Microsoft

4 Digital Trends that will Transform Business in 2020

Understanding the scope of change

A significant event happened recently and went nearly unnoticed: more than half of all gross domestic product (GDP) worldwide became digital, and by 2022 this will be true of 60 percent of all GDP.[1] The way businesses make money and the way billions of humans consume services and receive value is through digital applications. Significantly, businesses are no longer just deploying and optimizing applications, they are using new technologies to build proprietary solutions that help them differentiate and gain a competitive advantage. This is the essence of tech intensity, an essential element for success in the digital era.

This has tremendous implications across industries and businesses, many of which are over a hundred years old and were designed and structured for a physical world. The pressure is relentless to reinvent business models in order to deliver more value to customers and stakeholders, enter new markets, and improve operations.

The cloud, AI, machine learning, mixed reality, blockchain, and the Internet of Things (IoT) are all central to this movement. Using these technologies, businesses and organizations are able to build solutions that unlock their data and convert it to meaningful value. They are successfully reinventing for the digital economy. That's digital transformation.

In an effort to understand the scope of change around us, we surveyed 700 executives and business and technical decision makers in the US from the retail, healthcare, manufacturing, financial services, and government sectors. This e-book reports on our findings.

[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.

>50% More than half of all gross domestic product (GDP) worldwide became digital.

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. From this start, four strong trends have emerged, all powered by the growth and accessibility of data, all transforming our world.
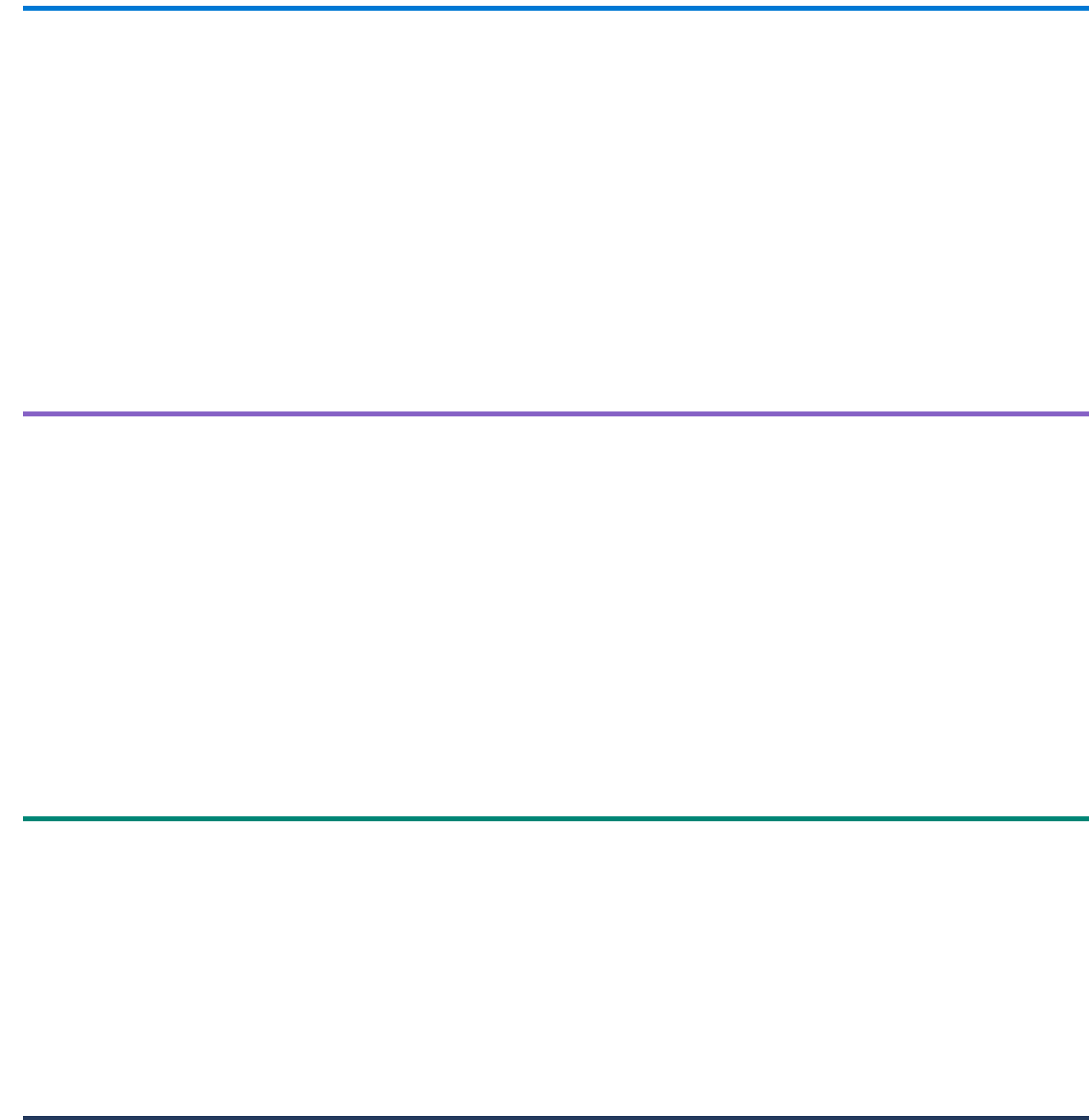
Trend 1

