

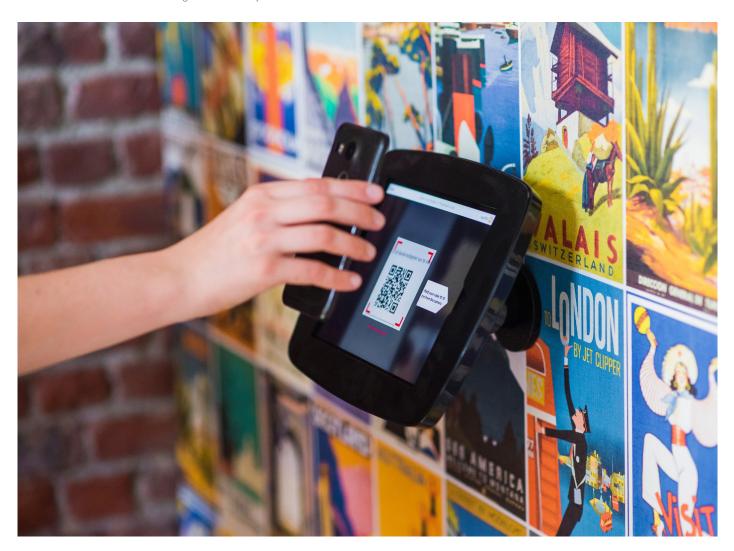
Digital Transformation: Powering the Great Reset



Contents

- 3 Executive summary
- 4 Reimagining digital transformation: leadership perspectives
- 6 The rising urgency of digital transformation
- 8 Opportunity 1: Transform business
- 11 Opportunity 2: Empower stakeholders
- 12 Opportunity 3: Change systems
- 13 Conclusion
- 14 Appendix 1: Executive Working Group
- 15 Contributors
- 16 Endnotes

© 2020 World Economic Forum. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, including photocopying and recording, or by any information storage and retrieval system.



Executive summary

COVID-19 has irrevocably changed our world.

During COVID-19, we have had to learn how to live differently – to learn, work, socialize, shop, worship and collaborate in different ways. And many of us are doing all this virtually. The pandemic is therefore a watershed moment for the digital transformation of business. The rules for success have changed, and are ever more reliant on harnessing the power of digital models to create new value and experiences.

Digital transformation is not a new endeavour for business, though prior attempts have often failed to realize its full potential. What is new in the wake of COVID-19 is that this is a shared opportunity for leaders. Successful leaders will now seize the opportunity to advance a new trajectory for digital transformation that aligns with the changing role of business: to be a powerful enabler of long-term value creation for all of its stakeholders.

This paper explores the increasing yet evolving role and relevance of digital transformation in business today. It offers an opening frame for a multiyear, cross-industry programme to co-create the new playbooks for executive decision-making and action in a post-pandemic business normal. It presents

three opportunities for digitally enabled corporate leadership to support the Great Reset¹ of our economies and societies:

- Transform into a digital business across seven dimensions: new value creation; digital-at-the-core business models; intelligent and agile operating models; localized and resilient supply chains; real-time decisions at the edge; data-driven investment decisions; and augmented talent
- 2. Empower all stakeholders: employees, consumers, suppliers, partners, government and society
- 3. Effect systems change through digitally enabled collaboration models that correct market failures

In 2020 and beyond, the Accelerating Digital Transformation programme, facilitated by the World Economic Forum, will support conversations and collaborations among the members of a growing community of leaders who are redefining digital business transformation as an engine of future value for both their organizations and society.



REUTERS/ALY SONG

Reimagining digital transformation: leadership perspectives



Antonio Neri
President and Chief Executive
Officer, Hewlett Packard Enterprise
(Chair, Digital Transformation
CEO Champions Group)

© Accelerated by the global pandemic, we are entering the next wave of digital transformation – an Age of Insight. We must leverage technology to discover insights that elevate the greater well-being of every human on this planet.



Julie Sweet Chief Executive Officer, Accenture

© 2020 begins the decade of delivery for the promise of technology. Digital transformation is a powerful enabler of the great reset, to generate sustainable value and shared success.



C Vijayakumar Chief Executive Officer, HCL Technologies (Chair, Information Technology Industry Community)

The year 2020 challenged us to completely rethink our enterprise growth strategies and the global economy at large. Digital transformation can ensure this change is sustainable and purpose-driven.



Stephen Klasko Chief Executive Officer, Jefferson Health (Co-Chair, Stewardship Board on Digital Economy)

The pandemic has accelerated the mobile, digital world that we're entering. Our work is to ensure that we guide the technology revolution in ways that are ethical and responsible. Trust will be the key to the future.



Frans van Houten Chief Executive Officer, Royal Philips

By embracing informatics, analytics and AI, we can use the COVID crisis to quickly reimagine healthcare, to give people improved access to affordable and quality care, with a much better experience and higher productivity.



Gisbert Rühl
Chief Executive Officer, Klöckner

The COVID crisis highlighted the criticality of digital transformation of business, industry and society. Responsible leaders will take the opportunity now to drive a long-term change.







Robert F Smith Chairman and Chief Executive Officer, Vista Equity Partners



© Digital business and operating models can effect a step-change in financial

inclusion and service delivery to millions

the opportunity now.

in markets such as Africa. We must act on



Mauricio Ramos
Chief Executive Officer,
Millicom International Cellular
(Chair, Digital Communications
Industry Community)

© Connectivity has proven to be the lifeblood of our economies and societies and will be equally critical for digital transformation of industries as we move into the new normal.



