National Institute of Standards and Technology Special Publication 800-37 addresses the divvying up of risk with a three-tier structure including the organization, the mission, and the system. Meanwhile the ISO 27000 series of standards provides recommendations for the use of policy and organizational structure to reduce risk, and the COSO framework connects governance to culture by highlighting the importance of board oversight, culture requirements, core values, and human resource development. Vigorous, board-level engagement in risk governance is essential for success. Thankfully, boards are increasingly recognizing the importance of cyber risk governance; a study published by Ernst and Young in 2020 found that 81% of board members categorize cybersecurity as "highly relevant," and Gartner researchers predict that 40% of all boards will have a dedicated cybersecurity committee by the year 2025 (currently, just 10% of boards have one).

---

Related insight areas: [Banking and Capital Markets](#), [Fourth Industrial Revolution](#), [Internet Governance](#), [The Digital Economy](#), [Workforce and Employment](#), [Corporate Governance](#), [Agile Governance](#), [Leadership](#), [Risk and Resilience](#), [Illicit Economy](#)



The New Humanitarian

## Comment: Red Cross data hack

24 January 2022

The fallout is just beginning after what data privacy researchers say could be the biggest-ever breach of humanitarian data. The New Humanitarian spoke to Zara Rahman, acting executive director of The Engine Room, a tech and data non-profit, to find out why this huge hack at the International Committee of the Red Cross (ICRC) on 19 January shouldn't come as a surprise, and what the aid sector needs to do to protect itself — and vulnerable people. For Rahman, "it's in many ways the worst-case scenario we've been warning about for years now", but what should perhaps concern us more, she warns, is that it happened at the ICRC, a place considered to have one of the best digital protection practices in the sector. Watch this short video for her full comment on the hack. The ICRC said the cyber-attack compromised the data of more than 515,000 of the world's most vulnerable — including people uprooted by conflict and disasters.



World Economic Forum

## What you need to know about cybersecurity in 2022

18 January 2022

The COVID-19 pandemic has expedited the use of digital tools in business and the home. These advances in digitalization have led to increasingly frequent, costly and damaging cyber incidents. The World Economic Forum's Global Cybersecurity Outlook 2022 presents critical findings from 120 global cyber leaders on how to shift from cybersecurity to cyber resilience. Digitalization has increased during the COVID-19 pandemic. The global use of services such as video conferencing has grown tenfold .



Observer Research Foundation

## The near future of international law in cyberspace: Contentions and realities

15 January 2022

This piece is part of the series, Technology and Governance: Competing Interests Both global leaders and international legal experts agree to the position that existing international law applies to cyber operations. Additionally, case law and advisory opinions derived from the International Court of Justice have proved useful as precedents determining the future debates on the matter. However, not every single detail of how international law and its specific bodies apply to cyber operations is figured out today. As Michael Schmitt, the director of the Tallinn Manual project has put it in a feature article , "the devil is in the details".



World Economic Forum

## Global Risks Report 2022 Press Conference

11 January 2022

At the virtual press conference on the Global Risks Report 2022, speakers share key findings and insights from the report.



World Economic Forum

## How to make organizations cyber resilient in the digital frontier

05 January 2022

Cyber crimes are set to cost governments and organizations \$10 trillion by 2025. As new cyber threats emerge, boards of directors must develop cyber risk plans to ensure their organizations have greater cyber resilience. Cyber risk strategies should align to financial analysis using clear and understandable language. In their 2020 Board of Directors Survey, Gartner, Inc. found that directors see cybersecurity as the second-greatest threat to their businesses, right after regulatory compliance risks. Cyber crime already cost the world at least \$6 trillion in 2021 and could lead to over \$10 trillion worth of annual damages by 2025 .



Social Europe

## Online surveillance thrives when fear takes over

05 January 2022

European law-enforcement agencies have been pushing to end encryption and survey everyone's online communications. LuckyStep/shutterstock.com In 2020, the European Commission put forward temporary legislation on 'chat control'. This sought to legalise the scanning of everyone's private online communications — every message, email or chat. Successor to a long line of attacks from governments on the encryption of online communications, it raised concerns among privacy activists with its potential to spark a new such 'cryptowar' .



CoinDesk

## Kosovo Moves to Ban Crypto Mining in Face of Energy Crisis

04 January 2022

Artane Rizvanolli, the eastern European country's economy minister, acted on the advice of the Technical Committee for Emergency Measures in Energy Supply on Dec. 31 as part of a set of relief measures. The government declared a state of emergency in December lasting for 60 days, allowing it to allocate more money for energy imports and introduce power cuts, according to a report by the Gazeta Express. .

