Microsoft

A Year of Change: Digital Transformation Trends in 2020

Understanding the scope of change

Prior to 2020, digital transformation was a force of its own. More than half of all gross domestic product (GDP) worldwide had become digital,[1] as businesses generated revenue from software applications and used new technologies to build proprietary solutions. Then the world was hit with a global pandemic and digital transformation itself was transformed.

Businesses no longer view digital transformation solely as a source of innovation. It has become a requirement for business continuity, enabling teams to work anywhere and organizations to rapidly adjust in the face of a crisis. Whereas they typically used to move forward cautiously with digital transformation, today companies are relying on it for the stability and agility it offers their operations, workforce, and customers.

Modern technology solutions are all central to this development. Organizations are converting data into meaningful value, finding new ways to serve customers, and building solutions that are relevant for a rapidly changing socioeconomic environment. Meanwhile, they are successfully reinventing for the digital economy. That's digital transformation.

We've heard from many customers about how they are handling the scope of change. This e-book reports on our findings.

>83% of companies believe they need to embrace tech intensity to be successful in the future.[2]

Tech intensity

This term refers to the applied use of a creative entrepreneurial mindset focused on inventing net-new digital capabilities to solve complex challenges for business and government in active and intentional combination with advanced digital technologies.

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[1] "IDC FutureScape: Multiplied Innovation Takes Off, Powered by AI, Distributed Public Cloud, Microservices, Developer Population Explosion, Greater Specialization and Verticalization, and Scaling Trust," IDC, 2018.

[2] Tech Intensity Quantitative Research, Microsoft, 2019.

4 trends driving change in business globally

The advent of the cloud brought an explosion of data availability for organizations. For the first time, we have the compute and storage power to collect, store, and analyze troves of data, enabling companies to respond quickly to forces beyond their control. From this dynamic, and in light of recent global events, four trends have emerged.
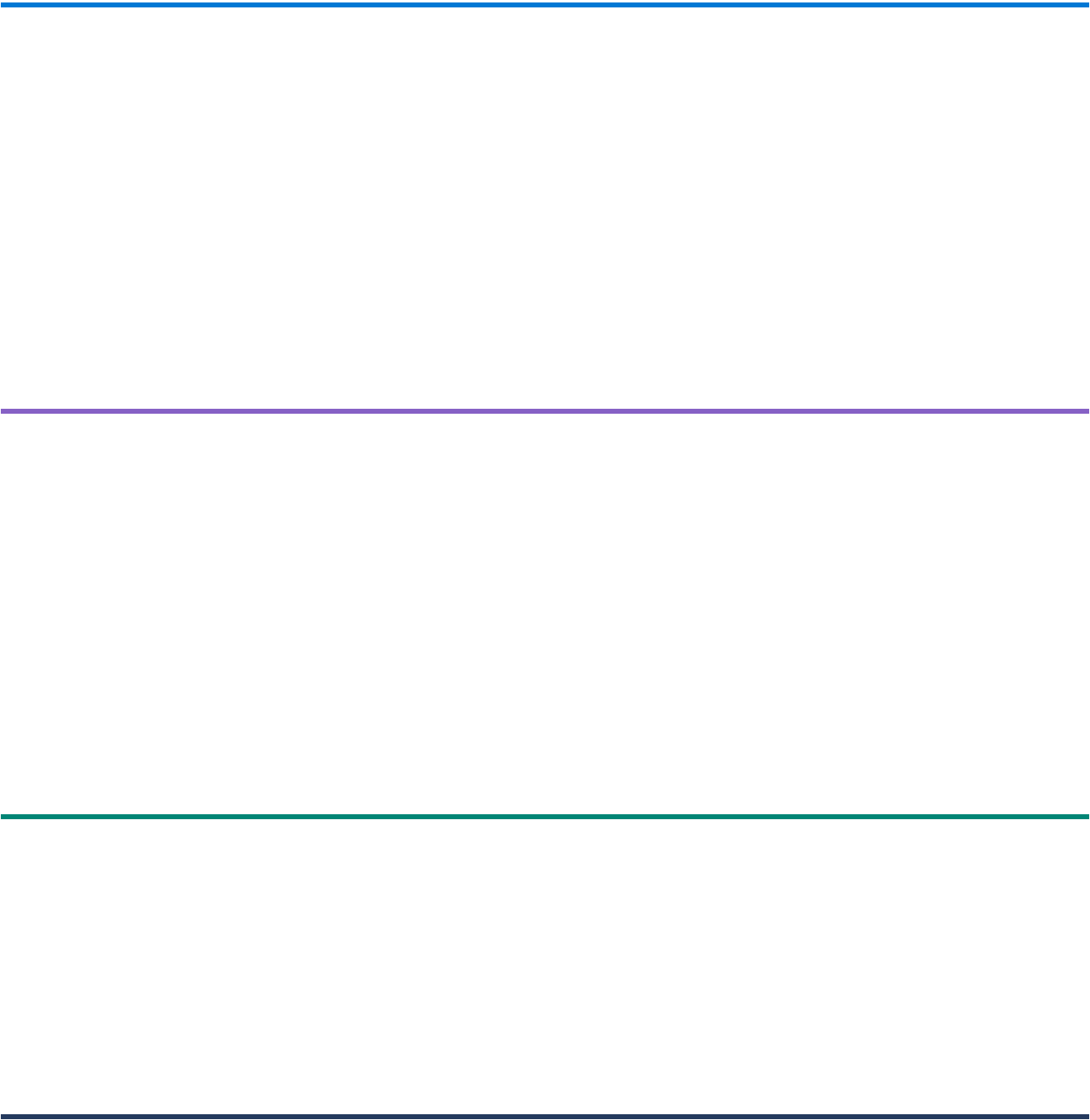
Trend 1