Takahito TokitaChief Executive Officer,
Fujitsu Limited

© COVID-19 is entirely and irreversibly changing our lives and work. Harnessing the power of digital transformation, business leaders should make the world more sustainable by building trust in society through human-centric innovation.



Stephanie Linnartz Group President, Marriott International

The pandemic has altered the simple acts of hospitality that are the foundations of business and society. Digital transformations must enhance human connection, anticipating the day we will all be together again.



Badr Jafar Chief Executive Officer, Crescent Enterprises

© COVID-19 has created a window of opportunity for technological leapfrogging. Our ability to recharge the economy and create jobs is largely dependent on concerted efforts to accelerate digital transformation, especially within SMEs.



Pat Gelsinger Chief Executive Officer, VMWare

These unusual times are permanently changing the way we work, learn, connect, worship and live. I firmly believe it is within our power to transform the turmoil of this challenging time into a recovery that creates opportunity for those who need it most.



Jane Sun Jie Chief Executive Officer, Trip.com Group

The world is becoming rapidly digitally driven. It has never been more critical for us to embrace these technologies to empower customers, transform business and create opportunity.

The rising urgency of digital transformation

For consumers, employees and partners, the shift in behaviour has been swift and dramatic. Since the onset of the COVID-19 crisis, internet usage has risen by 70%,² the use of communication apps has doubled,³ and some video streaming services have seen daily usage rise 20-fold.⁴ Never have we been so aware of our

dependence on digital models, and we are not going back.

With the power of digital technology so very visible, leading companies must now use technology to transform business itself to deliver for a broader set of stakeholders.⁵

The world goes digital



146% year-on-year growth in April 2020 in online retail orders in North America⁶



More than **25%** of consumers use mobile devices for purchases at least once a week⁷



22% growth in global venture capital investment in EdTech companies in the first quarter of 20208



China's online education market is expected to more than triple to **\$99.3 billion** in 2023 from 2019⁹



160% expected increase in frequency of digital purchases, as reported by global consumers¹⁰



48% of employees will likely work remotely at least part time post-COVID versus 30% pre-COVID¹¹



20% expected annual growth in telemedicine through 2020–2024¹²

The digital dividend is gigantic...



Digital laggards missed out on 15% in foregone revenues in 2018, which could grow to 46% of annual revenue in 2023¹⁵ "Digital natives" and companies that started early on their digital transformation journeys have often better withstood the current crisis and adapted faster to new human and societal needs. Even before COVID-19 hit, digital leaders were seeing twice the revenue growth of laggards, a trend expected to accelerate. Some 47% of incumbent companies who pivoted to competing in new digital ways have achieved organic growth greater than 10% over the past three years. Only 30% of traditional incumbents have done the same.

...and the digital divide is gaping

When COVID-19 hit, many disadvantaged communities, lower-paid workers and small businesses lacked the resources or capabilities to adjust to this new, more digitally demanding world.



45% of households globally do not have access to the internet, and only 19% have access in the least developed countries¹⁶

Job displacements caused by automation and the growing skills gap have heightened difficulties. Small businesses, which constitute 40–60% of national economies globally, have often had to confront limited access to digital connectivity or remote work, great reliance on cash-based transactions and massive demand uncertainties caused by shifting consumer behaviour.

Time to shift gears: add purpose to digital transformation



of chief executive officers believe the crisis will accelerate the move towards stakeholder capitalism, and 77% believe it will speed up their digital transformations¹⁹ Among the many trends that COVID-19 has accelerated, two stand out: Calls are rising for companies to lead in addressing societal challenges, and the marketplace is indicating that companies must adopt digital business models at their core to compete.

Before COVID-19 hit, the business landscape was already becoming more competitive and volatile. In the mid-20th century, the average Fortune 500 company lasted 75 years. Today, that average is 15 years, thanks to technology disruption. ¹⁷ Digital leaders are rewriting the rules of competition, putting more companies' survival at risk, while the pandemic adds further disruption and accentuates calls for a Great Reset of our economies and societies.

The time has come for companies to combine the two agendas – they must use digital business models and Fourth Industrial Revolution technologies to transform their businesses and lead systems change at scale. Many are already advancing on this path. In May 2020, a Fortune survey found that roughly half of chief executive officers believe the crisis will accelerate the move towards stakeholder capitalism, and 77% say it will force their companies to speed up their digital transformations. ¹⁸

Amid the uncertainty as to what behaviours and trends from the crisis will endure, this much is clear: Updating their business for a digital-first world, led by purpose, is now an imperative for almost every company.

Three opportunities for corporate leadership

As companies seize the opportunity to integrate purpose with profit and invest in digital transformation to help deliver on their purpose, leaders can use digital transformation to create value along three inter-related paths:

- Transform business: Reorient digital transformation investments and initiatives to drive sustained, long-term value for the company and beyond.
- Empower stakeholders: Use technology to respond to the needs and priorities of a broader set of stakeholders, including employees, consumers, partners, governments and society.
- Change systems: Create new collaboration and value-creation models across ecosystems to address global challenges through new markets and enable systemic change.

FIGURE 1: Three opportunities to drive purpose-led digital transformation



Opportunity 1: Transform business



of leaders say their organizations are ready for the digital age²² Companies are estimated to have spent \$1.2 trillion on digital transformation efforts in 2019,²⁰ yet only 13% of leaders say their organizations are ready for the digital age.²¹

Companies can and must do better, as clearly shown by COVID-19's combination of dramatic demand shocks and need to operate remotely. The shift to digital technologies must be structural, going beyond incremental efficiencies to transform operating and business models so that companies can continue to deliver for customers. The crisis obliges companies to redefine not just their operating models and value delivery to customers, but also their business models and implications to their cost or revenue structures.