# Circular Business Models

---

## Opportunities abound to reimagine consumption with products designed for sharing, durability, and reuse

Much of the material used for production ends up being wasted, and a lot of the value we attempt to create in the process is forfeited. Moving towards a more circular economy entails a radical shift away from this dynamic - and large companies can play a significant role by using their scale to drive circularity into the mainstream. Successful circular economy businesses and initiatives can inspire well-known brands to follow suit, and while models supporting the shift to a circular economy will vary, the key consideration is always whether a business is creating value through extraction and consumption, or through regeneration and restoration. Extending an item's lifespan can be achieved through designing for durability, though in order to truly unlock greater value sustainable design strategies should be deployed in combination with innovation related to maintenance, repair, the standardization of parts, disassembly, refurbishment, and re-manufacturing. Business models that emphasize access over ownership, and selling performance rather than the product itself, will likely be able to keep things in use longer - even as they are used more intensively.

Manufacturers can increase profitability through greater durability, reusability, and energy and water efficiency - and therefore have an incentive to use better-designed products. Customers can also benefit from greater circularity, as paying for a service instead of acquiring an asset means they can enjoy benefits without bearing responsibility for maintenance, repair, and disposal - while accessing products that might have otherwise been out of reach. While cars can be shared among multiple users on peer-to-peer platforms (such as Zipcar or Car2go), power tools can be made available by the hour from local libraries, and clothing can be rented as needed (the New York Public Library lent out professional attire intended use at job interviews in 2018, and the LENA fashion library in Amsterdam operates a membership-based clothing lending service). Ultimately, whereas companies used to only sell cars, they are now selling mobility, and while they once just sold clothes, they can now provide access. By actively rethinking consumption, businesses can be successfully reoriented for the circular economy, and help preserve the value in social and ecological systems.

---

Related insight areas: [Corporate Governance](#), [Diversity and Inclusion](#), [Mobility](#), [Aviation](#), [Travel and Tourism](#), [Innovation](#), [Fourth Industrial Revolution](#), [Retail](#), [Consumer Goods and Lifestyle](#), [Behavioural Sciences](#), [Entrepreneurship](#), [Cities and Urbanization](#)



**World Economic Forum**  
**Renewing a Global Social Contract |**  
**Davos Agenda 2022**

18 January 2022

While governments have rolled out some of the largest social spending programmes ever seen, the pandemic's aftermath, technological change and the green transition risk further eroding skills, jobs and social cohesion. What new policies and business actions are needed to create social mobility, good jobs and an equitable society for all? .



**World Economic Forum**  
**Special Address by Kishida Fumio,**  
**Prime Minister of Japan | Davos**  
**Agenda 2022**

18 January 2022

Special Address by Kishida Fumio, Prime Minister of Japan with Klaus Schwab. .



**Social Europe**  
**'Leaving no one behind': putting words**  
**into actions**

13 January 2022

Mehtap Akgüç is senior researcher in the economic, employment and social policies unit of the European Trade Union Institute and an affiliate of the Institute of Labor Economics, focusing on labour markets and wage inequalities, migration and mobility, the green and circular economy and economic development. Kalina Arabadjieva is a researcher at the European Trade Union Institute, with a PhD in labour law. She is working on gender equality and the just transition. Béla Galgóczi is senior researcher for the European Trade Union Institute and author of Towards a Just Transition: Coal, Cars and the World of Work (ETUI, 2019).



**Social Europe**  
**Germany's reliance on its healthcare**  
**'brown angels'**

05 January 2022

The recruitment of nurses to meet shortages in the global north has side-effects—not all good—on their countries of origin. Unlike most of their professional peers, these Kerala nurses were able to find work at a clinic in Kerala (EstrellaBuena/shutterstock.com) There's a line in Mira Nair's film Monsoon Wedding : 'Computer engineers are India's biggest export!' Maybe it should say nurses instead. To address the severe shortage of nursing staff in Germany, in December the federal employment agency, die Bundesagentur für Arbeit (BA), signed an agreement with the state of Kerala on their recruitment. The agreement, based on the 2020 Skilled Immigration Act , is the second of its kind Germany has signed with a partner beyond the European Union.



**MIT Sloan Management Review**  
**Break Out to Open Innovation**

07 December 2021

Mercedes-Benz AG produces over 2 million passenger cars annually for a global market in the throes of transformation. Automakers are meeting new demands for electrification and connectivity, new competitors are arising, and customers have new expectations, such as the desire for sustainable mobility. All of these trends are driving the need to speed innovation in every facet of the automotive industry.



**GreenBiz**  
**What battery swapping could mean for**  
**corporate fleets**

07 December 2021

One of the biggest challenges to electrifying a fleet of vehicles — aside from adjusting to the range and limitations of the vehicles themselves — is building up the expensive charging infrastructure to support it. A California startup is making a pitch for a solution that almost negates the need for charging infrastructure entirely: battery swapping. "The idea is very, very simple, which is instead of trying to move energy in energy form ... you move energy physically," said Khaled Hassounah, co-founder and CEO of Ample.



**World Economic Forum**  
**Innovating for Sustainability: The**  
**Entrepreneurs Who Could Save the**  
**World | Sustainable Summit 2021**

01 December 2021

With digitization helping emerging economies make up 57% of global trade by 2030, innovation and entrepreneurship remain critical in ensuring strong development action. Speakers: Allon Raiz, Kristin Hughes, Maren Hjorth Bauer, Lasse Lindqvist, Jennifer Blanke, Tom Birbeck, Job Oyeibisi, Nivedha RM, Natasha Franck, William Kwende.