Every company will become a tech company

At many organizations, digital transformation efforts have been underway for several years. In 2020, those efforts are accelerating. The need for business continuity during a time of rapid change, as well as the need to work differently due to limitations, or to achieve cost savings, has made digital transformation a priority. As Microsoft CEO Satya Nadella said, "We've seen two years' worth of digital transformation in two months."

75% of business leaders report they are already creating new products and services.

73% of companies report they are currently creating their own first-party intellectual property (IP) using next-generation technologies such as machine learning (39%), IoT (37%), AI (32%), blockchain (29%), and mixed reality (21%).[2]

Insight Across industries, organizations put themselves at the forefront when they develop their own digital capabilities. As Nadella said: "What was true then and what is true now is that we create technology so others can create more technology."

2 Tech Intensity Quantitative Research, Microsoft, 2019.

Trend 2

Global society will benefit from tech intensity

It's not all about the bottom line for businesses. The efforts of businesses include positive network effects, economies of scale, and a global reach of societal benefit and improvements. We are already seeing sectors such as healthcare gaining ground using the power of technology to deliver easier access to practitioners, decrease costs, and treat more patients faster and in a less expensive way.

[2] Tech Intensity Quantitative Research, Microsoft, 2019.

43% of companies believe tech developments will lead to better public services at lower costs.

36% of companies believe tech developments will lead to improved access to healthcare.

36% of companies believe tech developments will lead to safer products for consumers.[2]

Insight Art delaCruz, President and Chief Operating Officer at Team Rubicon, a nonprofit that responds to natural disasters and humanitarian crises around the world, noted: "By combining infection rate data with other information sources like potential weather events and social vulnerability, we can see which areas are bending the curve and which aren't there yet. We can find gaps in aid and fill them."

Trend 3

Lines between and within industries will blur

Businesses once had a clear idea of who their top competitors were. They knew who they had to be a step ahead of in order to be considered a market leader. However, digital transformation is blurring the lines between and within industries, making it harder to identify exactly what grounds you're competing on. In 2020 and beyond, companies have the opportunity to expand their reach due to the blurring of these lines.

Restaurants have switched to meal prep delivery services. Retail companies are becoming banks. Telecommunications companies are becoming media giants. Grocery stores are offering more health- and wellness-related services. Manufacturers are leveraging their infrastructure to produce personal protective equipment.

² Tech Intensity Quantitative Research, Microsoft, 2019.

47% of companies believe industry incumbents will be forced to compete with new entrants that have harnessed their own digital capabilities and intellectual property.

36% of companies believe digital advancements will make the global economic playing field more level.²

Insight In the next 10 years, breakthrough innovation will be driven by sectors that are able to evolve, create proprietary solutions, and bring new measures of value to customers.

Trend 4

Corporate cultures will shift

Enabling remote work with collaboration technology is no longer a competitive differentiator—it's a necessity for business continuity. Even as companies enable teams to work anywhere, corporate cultures are adapting to become more empathetic and human-centric. Collaboration technology helps teams work more efficiently while facilitating the virtual human connections that define the workplace.

Old		New
Information scarce		Information abundant
Static hierarchies	→	Dynamic networks
Compete to win		Collaborate to win
Individual productivity		Collective value creation
Focus on planning ahead		Experiment, learn, and respond
Efficiency of process		Effectiveness of outcomes

70% of millennial business leaders believe it is very important to work for a company or organization that keeps up with software and application trends.[2]

Insight Having seen firsthand the benefits of allowing employees to work from home, more companies are moving to a permanent work-from-home model for some or the majority of their workforce—thus changing corporate culture norms.

[2] Tech Intensity Quantitative Research, Microsoft, 2019.