More and more voices are also calling for a new form of capitalism – one that produces macro

outcomes that are better aligned with our human and environmental needs.

The answer to these demands is to consciously shape new digital business models that deliver greater value to both shareholders and a wider set of stakeholders. To do so, companies will have to determine where new value exists, which business models will capture it, and which technologies will support the adaptability and resilience that these models require. They will have to use data to power better decision-making, optimize finance and free up capacity for investment.

Organizations will therefore have to reassess nearly every aspect of their business, guided by a clearly articulated vision. This section offers a path to execute that reassessment, create that vision and guide the digital transformation journey.

Digital transformation in the new normal: the seven dimensions

The nature and pace of digital transformations will vary across companies, and be influenced by their size, industry, digital maturity and capabilities. However, amid the different digital transformation priorities and plans that every

company must construct, seven important dimensions are near-universal: They can help executives in most companies understand how to successfully digitalize their business with purpose.

FIGURE 2:

Seven dimensions

Business dimension	From	То
New value	A linear value chain, shareholder value	A dynamic value map, stakeholder value
Business models	Digital channels for products	Data-led services or outcomes, digital ecosystems
Operating models	Hierarchical, isolated, on-premise	Agile, Al-enhanced, platform-based
Supply chain	Globalized, low-cost, just in time	Localized, resilient, efficient, ethical
Decision-making	Manual, based on historical data	Predictive, real-time, intelligent, at the edge
Finance/investments	New tech capabilities and growth objectives	De-risking cost/revenue, finding new revenue, hitting ESG targets
Talent	Closing known skill gaps	An elastic, rapidly upskilled digital workforce, talent-on-demand models



Digital ecosystems will represent more than \$60 trillion in revenue by 2025, or more than 30% of global corporate revenue²⁴



of new business value over the next decade will be through digitally enabled platforms²⁷

New value from digital transformation

Successful companies are looking beyond linear value chains and industry boundaries to create a dynamic value "map": They use technology to encourage collaboration and create shared value in broader digital ecosystems. Rather than facing well-defined value pools with homogenous competitors, these companies thrive in networked, overlapping value pools with heterogeneous competitors. They invest in creating value that delivers for both the business and all its stakeholders.

 Pfizer is opening labs and R&D within its ecosystem – providing access to tools and publishing results to reimagine itself as an R&D platform company.²³

Digital-at-the-core business models

The shift is accelerating to "digital-at-the-core" business models: adaptive, data-led, asset-light and based on services rather than products. Instead of extending traditional models and channels (such as brick and stores) while enabling digital channels, companies are orchestrating digitally enabled platforms or marketplaces.

- Hewlett Packard Enterprise has accelerated its strategic pivot to become an edge-to-cloud, platform-as-a-service company – responding to the clear shift in customer preferences away from buying and operating IT to consuming IT infrastructure and capabilities as a service.²⁵
- Ping An, headquartered in China, expanded and transformed from being an insurance company into managing five digital ecosystems in finance, property, automotive, healthcare and smart city services, serving more than half a billion online customers.²⁶

Intelligent, agile operations

To respond quickly to supply and demand shifts across different geographies, operating models must become intelligent, cyber resilient, agile and free from functional silos, with humans working with artificial intelligence (AI) across the enterprise. Companies will need to match their organizational structure to the technology transition: By 2021, cloud data centres will process 94% of workload and computing, supporting the pivot to digital business models, 28 and 80% of emerging technologies will have foundations in AI. 29

- A large consumer and packaged goods company is replacing 90% of its field sales force with digital and remote interactions.
 Supported by data-driven insights from the back end and a digital platform on the front end, the expectation is to triple consumer engagement and double workforce productivity.
- Gulftainer, a UAE-based subsidiary of Crescent Enterprises, launched the "Future of Ports Startup Challenge 2020" to accelerate the adoption of disruptive technologies within its operations, and to transform the ports and logistics industry.³⁰

Localized, resilient supply chains

Just-in-time and low cost is no longer good enough. The threat of disruption requires companies to reintegrate local supply chains with a view to resilience and agility, as well as improved speed to customers. This shift must maintain efficiency while paying ever greater attention to ethics and transparency. Digitalization offers visibility of the supply chain to enable real-time, data-backed decisions to seamlessly shift operations as needed.

 Henkel uses algorithm-enabled demand sensing – combining internal data with public information such as weather reports and holiday dates – to forecast sales volumes for its consumer goods by region and shift operations as needed to meet this demand.³²

Real-time decisions at the edge

Decisions made based on historical data and traditional forecasting models are too slow – 63% of executives cite slow decision-making as a barrier to agility. ³³ Future decisions will increasingly be made "at the edge" by front-line employees who are close to consumers, and distributed across partners and automated machines. Granular, real-time data and predictive forecasting will enable intelligent decisions at the edge to deliver personalized services and forge new collaborations.