# Understanding Climate Risks

---

## Extreme weather, rising sea levels, and food and water scarcity are becoming a reality

All ten of the hottest years on record have occurred since 2005. The global average temperature is now about 1°C above the pre-industrial average, and increasing at a rate of about 0.2°C per decade. This warming is largely the result of human activity. Carbon dioxide released by burning fossil fuels, and through agricultural activity like farming, has raised the pre-industrial concentration of carbon dioxide in the atmosphere by about one-third to more than 400 parts per million - which has in turn intensified the trapping of heat. Global warming is causing sea levels to rise and is changing precipitation patterns, with increased rainfall in some regions and more extreme drought in others. The world experienced a staggering number of climate-related disasters in 2020 - causing damage from hurricanes, wildfires, droughts, and floods that resulted in financial losses totalling more than \$200 billion, according to the German reinsurer Munich Re. The US National Climate Assessment issued in late 2018 projected yearly related losses of \$300 billion in the US alone by the end of this century.

The Paris Agreement on climate change aims to limit global average temperature rise to well below 2°C above pre-industrial levels. However, a 2018 report published by the Intergovernmental Panel on Climate Change vividly illustrated the need to limit warming to no more than 1.5°C; many ocean ecosystems, including the majority of the world's warm water coral reefs, are likely to disappear if warming exceeds this level. The average global rise in sea level - which is projected to be about half a metre by 2100, if warming reaches 2°C - could be reduced by 20% by hitting the 1.5°C target, thereby protecting an estimated 10 million vulnerable people. A slower temperature rise would also help affected regions better adapt to climate change. In order to meet the 1.5°C target, however, countries must go well beyond their initial Paris Agreement pledges and commit to net-zero emissions by the year 2050. Achieving this will require far-reaching changes to many aspects of modern society as we know it, but would also help create a more sustainable, equitable world.

---

Related insight areas: [Water](#), [Antarctica](#), [Future of the Environment](#), [Air Pollution](#), [The Ocean](#), [Climate Indicators](#), [Corporate Governance](#), [Peace and Resilience](#), [Global Governance](#), [Sustainable Development](#), [Future of Food](#), [Forests](#), [Risk and Resilience](#)





RAND Corporation

## Lay Detection of Unusual Patterns in the Frequency of Hurricanes

25 January 2022

An increase in the severity of extreme weather is arguably one of the most important consequences of climate change with immediate and potentially devastating impacts. Recent events, like Hurricane Harvey, stimulated public discourse surrounding the role of climate change in amplifying, or otherwise modifying, the patterns of such events. Within the scientific community, recent years have witnessed considerable progress on "climate attribution"—the use of statistical techniques to assess the probability that climate change is influencing the character of some extreme weather events. Using a novel application of signal detection theory, this article assesses when, and to what extent, laypeople attribute changes in hurricanes to climate change and whether and how certain characteristics predict this decision.



Center for Global Development

## Economics & Marginalia: January 21, 2022

21 January 2022

I once saw Meat Loaf speak at the Oxford Union (an institution and building I otherwise spent a great deal of time ignoring; considering some of the characters it has belched out into public life in the last couple of decades I made a wise choice). He was fantastic: full of good stories (ranging from buying a whole sturgeon to spite a snooty shopkeeper to picking up a hitchhiker who turned out to be Charles Manson), wit and a healthy sense of the absurdity of the occasion, which tracks well with a man whose most famous songs include "I'd lie for you (and that's the truth)", and "I'd do anything for love (but I won't do that)"—apparently, he is the only writer in the world with more well-worn parentheses keys than me. Mr. Loaf died yesterday, and the world is a little bit less fun as a result. As ever, we take solace in economics.



RAND Corporation

## A Simple Strategy to Communicate About Climate Attribution

21 January 2022

Hurricane Harvey and other recent weather extremes stimulated extensive public discourse about the role of anthropogenic climate change in amplifying, or otherwise modifying, such events. In tandem, the scientific community has made considerable progress on statistical "climate attribution." However, explaining these statistical methods to the public has posed challenges. Using appropriately designed "spinner boards," we find that even members of the general public who do not understand the difference between weather and climate are readily able to understand basic concepts of attribution and explain those concepts to others. This includes both understanding and explaining the way in which the probability of an extreme weather event may increase as a result of climate change and explaining how the intensity of hurricanes can be increased.



World Economic Forum

## Predictions 2022: CEOs and top leaders share tactics that will speed the net zero transition

20 January 2022

Tackling climate change will require new thinking and approaches. We'll need a range of innovative approaches and solutions that can scale impact to make a fossil-free future a reality quickly. Leaders from top companies explore solutions and approaches that will help drive the net zero transition, including some that might be surprising. Humanity's future on planet Earth depends on protecting and restoring nature. Leaders must think innovatively to create solutions that can scale and can effectively tackle our climate goals.