Every company will become a tech company

Many companies are rearchitecting their infrastructure and culture for innovations. From manufacturing to healthcare, they're inventing new technologies from existing solutions in order to compete more effectively. We've seen a shift away from simply implementing digital applications and embracing mobility, to a more focused strategy to build proprietary data solutions. Businesses need to innovate, at high velocity, to enter new markets and drive more customer value.

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%).

68% of business leaders say profitability has increased due to digital transformation programs[2].

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

Insight

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

Trend 2

Global society will benefit from tech intensity

It's not all about the bottom line for businesses. The efforts of businesses will include positive network effects, economies of scale, and a global reach of societal benefit and improvements. For example, in 2020 we expect to see sectors like healthcare gaining ground using the power of technology, bringing easier access to healthcare, decreasing costs, finding treatments and cures faster, and in a less expensive way.

36% believe tech developments will lead to improved access to health care.

40% believe tech developments will provide better connectivity to rural areas.

40% believe tech developments will help reduce corporate waste.

Insight Neuroscientist and spiritual master Amit Ray sees tremendous potential for AI: "Compassionate Artificial Intelligence can transform and heal the world from [a] much deeper sense. [It] can add values and transform our world, our families, our workplaces, and our communities."

Trend 3

Lines between and within industries will blur

Businesses once had a clear idea about who their top competition was. They knew who they had to beat in order to win category dominance. But digital transformation is blurring the lines between and within industries, making it harder to identify exactly what grounds you're competing on. Retail companies are becoming banks. Telecommunications companies are becoming media giants. Grocery stores are becoming healthcare providers.

Established organizations face disruptions from new market entrants—including developing nations—that are able to take advantage of technologies at a faster velocity, while orienting their processes and cultures for next-generation consumer demand.

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

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

Insight In the next 10 years, breakthrough innovation will be driven not by the technology sector, but by sectors that are able to evolve, create proprietary solutions and bring new measures of value to customers.

Trend 4

Corporate cultures will shift

New technologies and capabilities that make work more efficient and engaging are more accessible than ever before, and the demand on businesses to put these to good use is high. This is changing corporate culture by improving communications, collaboration, and access to business data. It's raising expectations and forcing businesses and organizations to adapt or risk losing the race for talent. With better technology, workers get better work, better infrastructure, tools, and insights that can lead to professional success.

Old

Information scarce
Static hierarchies
Compete to win
Individual productivity
Focus on planning ahead
Efficiency of process

→

New

Information abundant
Dynamic networks
Collaborate to win
Collective value creation
Experiment, learn and respond
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.

Insight
Technology hiring in non-technology industries is growing 11% faster than technology hiring in the technology industry.

The tech intensity underlying transformation

Woven through the profound digital transformation that's shaping our world, there is a sense of tech intensity. We define this as an organization's rate of technology adoption, along with its ability to build its own digital capability, amplified by trust. It's a creative entrepreneurial mindset focused on inventing net-new digital capabilities to solve complex challenges for business and government. And it's showing up across multiple industries.

Retail

Gone are the days when retailers chose when, where, and what to sell. Now consumers are in the driver's seat, and retailers are being challenged to figure how to best engage with them.

Retailers are also trying to manage pressures driven by industry trends such as the drive for more sustainability in retail, the proliferation of data, increased energy around "anywhere commerce," the need to better equip store associates with technology, and much more. Meeting these challenges is not easy, but it requires the sort of change that often accelerates innovation.