- Leading oil companies such as Equinor, Shell and Chevron are now using data generated from oilfield digitalization (with use of sensors, automation and digital twin technology) to make "on the edge" decisions at the field level. These technologies help to predict failures, optimize logistics choices and select the most valuable wells for intervention.
- Salesforce accelerated its investments in data and digital tools to create a more unified, trusted view of the customer in real time. This allows front-line employees in sales, service, marketing and other support functions to collaborate better and to offer more timely, cohesive and personalized customer support and experiences.



of Global 2000 companies will offer employees Al-powered career coaches that offer personalized growth and training recommendations34

Data-driven investment decisions

Companies can use data and analytics to de-risk revenue and cost profiles, understand and forecast shifting revenue streams, plan for new growth areas, rethink how to finance innovation, demonstrate the value of digital and consider the financial impact of economic uncertainty, shared efforts with ecosystem partners and delivering on environmental, social and governance (ESG) outcomes.

Majid Al Futtaim Group reacted to COVID-19 with a two-track digital transformation strategy: a nerve centre focused on immediately adapting and expanding digital and online offerings (such e-grocery and a customer-tenant marketplace platform); and another initiative monitoring the landscape for longer-term digital investments.35

Augmented talent

To support digital operating models, most companies will need rapid upskilling, to prepare for closer collaboration between humans and smart machines, and an elastic workforce. By 2022, 42% of the core skills needed to perform most jobs are expected to change, while 54% of employees will need reskilling.36

DHL enhanced human capability in warehouses by providing Google's second-generation smart glasses to "vision pick" products. The result is a 15% productivity boost, as employees stay focused and benefit from real-time guidance and instructions.37

Principles to guide the digital transformation journey

No single path can ensure success, but these 11 principles, commonly applied by leading organizations, can help most companies succeed in the seven dimensions of digital transformation.

Today only

of executives say their leaders have the right digital skills38

- 1. Be clear on purpose. Align leadership to a well-defined "north star" to guide difficult tradeoffs among stakeholder interests.
- 2. Embed digital in every function. Make digital integral to corporate strategy and ways of working, with cross-functional teams driving implementation.
- 3. Merge innovation and efficiency. Consider technology as both a short-term cost-cutting measure and a long-term investment in new value.
- 4. Integrate value and purpose. Embed purpose in business strategy to help create new markets and value propositions.
- 5. Advance with agile, iterative roadmaps. Retain the flexibility to pivot during your transformation. Define both important "waves" (major evolutions towards your target future state) and "stepping stones" (tactical near-term actions).39
- 6. Combine short-term and long-term strategy. Apply scenario planning that considers changes over different time horizons, building in optionality and agility.

- Build an entrepreneurial culture. Create a workforce that is willing to innovate and to fail fast if needed, supported by agile spaces and incubators for disruptive innovation.
- 8. Upskill executives. Augment and continuously update the digital capabilities of corporate boards and executive teams.
- 9. Invest in technology for the long run. Balance short-term pressures against the future value to be gained through investments, guided by your vision and focused on business outcomes.
- 10. Be determined with technology adoption. Develop shared visions, coordinated delivery frameworks and institutional determination to overcome rigid departmental divisions and resistance to change, building the new processes, behaviours and norms that digital transformation requires.
- 11. Adopt new metrics. Consider metrics such as digital capabilities acquired or improvements in customer experience to measure success.

Opportunity 2: Empower stakeholders

COVID-19 has made it clearer than ever that companies must serve all of their stakeholders - including employees, consumers, partners, governments and society. As the new normal presents different stakeholder groups with opportunities and challenges, digital technology can help companies to contribute to their success. Companies can thus put into practice Stakeholder principles in the COVID era⁴⁰ as they recover and rebuild from the crisis.

Employees: saving and creating jobs

Massive job losses of up to 183 million could sweep the globe in 2020, making reskilling or redeployment at scale necessary in the very near term. Digital transformation plans can: support flexible and remote working options; offer new employee health propositions and assurances; redeploy, reskill and support; and mobilize talent for new and shared business value creation.

Lin Qingxuan, a leading Chinese cosmetics retailer, redeployed its in-store beauty advisers as online influencers, using WeChat to engage customers virtually and drive online sales.41

Consumers: new health and ESG concerns

COVID-19 has led consumers to seek expanded health and safety measures, including more digital and low-to-no contact purchases. A "healthy configuration" is now the top consideration for Chinese car purchasers (cited by 69%), well above comfort (56%) and price (51%).43 Many consumers are also looking for sustainability, trusted local brands and ethical business practices. Digital business models and strategies such as "as-aservice", along with platforms and ecosystem collaborations, can offer personalized, unified and convenient experiences throughout new channels. As digital interactions with consumers grow, companies must take proactive steps to protect their privacy and security and sustain their trust.

Philips launched an online portal in the Netherlands to enable hospitals to seamlessly and securely share COVID-19 patient data, while safeguarding patient privacy. Since its launch on 28 March, 95% of Dutch hospitals have used this portal.44

Suppliers and partners: meeting financial pressures

Lockdowns, border restrictions and a sharp economic downturn have hit suppliers and partners hard, causing job losses and sharp financial pressures. Technologies such as blockchain, Al and robotics

can enable new, flexible, efficient and transparent supply-chain partnerships that deliver on shifting customer expectations. Supply-chain "masters" have achieved more than two-thirds of their 13% average revenue growth through collaboration, innovation and data-driven insight technologies.⁴⁶ Digital technology can also support companies as they help suppliers and partners with altered payment terms, access to better intelligence and capabilities and reallocation of materials and talent.