World Economic Forum

## The Udokan project: How sustainable mining can feed clean tech

19 January 2022

A greener global energy system will rely on metals like copper. Copper could face a severed supply problem in the future. Sustainable production of copper can be achieved through a multi-layered and considered strategy. Operating in a low-carbon economy means new technology with fewer emissions. Even tech requires materials that still need to be mined.

# New Economic Thinking

---

## Economic growth has made life better for millions, but trouble is on the horizon

While there are significant disparities in life expectancy in various parts of the world, no country currently has a life-expectancy rate lower than the highest rate as of 1800. Other signs of progress: the global population living in absolute poverty has declined from 82% to just 9% during the past century, while the number of functioning democracies has increased to 123 from 16, and the global literacy rate has jumped to 85% from 32%. Economic growth has fuelled these improvements, but lately there have been a number of troubling signs. According to the Lancet Commission on pollution and health, an initiative started by the medical journal The Lancet, the Global Alliance on Health and Pollution, and the Icahn School of Medicine at Mount Sinai, environmental pollution has reduced annual global economic output by 6.2%, and caused roughly 9 million premature deaths. Workers in some cities now spend an average of one to two work weeks per year stuck in traffic jams, wealth inequality is increasing, and personal, corporate, and sovereign debt levels are reaching new highs.

The global geopolitical landscape has shifted to a multi-conceptual framework - where traditional, singular ideas about how best to look after world affairs have splintered into multiple approaches and conflicting agendas. The increased prevalence of protectionist trade policies, and a broad decline of commitments to rules-based multilateralism are upending the global order established after World War II. As the institutions at the core of that order, such as the World Trade Organization (ongoing US-China trade conflict crippled the WTO in 2019 due to disagreements over its appellate body) lose their authority, new institutions are needed to fill the gaps. The innovation fuelling the Fourth Industrial Revolution, in addition to threatening to create new social divisions, is also raising questions about traditional economic assumptions related to productivity, work, education, and the means to adequately gauge our progress. As a result, we must explore ways to update our economic models and systems, in order to ensure they can deliver positive outcomes for the largest possible number of people for the foreseeable future.

---

Related insight areas: [Circular Economy](#), [The Digital Economy](#), [Fourth Industrial Revolution](#), [Science](#), [Geopolitics](#), [Taxes](#), [Advanced Manufacturing and Production](#), [Financial and Monetary Systems](#), [Economic Progress](#), [Trade and Investment](#)



Center for Global Development

## Country Platforms and Delivery of Global Public Goods

20 January 2022

This paper discusses three potential requirements for country platforms to facilitate effective delivery of GPGs. We propose that existing country platforms be repurposed to coordinate the contribution of domestic and external stakeholders to GPG delivery efforts at the country level. For this proposed approach to be successful, an explicit link must be introduced between country-level efforts and global initiatives to provide GPGs.

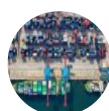


World Economic Forum

## Fast-Tracking Circular Solutions for Net-Zero Industries | Sustainable Development Summit 2021

09 January 2022

To reach net-zero emissions from heavy industry sectors by 2050, new approaches and solutions will need to be deployed at scale across supply and demand-side industries. This session explores collaboration models, policies and pathways that hold the greatest promise to fast-track circular economy solutions and accelerate the race to net zero. .

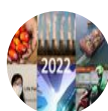


World Economic Forum

## How green corridors can enable the transition to zero-emission shipping

05 January 2022

Zero-emission fuels and vessels will need to be deployed at scale over the next decade to meet emissions targets by 2050. Green corridors offer a solution to scale pilots and demonstrations for sustainable shipping into industry-wide solutions. We test these hypotheses in The Next Wave: Green Corridors , by examining two potential trade routes: Australia-Japan and Asia-Europe. The decarbonization of shipping – responsible for 3% of global greenhouse gas (GHG) emissions but more than 80% of global trade – is rapidly moving up the agenda, for policymakers and industry alike.



Eco-Business

## From food to finance: expert views on sustainability risks and predictions for 2022

05 January 2022

For the past decade, financial returns have been strongly supported by central banks flooding markets with liquidity. This is unsustainable as it relates to the financial system itself, and it will be tested in 2022 as inflation picks up and rates rise. There are implications for sustainable finance, which has boomed over the same period and given rise to widespread greenwashing. As money becomes scarcer, investors will be more discerning, and companies will have to demonstrate real credentials and sustainable impact when trying to attract money under the sustainability banner.



Project Syndicate

## Is Climate Finance the Next Bubble?

04 January 2022

While the conventional wisdom is that the next financial crash will come from the collapse of the cryptocurrency bubble, climate finance may pose a more serious risk. Mounting evidence suggests that green lending is displaying all the pathologies associated with financial manias.