That's why we believe that the next big wave of innovations isn't going to come from technology companies. Instead it will be driven by retailers that embrace tech intensity as they work to find new paths to revenue, keep up with customer demands, and ultimately reimagine their businesses.

Fabletics

Some might say Fabletics is backwards. The retailer was founded as online-only, then recently 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.
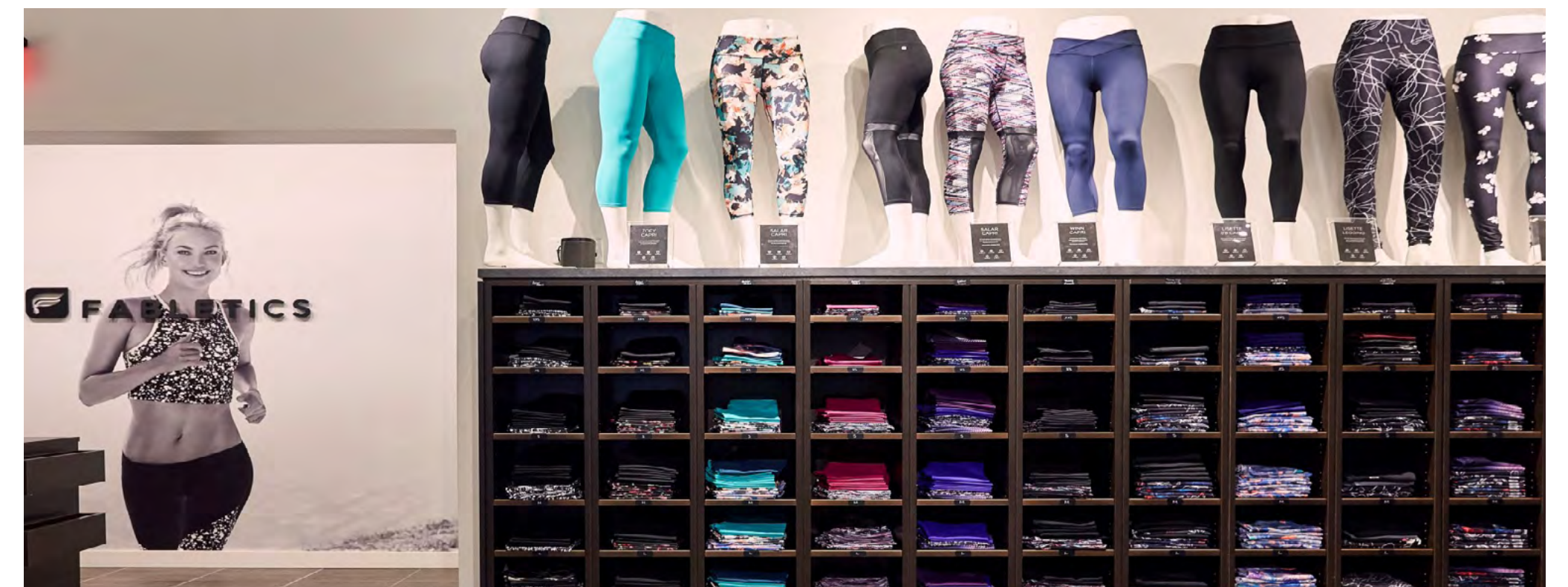
Healthcare

In the highly regulated field of healthcare, digital change is driven by patient need. Patients who are accustomed to easy access to every bit of information about themselves are beginning to force healthcare providers to step up with ecosystems that mirror the consumer world.

For example, some patients can now access healthcare portals that connect them with gym memberships, wellness coaches, and nutrition consulting, as well as prescription records and notifications if a new medication conflicts with an existing one. In the hospital and operating room, digital transformation is being driven by mixed reality devices that help surgeons operate with greater precision and better outcomes.

apoQlar

Surgeons usually use CT and MRI images to prepare for cancer options, to 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 already used in six German hospitals, and apoQlar is working with doctors to constantly improve the product. VSI is updated about every two weeks.

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. Manufacturers are building digital feedback loops that help companies connect with their products and customers to continuously learn, grow, and improve existing services, and build new ones.