Schneider Electric expanded its e-commerce platform in India to enable business customers and partners - many of which are small businesses – to source products digitally, with free shipping, expert guidance and flexible payment options in partnership with FinTech companies.⁴⁷

Society and government: well-being and the recovery

COVID-19 has highlighted the failure of many societies to offer their populations access to healthcare, education, employment, digital connectivity and affordable housing. The crisis has also raised pressure on companies to solve these problems: 74% of employees expect their chief executive officers to explain what their companies have done to help society.⁴⁸ Digital technology can help companies close these gaps, whether through virtual medicine, digital platforms or AI to boost data analytics and scale up efforts.49

- Jefferson Health, a US-based hospital network, handled 100,000 cases through its telehealth facilities in three months - the equivalent of the total amount of cases served with telehealth between 2015 and 2019.
- UBS, the Swiss bank, rapidly built and deployed six bots to process more than 24,000 applications from small businesses round the clock (the equivalent of 100 workers), thus, enabling faster access to liquidity.
- Ola, an Indian ridesharing platform, is deploying its technology to help the Punjab state government track and manage the produce of more than 1.7 million farmers, monitoring vehicles in vegetable markets to help ensure appropriate social distancing.50

Evidence suggests that effective stakeholder engagement leads to superior financial performance. In 2019, on average, 60% of ESG investment funds reported higher returns than conventional funds.⁵¹



of companies say they either are experiencing skill gaps now or expect them within a few years42



Trusting a brand to do what is right is a deciding factor for 81% of consumers in a purchasing decision45

Opportunity 3: Change systems

Digital technology can spark new collaboration models - ones with the power to transform ageold systems, invert systemic market failures and address global challenges. Operating at scale, with precision, and with each ecosystem collaborator playing a different yet important role, these new digital collaboration models can shift paradigms and deliver value for all. Companies are increasingly advancing such digital platform and collaboration models, contributing to systems change while delivering value for their business.

- 1. Empowering small businesses. Small businesses constitute 40-60% of GDP52 in most countries, yet many are cut off from the digital economy. Only 20% of European SMEs, for example, are digitalized.53 Innovative partnerships among tech companies, banks, governments and education providers can accelerate digital transformation for small businesses. The result can be a virtuous cycle of enhanced labour productivity and innovation, rejuvenated local communities and strengthened social cohesion.
 - Ant Financial, a subsidiary of Alibaba Group, has used its digital platform for microloans in China. It conducts algorithmic analysis of huge amounts of transactional and behavioural data from sellers, marketers, service providers and manufacturers to calculate real-time credit scores and process microloans in minutes.⁵⁴
- 2. Reimagining health systems. Healthcare costs typically rise at double the rate of GDP growth,⁵⁶ with up to \$1 trillion wasted each year in the US alone,⁵⁷ and outcomes that vary significantly across hospitals, countries and regions. Digital technology can support a shift to value-based healthcare, where providers are paid for outcomes rather than services.⁵⁸ When traditional health-system actors and digital companies collaborate, they can enable open data standards and new technologies such as natural language processing, Al and blockchain. The result can be seamless sharing of medical records among providers and the use of data analytics for better, real-time decisions.
 - Kaiser Permanente is partnering with Unite Us to create Thrive Local, a network to connect healthcare and social services providers to millions of consumers across the United States. Thrive Local will be

integrated into Kaiser Permanente's electronic health record system, where healthcare workers and providers can access a directory of social services agencies, make referrals directly to community organizations and track the progress in meeting patient needs.

3. Enabling the circular economy. COVID-19 is forecast to cause a 7.5% drop in greenhouse gas emissions in 2020, but this improvement will likely vanish once the economyrecovers.60 Businesses must move to sustainable, circular business models that redefine traditional revenue and cost structures. Such models decouple economic value creation from resource consumption, extend product use and life cycles, reduce waste and create new business value - as much as \$4.5 trillion by 2030.61 Interconnected data platforms, enabled by digital collaboration between companies within and across industries, enable these models thorough opportunities that include products-as-a-service, on-demand access and product sharing.

> \$4.5 trillion

in business value can be realized through the circular economy by 2030⁶³

eRent is a rental platform that enables customers to rent out and manage different types of construction equipment and machinery, aggregated nationally through one digital channel. It matches idle assets with demand, and uses the internet of things (IoT) for tracking. Besides the benefit to the environment by reducing the need for each customer to have their own equipment, these customers realize an average saving of 20%.62

20%

of SMEs in Europe are currently digitalized, compared to 58% of large enterprises55

\$1 trillion

goes to waste every year in healthcare in the US alone59

Conclusion

In a few years, it is possible that no one will be speaking of "digital transformation" because the term will have become irrelevant: Non-digital businesses will simply not exist. To avoid becoming one of those dying businesses, organizations must embrace digital transformation now.

Yet being digital-at-the-core by itself is not enough. A company's success will also depend on its capacity to create societal as well as economic value and demonstrate purpose-led leadership. Digital technology offers this potential: new ways to create new value for all stakeholders, while making business models more inclusive, sustainable and trustworthy.

To realize this potential, companies must move towards open collaboration models, combine goals in terms of value and purpose, and invest i n culture and in new leadership capabilities. They must acquire new behaviours and capabilities to effectively interact and execute in ecosystems and deliver on new value. The result will be a digital, intelligent enterprise: resilient, distributed and adaptive to disruptive change.

In the wake of COVID-19, chief executive officers and business leaders now have an opportunity - and a pressing need - to consciously shape a new "business normal" that delivers inclusive and sustainable value for all stakeholders. In 2020 and beyond, this community of leaders (Appendix 1) will continue to learn together and drive collaboration on these shared priorities.

Accelerating digital transformation

The Forum is shaping a multi-year, cross-industry programme to use the current "dislocative shock" to economies and businesses to accelerate digital transformations that support the Great Reset.