New Statesman

## Protests, nature protection and plant-based meat: ten climate and environment predictions for 2022

03 January 2022

Covid was supposed to be the moment the world changed. Shows of solidarity among neighbours and the enjoyment of small pleasures and local parks during the first lockdown were all heralded as encouraging signs the world was ready for a slower, more sustainable pace of life. Travel stopped, emissions dropped and people appreciated the reduced noise and pollution. Fast forward to 2022, however, and this vision is increasingly blurry. As people, hopefully, escape from the shackles of the pandemic and governments have to make tough decisions about how to spend depleted coffers and boost the economy, it is unlikely this will be the year that humanity gets to grips with the climate and nature crises.

## Innovative approaches to data stewardship manage trade-offs while creating inclusive value

Increasing digital connectivity has led to unprecedented volumes of online data. According to IDC, the “global datasphere” will grow from 33 zettabytes in 2018 to 175 zettabytes by 2025 - when three-quarters of the world's population will interact with data every day, nearly half of all data will be available to the public via the cloud, and nearly a third of it will be provided in real-time to aid decision making.

Companies and governments are increasingly using data to try to add value by delivering personalized healthcare, or by building smarter cities and public services. Data has been a particularly useful public health tool during the COVID-19 crisis; at least 25 countries have introduced contact-tracing applications meant to curb its spread. As data increasingly becomes a source of economic value, there is mounting pressure to share and use it in ways that benefit everyone. This means respecting personal freedoms like privacy and security, and actively preventing the use of data to perpetrate human rights abuses or to discriminate. Governments have introduced rules to enforce responsible data use, such as the European Union's General Data Protection Regulation - which aims to give internet users more control over their personal data.

With most data-driven innovation and services coming out of the private sector, businesses play an increasingly important role in demonstrating responsible data stewardship. New mechanisms - including business models, technologies, and practices - are being developed in isolated pockets across various industries. Business leadership is essential for unlocking data's transformative value in a way that builds trust and relieves pressure on policy-makers to intensively regulate industries. Efforts such as the Sovrin ledger, designed as a public repository for digital identities, and Massachusetts Institute of Technology's Solid project strive to embed new internet principles, rules, and protocols that give people more control over their personal data online. Meanwhile innovative legal and collaborative structures are being tested to streamline data sharing, such as data-trade marketplaces. Data is critical for national security and a nation's competitiveness; while data flows across borders are necessary for global trade, governments are increasingly trying to reduce their dependence on foreign firms by asserting data sovereignty. Examples of this include China's data localization rules, and the GAIA-X data sovereignty effort spearheaded in Europe by Germany and France. The harmonization and coordination of governments' policy frameworks will be key for balancing national goals with the benefits of international innovation.

Priorities for collaboration:

- Identify and promote technology and policy innovation in trusted data sharing and use.

- Mobilize business stewardship and leadership on data.

- Coordinate global cooperation on cross-border data flows.

---

Related insight areas: [Public Finance and Social Protection](#), [Digital Identity](#), [Precision Medicine](#), [Geo-economics](#), [China](#), [Data Science](#), [European Union](#), [Human Rights](#), [Health and Healthcare](#), [COVID-19](#), [Trade and Investment](#)



Center for Global Development

### Space and Development: Preparing for Affordable Space-Based Telecommunications

19 January 2022

A new generation of satellites are about to make internet access more inclusive and resilient, but are governments ready to engage? Executive summary Space-based communication technology will make access to “last mile” broadband significantly cheaper, if not yet affordable, for citizens in remote, sparsely populated, dangerous, or otherwise difficult locations. Space-based communications provide unique additive value for areas without terrestrial infrastructure. This includes communications at sea and during emergencies related to disasters or conflict. Traditional global telecommunications infrastructure will continue to have far more capacity, (2,000 terabits per second (Tbps)), than projected space-based infrastructure capacity, (estimated at 50 Tbps by 2026).



Greater Manchester Combined Authority

### CASE STUDY: Helping Wythenshawe residents develop their digital skills

17 January 2022

Wythenshawe Community Housing Group’s Digital Inclusion Officer runs free training support sessions at several locations around Wythenshawe. These sessions include drop-in computer classes, basic digital skills training and sessions supporting residents to complete benefits forms, Universal Credit and Visa applications online. Stories and experience of some beneficiaries are presented.



McGill University

### Can Wikipedia Fix Its Information Inequality Problem?

13 January 2022

Wikipedia has revolutionized the way that knowledge is produced and dramatically increased access to information. A closer look at the 300,000 active editors who contribute to Wikipedia’s millions of articles shows that they play a powerful role in shaping the world-wide information ecosystem, generating positive feedback loops that leave other topics in the dust, under-researched and unread. Their impact on the most visited educational resource on the planet affects us all.



Social Europe

### First agreement for platform workers in Spain

13 January 2022

Luz Rodríguez is professor of labour law at the University of Castilla-La Mancha. Her latest books are Plataformas Digitales y Mercado de Trabajo (2019) and Tecnología y Trabajo: el impacto de la revolución digital en los derechos laborales y la protección social (2021).



Social Europe

### Learning accounts—filling the training gaps

10 January 2022

David Kunst is a policy officer in the Directorate-General for Employment, Social Affairs and Inclusion of the European Commission. His work focuses on policies to support skills and employment. All views expressed are personal.