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.
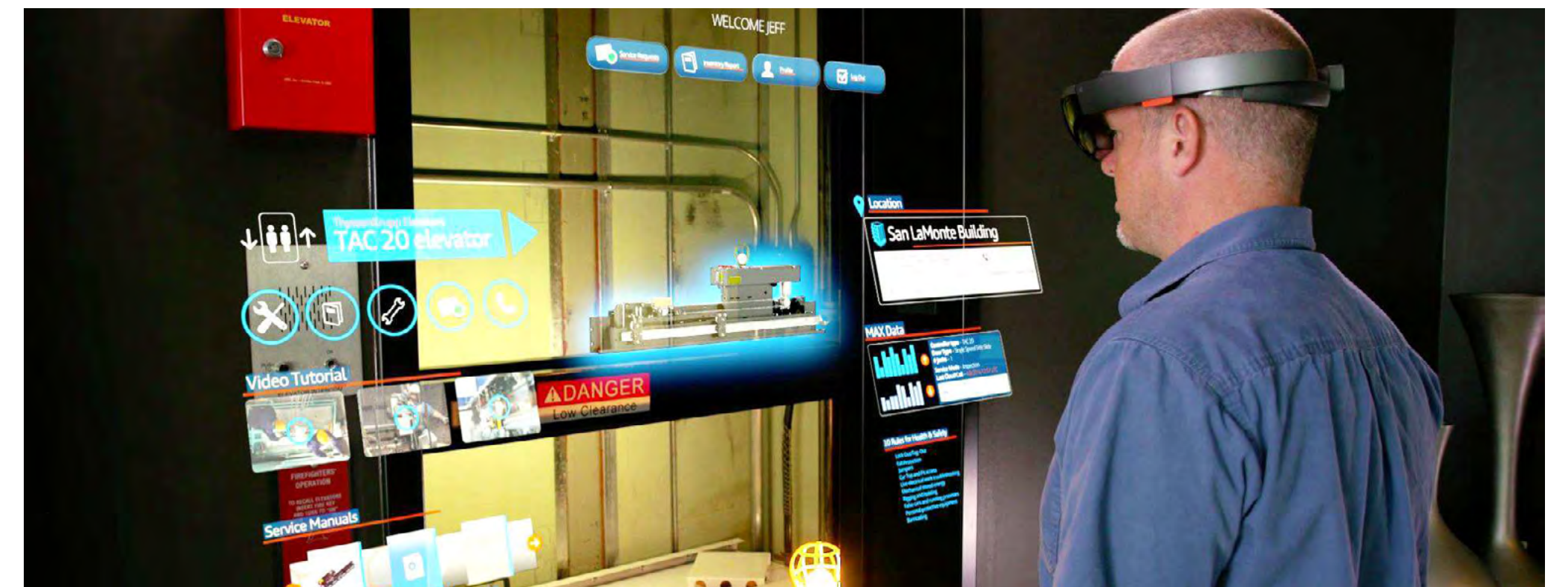
Financial services

Technology will become a transformative tool that enables everything from new business models in financial services, 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.

TD Bank Group

With more than 26 million customers, TD Bank Group (TD), 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 generates hundreds of millions of digital records every day. Making sense of all that information quickly requires very specific and powerful technology. TD 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. Expect governments to deepen their reliance on IoT and other technologies to conserve resources, improve convenience for their citizens, and allow citizens a more direct voice in government.

Denver, Colorado

In Denver, Colorado, a smart city is coming to life, bringing together data from many sensors—from intelligent traffic lights to air pollution sensors and connected vehicles—to gain a holistic view of city data and gather insights, so leaders can act on those insights to improve experiences for everyone.

The system, supported by Microsoft Azure Data Lake and Azure IoT Hub, will help optimize travel times, prioritize emergency and transit vehicles, streamline analysis of electric vehicle charging, make intersections safer, and identify the times of day when the air quality is the healthiest for schoolchildren to play outside.

Continuous transformation drives innovation

Start your journey here

While digital products and services have been around for roughly 15 years, the fact remains that most global businesses were created for the physical world. They are working now to reposition their organizations to compete and grow these technologies.

This requires more than attracting and retaining new skillsets and talents. It requires a full shift in the corporate mindset toward enterprise transformation and embracing new cultures and structures to innovate at scale.

Thanks to technology advances in data capture and analytics, better access to data, and the ability to build new proprietary solutions, organizations are now able to apply technologies such as AI and machine learning to unlock key insights and competitive strategies. This shift is helping organizations transform across every industry, while impacting corporate culture and benefiting global society.

Learn more from 8 real-world digital transformation lessons

Uncover the four elements to a successful digital transformation strategy

Microsoft