Key levers for change:

- 1. Shape a new narrative on the role of digital transformation in business and society
- 2. Co-create frameworks and guides to support new business approaches and actions
- 3. Facilitate initiatives, projects and collaborations between business, industry and society
- 4. Showcase "lighthouse" examples of digital-enabled and sustainable business models



REUTERS/JASON LEE

Appendix 1:

Executive Working Group

We would like to thank the members of the Executive Working Group on Digital Transformation.

Hamid Akbari, Chairman, Velocia, Chief Executive Officer, Blanc Labs

Joe Abi Akl, Chief Corporate Development Officer, Majid Al Futtaim Holding

Michelle Anderson, Head of Strategy: Engineering Services, Absa

Mohamed Al Assaf, Vice-President, Corporate Development, Majid Al Futtaim Holding

Nick Basford, Vice-President, Global Retail and E-Commerce Strategy, UPS

Mark Brooks, Chief Information Officer, Centene Corporation

Bob Burman, Director, Corporate Strategy, UPS

Sorin-Cristian Cheran, Vice-President of Artificial Intelligence, Chief Technologist, Hewlett Packard Enterprise

Sangeet Paul Choudary, Founder, Platformation Labs

Daniel Englberger, Group Chief Transformation Officer, Zurich Insurance Group

Sean Flaherty, Vice-President of Global Retail and E-Commerce Strategy, UPS

Piercarlo Gera, Chief Executive Officer, Gera & Partners

Patrick Hauert, Vice-President, Program Development IoT Security, Kudelski Group

Ladina Heimgartner, Head of Group Executive Office and Communications; Member of the Executive Board, Ringier

Joerg Hellwig, Chief Digital Officer, LANXESS

Michael Hoad, Vice-President, Enterprise Communications, Jefferson Health

Stefan Hotze, Head, Corporate Strategic Planning, Nokia

Carlos Javaroni, Vice-President, Business Development, Digital Offers, Europe Operations, Schneider Electric

Daniel Jürgenson, Head, Strategy Development, Klöckner

Phani Kambhampati, Senior Director Information Technology of Enterprise Transformation, UPS

Rama Krishna, Vice-President, Digital Business and Analytics, Hewlett Packard Enterprise

Ram Krishnan, Chief Marketing Officer, Aera Technology

James Kugler, Chief Digital Officer, Merck

Fred Laluyaux, President and Chief Executive Officer, Aera Technology

Jeremy Leach, Global Head of Digital Consulting, Wipro

Fanyu Lin, Chief Executive Officer, Fluxus

Carsten Linz, Group Chief Digital Officer, BASF

Bhuwan Lodha, Vice-President, Digital, Mahindra and Mahindra

Alexei Manikhin, Head, Data and Digital Systems, Norilsk Nickel

Alexander Mathieu, Vice-President, Corporate Strategy and New Business Development, Nokia

Charles Molapisi, Group Chief Technology and Information Officer, MTN

Christophe Nicolas, Group Chief Information Officer, Kudelski Group

Burke Norton, Senior Managing Director; Co-Head, Perennial Investing, Vista Equity Partners

Karin Oertli, Chief Operating Officer, Personal and Corporate Banking and Switzerland, UBS

Karsten Ottenberg, Former Chief Executive Officer, Bosch Siemens Home Appliances

Teppo Paavola, Chief Digital Officer, Adecco Group

Michel de Rijk, Chief Executive Officer, Asia-Pacific, S4 Capital

Patrick Rademacher, Senior Manager, Strategy, Ringier

Stephen Rouatt, Vice-President and Group Head, Strategy, Alliances and Market Intelligence, Signify

Tushar Singhvi, Director of CE-Ventures, Crescent Enterprise

Scott Snyder, Partner and Head, Digital and Innovation, Heidrick Consulting, Heidrick & Struggles

Mark Spelman, Chief Executive, Spelman Cormack

Dan Toma, Co-Founder, Outcome

Simon Torrance, Senior Adviser, Metaflight

Nicolas Verschelden, Head of Digital Innovation, Anheuser-Busch InBev

Matthias Weissl, Co-Founder and Chief Executive Officer, Verum Capital

Leigh Zarelli, Senior Vice-President, Marriott Digital, Marriott International

Anna Zeiter, Chief Privacy Officer, eBay

Islam Zekry, Chief Data Officer, Commercial International Bank (CIB)

Contributors

We would like to thank our Digital Transformation **CEO Champions:**

Pat Gelsinger, Chief Executive Officer, VMWare

Frans van Houten, Chief Executive Officer, Royal Philips

Badr Jafar, Chief Executive Officer, Crescent Enterprises

Stephen Klasko, Chief Executive Officer, Jefferson Health

Stephanie Linnartz, Group President, Marriott International

Antonio Neri, President and Chief Executive Officer, Hewlett Packard Enterprise (Chair, Digital Transformation CEO Champions Group)

Gisbert Rühl, Chief Executive Officer, Klöckner

Robert F Smith, Chief Executive Officer, Vista Equity Partners

Additional thanks go to: Mauricio Ramos, Chief Executive Officer, Millicom (Chair, Digital Communications Industry Community); Julie Sweet, Chief Executive Officer, Accenture and C Vijayakumar, Chief Executive Officer, HCL Technologies (Chair, Information Technology Industry Community).

We thank the members of the Executive Working Group on Digital Transformation (Appendix 1).