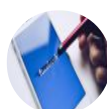


London School of Economics and Political Science

### Can competition law rein in Big Tech?

08 January 2022

Large technology companies such as Google, Facebook, Apple, and Amazon have a large impact on the economy and wider society, and that raises concerns on many fronts, ranging from data protection to the democratic will formation process. They also tend to become monopolies, which poses a challenge for competition law. Raphael Reims analyses the problems inherent in regulating Big Tech. Is competition [...].



LSE Business Review

### Can competition law rein in Big Tech?

05 January 2022

Large technology companies such as Google, Facebook, Apple, and Amazon have a large impact on the economy and wider society, and that raises concerns on many fronts, ranging from data protection to the democratic will formation process. They also tend to become monopolies, which poses a challenge for competition law. Raphael Reims analyses the problems inherent in ... Continued.

# The Digital Enterprise

---

## Becoming ‘digital at the core’ can potentially create more sustainable value

Millennials and Gen Z account for nearly half the global workforce, and are updating expectations for employers everywhere. Remote working is important to many millennials (who are now as old as 40), for example, and COVID-19’s social distancing requirements have accelerated what had been a gradual shift to both more remote working, and more digitally-enabled customer experiences. Companies will need to be able to accommodate this with digital solutions that maintain engagement, health, and well-being. In addition, as workforces become more distributed, and connected devices and data networks are increasingly used, ensuring security will become more challenging - necessitating the management of more significant vulnerabilities. Companies will generally need to be open and flexible, to proactively plan for cybersecurity risks, and to be willing to take responsibility for helping employees acquire new and necessary digital skills. Other reasons for aggressively pursuing a digital transformation predate the pandemic; according to the MIT Initiative on the Digital Economy, the “digerati,” or firms that excel both in digital intensity and transformation management capabilities, have been shown to be 26% more profitable than their peers.

In response, an estimated 87% of CEOs expect to see a change in their operating models within three years, according to research cited by Deloitte in 2019. Technology and data can help support demand forecasting, inventory stocking, tracking, and delivery. Amazon, for example, has used a shipping model meant to predict buying behaviour in order to have products on hand locally before they are ordered. As COVID-19 disrupted supply chains with lockdowns and border closures, many organizations looked for ways to bolster resilience and transparency, and many manufacturers turned to selling products through channels like Amazon. Increasingly, companies everywhere will make greater use of technologies such as blockchain, cloud computing, artificial intelligence, and robotics as part of efforts to build resilience - and Unilever and United Kingdom-based supermarket chain Sainsbury’s have already sought to use blockchain to increase the sustainability and transparency of their supply chains. While the pandemic has led to revenue losses in many industries, investing in digital solutions can be one means to help better manage costs during a difficult time.

---

Related insight areas: [Digital Communications](#), [The Digital Economy](#), [Internet of Things](#), [Innovation](#), [Blockchain](#), [Data Science](#), [Sustainable Development](#), [Fourth Industrial Revolution](#), [5G](#), [Cybersecurity](#), [Workforce and Employment](#), [Entrepreneurship](#), [COVID-19](#), [Education](#), [Skills and Learning](#), [Artificial Intelligence](#)



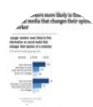


World Economic Forum

## Digital healthcare can be a catalyst for greater health equity

20 January 2022

The pandemic has accelerated the uptake of digital healthcare solutions. This shift to digitalization can be a powerful force in achieving health equity. To do so, we will need to rethink the fundamentals of healthcare delivery. The digital revolution was well underway even before COVID-19, but disruptive technology needs to be widely adopted before society adapts to it. It is only then that digital health solutions will ensure digital health access and truly advance health equity.



World Economic Forum

## Why adaptation strategies aren't only for governments

20 January 2022

'Adaptation' strategies are also valuable for the private sector, especially when taking into account its socially connected stakeholders. Organizations need to improve their ability to listen to, and understand, emerging social trends. The costs of adaptation can be shared through effective collaboration. Governments are increasingly being called on to not only prevent the worst consequences of climate change through mitigation strategies, but also to develop and implement adaptation strategies for how to best survive the impacts we can't avoid. In the United States, for example, 23 federal agencies recently revealed their adaptation plans for dealing with the changing climate.



German Institute for International and Security Affairs

## Diplomacy and Artificial Intelligence

20 January 2022

Reflections on Practical Assistance for Diplomatic Negotiations AI holds the promise of being able to analyse large amounts of data faster and more reliably than humans can. So is it also possible to use AI systems to analyse information relevant to diplomatic negotiations in a way that adds significant strategic value? We explore this question through two exploratory case studies. The first examines the negotiations for a German-Austrian customs union in 1929/30. Here we show how AI systems could be used to develop a spectrum of possible scenarios in an automated way for the purposes of strategy formation. The second case study looks at the negotiations on the so-called "cybercrime" resolution within the framework of the United Nations (UN).



