

Digital Transformation: A Guide for Policymakers

What is digital transformation?

Digital transformation refers to companies, in all sectors of the economy, applying digital tools across an organization in ways that create a range of new outcomes—better insights, new business models, improved safety—by connecting previously separate processes.

Once processes are digitized, this transformation helps businesses grow. They can rethink and improve the customer and employee experience. Artificial intelligence applied across a digital infrastructure optimizes production. Resiliency against cyber-attacks gets stronger when information is in the cloud. It is an important trend for protecting and strengthening the US economy and jobs in every industry.

Over the last couple of decades, some rural communities in America have experienced downward economic pressure. For one family farmer in Mechanicsburg, Ohio, industrial hemp offered a new opportunity to turn the tide. He used this crop to produce a new skincare product line. But getting his products from the farm to market required access to e-commerce tools and e-payment providers. Now, this family farmer has nine full-time employees and 600% year-over-year revenue growth.

That's just one example, but digital transformation has ripple effects across all sectors. Companies in every industry you can think of—manufacturing, healthcare, and agriculture, to name a few—are all adding software-powered tools to their daily operations.

How has the COVID-19 pandemic accelerated digital transformation?

You likely felt the effects of digital transformation at some point during the COVID-19 pandemic. Many retailers and restaurants installed touchless payment systems to minimize the spread of COVID. The rapid adoption of these digital systems due to the pandemic



In one survey, 63% of business leaders said COVID-19 made their organizations embrace digital transformation sooner than expected.

<https://www.celerity.com/digital-transformation-report>

provides a more convenient experience for customers and employees today.

The pandemic also became a catalyst for widespread telehealth adoption. Today, a healthcare provider may conduct an initial virtual visit with a patient. Then, after running tests, the patient can access the results through an online portal and discuss the results and next steps with the provider through a virtual follow-up visit. Prescriptions can be sent to a pharmacy electronically or the patient can order them through an online portal. Not only do patients no longer have to drive, park, and sit in a waiting room, but patients are safer because fewer people in waiting rooms limits illness transmissions. And all of this helps to bring down healthcare costs.

Why should I care about digital transformation?

The rapid rise of digital transformation means that the companies powering the economic engine in every district and state are increasingly relying on technology to grow, create new jobs, and innovate. America's economic competitiveness will increasingly depend on digital transformation.

Digital transformation means "tech" policy issues are issues for every company, big or small, in every economic sector, in every state in the US. Technology policies are not just technology company issues, they are issues for every constituent and local business.

Is digital transformation only relevant for tech companies?

Every company in every sector now uses technology on a daily basis.

The ways that companies outside of the tech sector use digital transformation are as varied as the companies themselves. A pharmacy launched an online COVID-19 portal to provide the latest information on the virus, check vaccine and testing availability and eligibility, and schedule appointments, receive reminders, and more. A nonprofit centralized communications for its Driver Safety and Tax-Aide programs with a multilingual virtual call center. A social impact fashion brand uses digital tools and platforms to tap into the talents of those with disabilities for T-shirt designs.

Okay, I agree that digital transformation is important. What policies need to be in place to help people take advantage of this shift?

Modernizing technology policies is important for spreading the benefits of digital transformation. Strong national laws with high standards are needed to give consumers, businesses, and governments clarity on how technology and data are to be used. This is particularly true for small businesses whose reach stretches beyond state lines. Here are just a few key areas where Congress can take action:

» **Inclusive Economic Opportunity:** All Americans deserve access to the job opportunities that software and digital services provide. Expanding broadband and computer access and ensuring more Americans can study STEM, cybersecurity, computer science, and other digital skills will help narrow the skills gap. The COMPETES and USICA bills include important provisions around STEM education and training that can foster greater opportunity.

➔ This year, digital transformation spending will reach nearly \$2 trillion. Between 2020 and 2023, direct digital transformation investments will total almost \$7 trillion.

<https://www.statista.com/statistics/870924/worldwide-digital-transformation-market-size/>

- » **Real Data Privacy:** Companies and consumers alike need a strong, comprehensive federal law that ensures consistent and high privacy standards throughout the country. A federal law should build on recent state privacy laws, including new laws in Colorado and Virginia that can provide a blueprint for establishing one national standard.
- » **Trustworthy Artificial Intelligence:** To maintain our status as the world leader in responsible AI development, the US should require all companies that develop, use, or deploy AI systems to perform impact assessments on high-risk uses of the technology.
- » **Smart and Strong Cybersecurity:** Connected devices and data analytics have the capacity to transform our daily lives and improve our economy, but we must keep them secure. Government and industry must collaborate to ensure high software security standards are used to address criminal and nation-state threats. Recent warnings about cyberattacks from Russia make this priority all too clear.
- » **Cross-Border Data Transfers:** With the ability to transfer data across borders securely and reliably, the quality and security of cloud services will be strengthened.

The bottom line: we all rely on technology to get through our daily lives, make a living and compete in a global economy. We depend on policymakers to set common rules of the road that provide the clarity needed to enable the benefits of technology to continue improving the lives of customers and employees.

Where can I learn more about digital transformation?

BSA's members are at the cutting edge of software innovation and, as a result, we work on the policy issues that shape digital transformation. You can learn more about BSA and our members at [BSA.org](https://www.bsa.org).

We're also proud to have recently launched the Digital Transformation Network, a coalition of companies leading on digital transformation. You can learn more about the Digital Transformation Network and read reports on the tangible benefits of digital transformation across industries at dxnetwork.org.