Thank you to additional members of our Stewardship Board on Digital Economy and New Value Creation, especially S Iswaran, Minister of Communications, Singapore; Jane Sun Jie, Chief Executive Officer, Trip.com Group; Sabine Keller-Busse, Group Chief Operating Officer, UBS; Maurice Lévy, Chairman, Publicis Groupe; Wendy Lucas-Bull, Chairman, Absa Group; and Takahito Tokita, Chief Executive Officer, Fujitsu Limited. Also, members of our Global Future Council on Digital Economy and New Value Creation, especially Azeem Azhar, Chief, Exponential View; Richard "Dick" Daniels, ex-Executive Vice-President, Chief Information Officer, Kaiser Permanente; Victoria A. Espinel, President and Chief Executive Officer, BSA (The Software Alliance); CV Madhukar, Investment Partner, Omidyar Network; James Chin Moody, Chief Executive Officer, Sendle; and Tushar Singhvi, Director, CE-Ventures, Crescent Enterprises.

Thank you to colleagues at Accenture, HPE and the World Economic Forum for their contributions to shaping this paper, and the broader programme on digital transformation.

World Economic Forum

Manju George, Head, Platform Strategy, Digital Economy and New Value Creation

Nokuthula Lukhele, Lead, Data and Digital Transformation, Digital Economy and New Value Creation

Derek O'Halloran, Head, Digital Economy and New Value Creation

Endnotes

- https://www.weforum.org/great-reset/ (link as of 16/7/20). 1.
- 2. https://www.forbes.com/sites/markbeech/2020/03/25/covid-19-pushes-up-internet-use-70-streaming-more-than-12-pushes-up-internet-use-70-streaming-use-7 first-figures-reveal/#10051a9f3104 (link as of 6/7/20).
- https://www.uswitch.com/mobiles/news/2020/05/communication-apps-usage-nearly-doubles-during-lockdown/ 3. (link as of 6/7/20).
- 4. https://www.prnewswire.com/news-releases/new-conviva-data-shows-global-streaming-up-20-with-daytime-viewingup-40-during-covid-19-crisis-301033825.html (link as of 8/7/20).
- 5. https://www.weforum.org/the-davos-manifesto (link as of 6/7/20).
- 6. https://www.forbes.com/sites/louiscolumbus/2020/04/28/how-covid-19-is-transforming-e-commerce/#406203163544 (link as of 8/7/20).
- 7. https://www.businesswire.com/news/home/20200406005318/en/Global-Mobile-Payments-Market-2020---Growth (link as of 8/7/20).
- https://technation.io/news/british-edtech-helping-schools-teachers-online-learning/ (link as of 8/7/20). 8.
- 9. https://www.forbes.com/sites/ywang/2020/02/27/chinas-e-learning-leaders-add-32-billion-as-coronavirus-fears-drivestudents-online/#5a456d6b4fb6 (link as of 14/7/20).
- 10. https://www.accenture.com/_acnmedia/PDF-126/Accenture-COVID-19-Retail-Consumer-Resarch-Wave-Four-POV. pdf#zoom=40 (link as of 8/7/20).
- 11. https://www.gartner.com/smarterwithgartner/9-future-of-work-trends-post-covid-19/ (link as of 8/7/20).
- https://www.businesswire.com/news/home/20200608005648/en/COVID-19-Impact-Recovery-Analysis--Telemedicine-12. Market-2020-2024 (link as of 8/7/20).
- 13. https://www.accenture.com/_acnmedia//Thought-Leadership-Assets/PDF/Accenture-Future-Systems-Report.pdf (link as of 6/7/20).
- 14. https://www.mckinsey.com/business-functions/mckinsey-digital/our-insights/digital-strategy-in-a-time-of-crisis (link as of 6/7/20).
- 15. https://www.accenture.com/ acnmedia/Thought-Leadership-Assets/PDF/Accenture-Future-Systems-Report. pdf#zoom=50 (link as of 6/7/20).
- https://en.unesco.org/news/new-report-global-broadband-access-underscores-urgent-need-reach-half-world-still-16. unconnected; https://www.itu.int/en/ITU-D/Statistics/Documents/facts/FactsFigures2019.pdf (links as of 6/7/20).
- https://economictimes.indiatimes.com/news/company/corporate-trends/here-are-the-10-oldest-companies-in-india-that-17. are-still-going-strong/articleshow/53953790.cms?from=mdr (link as of 6/7/20).
- 18. https://fortune.com/2020/05/14/ceo-survey-economic-recovery-ceo-daily/ (link as of 6/7/20).
- Ibid. 19.
- https://www.idc.com/getdoc.jsp?containerld=prUS45027419 (link as of 6/7/20). 20.
- https://sloanreview.mit.edu/projects/the-new-leadership-playbook-for-the-digital-age/ (link as of 6/7/20). 21.
- 22.
- 23. https://www.pfizer.com/science/collaboration (link as of 6/7/20).
- 24. https://www.mckinsey.com/industries/financial-services/our-insights/insurance-beyond-digital-the-rise-of-ecosystemsand-platforms (link as of 16/7/20).
- 25. https://www.hpe.com/us/en/newsroom/press-release/2020/03/hpe-unveils-open-as-a-service-5q-portfolio-designed-fortelcos-to-speed-path-to-revenue-and-redefine-experiences-at-the-enterprise-edge.html (link as of 6/7/20).
- 26. https://www.mckinsey.com/industries/financial-services/our-insights/insurance-beyond-digital-the-rise-of-ecosystemsand-platforms (link as of 16/7/20).
- 27. https://www.weforum.org/platforms/shaping-the-future-of-digital-economy-and-new-value-creation (link as of 6/7/20).
- https://newsroom.cisco.com/press-release-content?type=webcontent&articleId=1908858#:~:text=By%202021%2C%20 28. 94%20percent%20of,processed%20by%20traditional%20data%20centers (link as of 6/7/20).
- 29. https://www.managedoutsource.com/blog/top-artificial-intelligence-ai-trends-to-watch-for-in-2020/ (link as of 6/7/20).
- https://www.globenewswire.com/news-release/2020/06/23/2052135/0/en/Gulftainer-Launches-Global-Startup-30. Challenge-to-Boost-Tech-Innovation-in-Ports-and-Logistics-Sector.html (link as of 8/7/20).
- http://www3.weforum.org/docs/WEF_GVC_the_impact_of_COVID_19_Report.pdf (link as of 6/7/20). 31.
- 32. https://www.henkel.com/spotlight/2019-06-06-automation-requires-new-competencies-950382 (link as of 6/7/20).