World Economic Forum

## Technology Cooperation in the Fourth Industrial Revolution | Davos Agenda 2022

17 January 2022

The technologies of the Fourth Industrial Revolution have already led to transformative advances in numerous domains. How can technology stakeholders work together to balance innovation and responsibility to maximize the potential of emerging technologies for addressing global problems?



World Economic Forum

## New Nature Economy Report: Seizing Business Opportunities in China's Transition Towards a Nature-positive Economy

17 January 2022

China has an opportunity to achieve its economic and social ambitions and the vision of ecological civilization, while creating millions of sustainable jobs by 2030 if it transforms three systems at the heart of its economy, according to the latest report in the World Economic Forum's New Nature Economy Report series.

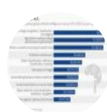


World Economic Forum

## We're failing at the ethics of AI. Here's how we make real impact

14 January 2022

The global COVID-19 crisis has acted as a world-wide accelerator for the rollout of artificial intelligence (AI) initiatives. The ethics and governance of AI systems are unclear. We need to advance in three main issues to make a real impact. The global COVID-19 crisis has acted as a world-wide accelerator for the rollout of AI initiatives. Technologies that would've taken place over five years have taken place over six months .



World Economic Forum

## Artificial intelligence: What the C-suite needs to know

12 January 2022

The C-suite needs to consider questions about Artificial Intelligence (AI) from many angles, ranging from its strategic implications to new business risks. Unlike previous technologies, AI has the ability to make increasingly complex decisions enabling new business opportunities, but with AI decision making also comes AI responsibility. Making responsible AI part of a business' operations requires the adoption of new practices and of appropriate AI governance. Explore the new toolkit here . Investments in artificial intelligence (AI) have grown in recent years and discussions are now shifting from how to create business value with AI to how to do so in a responsible and ethical way.

# References

---

## 1. Corporate Entrepreneurship

- Two ways corporates can support women entrepreneurs, World Economic Forum, [www.weforum.org](http://www.weforum.org)
- Who Are the 'Ecopreneurs' Restoring the Amazon? | Sustainable Development Impact Summit, World Economic Forum, [www.youtube.com](http://www.youtube.com)
- The 15-Minute City | Sustainable Development Summit 2021, World Economic Forum, [www.youtube.com](http://www.youtube.com)
- An Entrepreneur and a Swindler, Project Syndicate, [www.project-syndicate.org](http://www.project-syndicate.org)
- Scenarios in innovation pitches: boon or bane?, LSE Business Review, [blogs.lse.ac.uk](http://blogs.lse.ac.uk)
- ESG is coming to venture capital. Here's how startup founders can stay ahead of the curve, World Economic Forum, [www.weforum.org](http://www.weforum.org)
- Meet the Pioneers of Sustainable Fashion | Sustainable Development Summit 2021, World Economic Forum, [www.youtube.com](http://www.youtube.com)

## 2. Adaptive Leadership

- Special Address by Naftali Bennett, Prime Minister of Israel | Davos Agenda 2022, World Economic Forum, [www.youtube.com](http://www.youtube.com)
- Special Address by António Guterres, Secretary-General, United Nations | Davos Agenda 2022, World Economic Forum, [www.youtube.com](http://www.youtube.com)
- Special Address by Narendra Modi, Prime Minister of India | Davos Agenda 2022, World Economic Forum, [www.youtube.com](http://www.youtube.com)
- Special Address by Xi Jinping, President of the People's Republic of China | Davos Agenda 2022, World Economic Forum, [www.youtube.com](http://www.youtube.com)
- More than Economists, Project Syndicate, [www.project-syndicate.org](http://www.project-syndicate.org)
- The erasure of Vanessa Nakate shows why Africa needs a voice in climate debates, London School of Economics and Political Science, [blogs.lse.ac.uk](http://blogs.lse.ac.uk)
- As COP26 unfolds, we need to demand more of our leaders, World Economic Forum, [www.weforum.org](http://www.weforum.org)

## 3. Defining Corporate Purpose

- Public support for a universal basic income is dependent on the way it is funded, London School of Economics and Political Science, [blogs.lse.ac.uk](http://blogs.lse.ac.uk)
- How Risk-shifting by Underperforming Funds Distorts Stock Prices, Wharton School of the University of Pennsylvania - Knowledge@Wharton, [knowledge.wharton.upenn.edu](http://knowledge.wharton.upenn.edu)
- Here's how to choose the right fund manager for the future, World Economic Forum, [www.weforum.org](http://www.weforum.org)
- Capital Is Not a Strategy, Project Syndicate, [www.project-syndicate.org](http://www.project-syndicate.org)
- Beyond Business: Humanizing ESG, Wharton School of the University of Pennsylvania - Knowledge@Wharton, [knowledge.wharton.upenn.edu](http://knowledge.wharton.upenn.edu)
- The Popular Stock Metric That Can Lead Investors Astray, Harvard Business School Working Knowledge, [hbswk.hbs.edu](http://hbswk.hbs.edu)
- Bank leverage constraints and bond market illiquidity during the COVID-19 crisis, VoxEU, [voxeu.org](http://voxeu.org)