The tech intensity underlying transformation

Woven through the profound sense of uncertainty that's shaping our world, there is a sense of tech intensity. As previously defined, tech intensity is an organization's rate of technology adoption, along with its ability to build its own digital capability, amplified by trust. Tech intensity is focused on inventing new digital capabilities to solve the complex challenges organizations encounter in a rapidly changing world, and it's showing up across multiple industries.

Retail

Gone are the days when retailers chose when, where, and what to sell. The world is changing, and retailers are being challenged to figure out how best to engage with customers within new constraints. For example, adapting business processes to provide BOPIS—that is, buy-online-and-pickup-in-store—services.

Retailers are also trying to manage pressures driven by industry trends such as the drive for more sustainability in retail, the proliferation of data, the need to better equip store associates with technology, and the ability to deliver remote sales and service. Meeting these challenges is not easy, but it requires embracing the principles of tech intensity to accelerate innovation.

That's why we believe that the next big wave of innovation isn't going to come only from technology companies. We believe that retailers that embrace tech intensity as they work to find new paths to revenue, keep up with customer demands, and, ultimately, reimagine their business.

Fabletics

Some might say the Fabletics story is backward. The retailer was founded as online-only, then opened brick-and-mortar stores. As a company founded on digital technology, though, they brought a different view to their physical stores. Their locations would be used to gather richer, more meaningful data on customer interactions with the product, which would in turn inform product design.

Fabletics coined the term "brick-mining" to describe the process of data collection on the ground to help inform business in the cloud. The variety of metrics trackable in a physical store far outnumber the tracking available online, and for this reason Fabletics is able to fine-tune for business success. They use Microsoft Azure to connect the dots.

Like many other retailers, Fabletics is also leveraging its data platforms to adapt their processes to the new world and customer needs.

Healthcare

In the highly regulated field of healthcare, digital change is driven by the need to lower the risk of delivering patient care while doing so at scale. A rapidly changing world is also pressuring healthcare organizations to evolve how they deliver patient care.

For example, healthcare organizations are increasingly leveraging technology platforms to shift to telehealth services. By meeting with patients virtually, healthcare professionals can treat more patients while minimizing the risk of exposure to themselves and other patients.

apoQlar

Surgeons usually use CT and MRI images to prepare for cancer options, locate the tumor, and understand risks like nearby nerve pathways. It's a 2D perspective, though, and involves some guesswork. The team at apoQlar has developed virtual surgery intelligence (VSI) software. Using the Microsoft HoloLens mixed reality device, surgeons can now see CT and MRI images in 3D during surgery for the first time.

The software is used in six German hospitals, and apoQlar is working with doctors to constantly improve the product. VSI is updated about every two weeks, a clear demonstration of apoQlar's tech intensity.

Manufacturing

In the coming years, manufacturers will move from selling unconnected products to ones that come with connectivity services, and from selling a discrete product to selling products as a service. Having recognized the need to shift focus to accommodate global crises, manufacturers will also seek ways to be more agile and responsive to changing market demands. Manufacturers are building digital feedback loops that help companies connect with their products and customers to continuously learn, grow, and improve existing services, as well as build new ones. All of these efforts amount to increasing tech intensity.

thyssenkrupp

With 160,000 employees spread across six continents, thyssenkrupp is one of the most diversified industrial groups in the world. In the last few years, new and emerging technologies have brought significant changes to manufacturing. Partnering with Microsoft, thyssenkrupp embarked on a four-part digital transformation journey that included:

- Ensuring around-the-clock service reliability with IoT
- Providing first-rate customer care with mixed reality
- Empowering employees with high-tech tools
- Optimizing system performance with digital twins
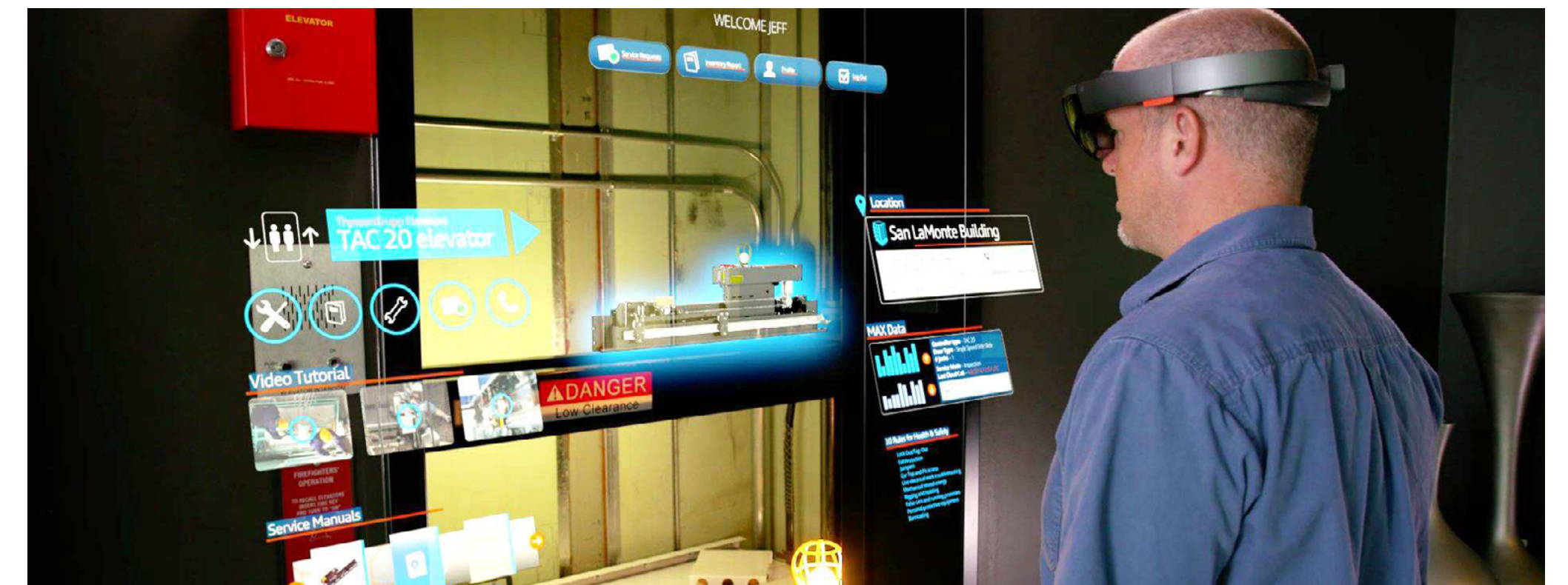
Financial services

Technology will become a transformative tool that enables everything from new forms of payment such as contactless cards to defeating financial crime. AI will become the foundation for all financial service organizations in driving intelligent banking at all levels. It will dramatically improve the ability to deliver differentiated customer experiences, empower employees, and drive innovation in compliance, regulatory, and security environments. It is also facilitating tech intensity.

TD Bank

With more than 26 million customers, TD Bank, one of North America's largest banks, knows how important it is to find new ways to draw deeper insights from the data available to them. TD Bank generates hundreds of millions of digital records every day. Making sense of all that information quickly requires very specific and powerful technology. TD Bank moved to Microsoft Azure and gained the benefits of the cloud: scalability, agility, and flexibility.

Azure is able to deliver detailed results about the factors influencing customer satisfaction, unlocking tremendous possibilities to drive better experiences and increase customer engagement.

Government

The need for greater efficiencies and better communication with citizens is making digital transformation initiatives imperative across local, regional, and national governments, especially in a crisis. Expect governments to deepen their reliance on enabling remote access, empowering cross-agency collaboration, and delivering trusted and secure services to improve citizen public health efforts and better engage citizens safely.

Gauteng Provincial Government Republic of South Africa

In Gauteng, South Africa's smallest but most densely populated province, the government is increasing its tech intensity by bringing easier access and higher quality of civic services to its people. Working with Microsoft and a local technology partner, the Gauteng Provincial Government (GPG) is building an online citizen platform.

The Digital Platform is an e-government web portal, mobile app, and chatbot service based on Microsoft Azure Platform as a Service, Dynamics 365 CE, and Microsoft 365. More than 400,000 citizens use the tool, which is integrated with 10 existing services. Most notably, the tool enables 24/7 access to the government and automates the job application process so that candidates don't have to submit their resume for each job they qualify for.

Digital transformation is the foundation for business

For the last five years, digital products and services have largely been seen as a way to drive business through new lines of revenue, increased efficiencies, and reduced costs. In 2020, that has changed. A rapidly changing world has put digital transformation in a different light.

Powerful collaboration tools and unified data sources enable organizations to engage with each other and the customer seamlessly and from anywhere. Technology advances in data capture and analytics, improved access to data, as well as the ability to build new proprietary solutions, enable organizations to apply technologies such as AI and machine learning to unlock key insights and deliver value when and where it's needed most. Digital transformation is helping organizations across every industry adjust to changing business and customer needs, while impacting corporate culture and benefiting society on a global scale.

Start your journey here

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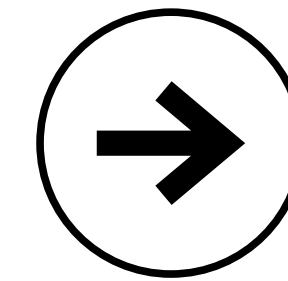
Learn more about Microsoft's digital transformation solutions >

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