- 33. https://www.accenture.com/ acnmedia/PDF-123/Accenture-COVID-19-Building-The-Intelligent-Enterprise-Resilience.pdf
- 34. https://www.accenture.com/us-en/insights/technology/technology-trends-2020 (link as of 6/7/20).
- 35. Executive interview: 8 June 2020.
- 36. Accenture COVID-19 Consumer Research, conducted May 2020.
- https://www.dhl.com/global-en/home/press/press-archive/2019/dhl-supply-chain-deploys-latest-version-of-smart-37. glasses-worldwide.html (link as of 6/7/20).
- 38. https://sloanreview.mit.edu/projects/the-new-leadership-playbook-for-the-digital-age/ (link as of 6/7/20).
- http://www3.weforum.org/docs/Media/47538_Digital%20Enterprise_Moving_Experimentation_Transformation_ 39. report 2018%20-%20final%20(2).pdf (link as of 6/7/20).
- 40. http://www3.weforum.org/docs/WEF Stakeholder Principles COVID Era.pdf (link as of 6/7/20).
- 41. https://hbr.org/2020/03/how-chinese-companies-have-responded-to-coronavirus (link as of 6/7/20).
- 42. https://www.mckinsey.com/business-functions/organization/our-insights/beyond-hiring-how-companies-are-reskilling-toaddress-talent-gaps (link as of 16/7/20).
- 43. https://www.ipsos.com/sites/default/files/ct/news/documents/2020-03/impact-of-coronavirus-to-new-car-purchase-inchina-ipsos.pdf (link as of 6/7/20).
- 44. portal-for-digital-exchange-of-covid-19-patient-data-in-the-netherlands.html (link as of 8/7/20).
- 45. 2019 Edelman Trust Barometer Special Report: https://www.edelman.com/sites/g/files/aatuss191/files/2019-06/2019_ edelman trust barometer special report in brands we trust.pdf (link as of 6/7/20).
- 46. https://www.accenture.com/ acnmedia/PDF-116/Accenture-Sharpen-Up-Supply-Chain-SAP.pdf (link as of 6/7/20).
- 47. https://www.crn.in/news/schneider-electric-expands-its-offerings-on-its-e-commerce-platform-for-india/ (link as of 8/7/20).
- 48. Edelman Trust Barometer Implications for CEOs: https://www.edelman.com/sites/g/files/aatuss191/files/2018-10/ Edelman Trust Barometer Implications for CEOs 2018.pdf (link as of 6/7/20).
- 49. http://www3.weforum.org/docs/WEF_Tech_4_COVID_Early_Compendium_2020.pdf (link as of 6/7/20).
- 50. https://techcrunch.com/2020/04/17/ola-connects-technology-platform-india-government/ (link as of 6/7/20).
- 51. https://www.ft.com/content/733ee6ff-446e-4f8b-86b2-19ef42da3824 (link as of 6/7/20).
- 52. https://www.worldbank.org/en/topic/smefinance (link as of 6/7/20).
- 53. https://smeunited.eu/admin/storage/smeunited/smeunited-digital-brochure.pdf (link as of 6/7/20).
- https://hbr.org/2018/09/alibaba-and-the-future-of-business (link as of 6/7/20). 54.
- 55. https://smeunited.eu/publications/smeunited-comments-on-draft-working-document-european-digital-innovation-hubsin-digital-europe-programme (link as of 6/7/20).
- 56. https://www.who.int/health_financing/documents/health-expenditure-report-2019.pdf?ua=1 (link as of 8/7/20).
- 57. https://www.nytimes.com/2019/10/07/upshot/health-care-waste-study.html (link as of 8/7/20).
- 58. http://www3.weforum.org/docs/WEF Value in Healthcare report 2018.pdf (link as of 6/7/20).
- 59. https://hbr.org/2015/10/how-the-u-s-can-reduce-waste-in-health-care-spending-by-1-trillion (link as of 6/7/20).
- 60. https://www.utilitydive.com/news/us-power-sector-ghgs-projected-to-fall-75-in-2020-amid-record-drop-in-glo/575963/ (link as of 6/7/20).
- 61. https://newsroom.accenture.com/news/the-circular-economy-could-unlock-4-5-trillion-of-economic-growth-finds-newbook-by-accenture.htm (link as of 6/7/20).
- 62. https://www.accenture.com/pl-en/about/events/the-circular-economy-handbook (link as of 6/7/20).
- 63. https://newsroom.accenture.com/news/the-circular-economy-could-unlock-4-5-trillion-of-economic-growth-finds-newbook-by-accenture.htm (link as of 6/7/20).



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