## 4. Trust as a Value

- Civil society's expectations for the Human Rights Council in 2022, International Service for Human Rights, [ishr.ch](http://ishr.ch)
- Beyond race?, SpringerOpen, [comparativemigrationstudies.springeropen.com](http://comparativemigrationstudies.springeropen.com)
- How to address online #HateSpeech with a human rights based approach?, UNESCO, [www.youtube.com](http://www.youtube.com)
- Falling Flat: Why Startups Need Hierarchical Structure, Wharton School of the University of Pennsylvania - Knowledge@Wharton, [knowledge.wharton.upenn.edu](http://knowledge.wharton.upenn.edu)
- Covid Will Become Endemic. The World Must Decide What That Means, Wired, [www.wired.com](http://www.wired.com)
- Six Ways Leaders Can Adapt to the Workplace of 2022, MIT Sloan Management Review, [sloanreview.mit.edu](http://sloanreview.mit.edu)
- Value-based engineering v the Silicon Valley Zeitgeist, Social Europe, [socialeurope.eu](http://socialeurope.eu)

## 5. Agility and Responding to Disruption

- Bringing entrepreneurship and family business fully into a home in management departments, Science Direct - family business strategy, [www.sciencedirect.com](http://www.sciencedirect.com)
- Do CEOs really stay in the job for too long?, University of St. Gallen, [www.unisg.ch](http://www.unisg.ch)
- The Unexpected Role of PE Firms in Reducing Within-Firm Pay Inequality, INSEAD Knowledge, [knowledge.insead.edu](http://knowledge.insead.edu)
- Closing the Inventor Gender Gap with John-Paul Ferguson, Lucy Gilbert, and Negin Ashouri, McGill University, [delve.mcgill.ca](http://delve.mcgill.ca)
- 5 Principles for Scaling Change from IBM's High School Innovation, Harvard Business School Working Knowledge, [hbswk.hbs.edu](http://hbswk.hbs.edu)
- Is the Business World Finally Ready for the Wisdom of Shibusawa?, Harvard Business School Working Knowledge, [hbswk.hbs.edu](http://hbswk.hbs.edu)

## 6. New Ways to Make, Do and Buy

- Net zero means trusting partners you haven't met and technology that doesn't yet exist, World Economic Forum, [www.weforum.org](http://www.weforum.org)
- How to address digital safety in the metaverse, World Economic Forum, [www.weforum.org](http://www.weforum.org)
- Real estate in the metaverse is booming. Is it really such a crazy idea?, The Conversation, [theconversation.com](http://theconversation.com)
- Money in the Metaverse, The New Yorker, [www.newyorker.com](http://www.newyorker.com)
- How Brands Can Enter the Metaverse, Harvard Business Review, [hbr.org](http://hbr.org)
- Six Big Digital Trends to Watch in 2022, The Conversation, [theconversation.com](http://theconversation.com)
- Editorial: Intelligence and Safety for Humanoid Robots: Design, Control, and Applications, Frontiers, [www.frontiersin.org](http://www.frontiersin.org)

## Acknowledgements

- Cover and selected images throughout supplied by Reuters.
- Some URLs have been shortened for readability. Please follow the URL given to visit the source of the article. A full URL can be provided on request.

# Continue the experience online

## Explore the collective intelligence of the World Economic Forum

In today's world, individuals and organizations can find it difficult to keep up with the latest trends or to make sense of the countless transformations taking place around them.

How can you decipher the potential impact of rapidly unfolding changes when you're flooded with information—some of it misleading or unreliable? How do you continuously adapt your vision and strategy within a fast-evolving global context?

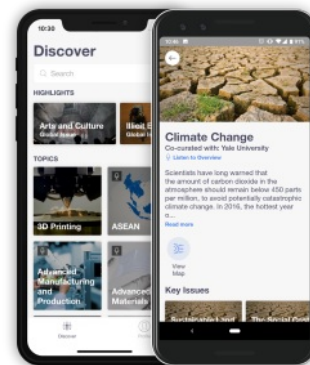
Leaders require new tools to make better strategic decisions in an increasingly complex and uncertain environment. The World Economic Forum developed Strategic Intelligence to help you understand the global forces at play and make more informed decisions.

## Connect to Strategic Intelligence

Visit [Strategic Intelligence](https://intelligence.weforum.org) on the web or download the [Strategic IQ](https://wef.ch/si) app on your mobile device to learn more.



[intelligence.weforum.org](https://intelligence.weforum.org)



[wef.ch/si](https://wef.ch/si)





---

COMMITTED TO  
IMPROVING THE STATE  
OF THE WORLD

---

The World Economic Forum, committed to improving the state of the world, is the International Organization for Public-Private Cooperation.

The Forum engages the foremost political, business and other leaders of society to shape global, regional and industry agendas.

---

World Economic Forum  
91-93 route de la Capite  
CH-1223 Cologny/Geneva  
Switzerland  
Tel.: +41 (0) 22 869 1212  
Fax: +41 (0) 22 786 2744  
contact@weforum.org  
[www.weforum.org](http://www.weforum.org)