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Digital transformation is a business strategy initiative that incorporates digital technology across all areas of an organization. It evaluates and modernizes an organization's processes, products, operations and technology stack to enable continual, rapid, customer-driven innovation. Today customers expect to be able to conduct their business, do their work and live their lives by using the latest technology advances. They expect this ability from wherever they are, anytime they want, by using the device of their choice and with all the supporting information and personalized content they need close at hand. The ultimate goal of digital transformation is to meet these expectations. Every organization's digital transformation implementation is different. It can begin with a single focused technology project, or as a comprehensive enterprise-wide initiative. It can range from integrating digital technology and digital solutions into existing processes and products, to reinventing processes and products or creating entirely new revenue streams by using still-emerging technologies. But experts agree that digital transformation is as much about business transformation and change management as it is about replacing analog processes or modernizing existing IT. While often led by a company's chief information officer (CIO), it requires the entire C-suite to align on new technologies and data-driven methodologies that can improve customer experience, empower employees and achieve business goals. But, most importantly, companies should create a digital transformation framework and monitor improvements through tracking key performance indicators (KPIs) to see if the work produces results. The earliest, headline-making examples of digital transformation—Uber, AirBnB, Netflix—used mobile and cloud computing technologies to reimagine transactions and, sometimes, disrupt entire industries. The COVID-19 pandemic drove transformative innovations to better support remote and hybrid work. Today, organizations are applying artificial intelligence (AI), automation and other technologies to streamline workflows, personalize customer experiences, improve decision-making, and respond more quickly and effectively to market disruptions and new opportunities. Digital transformation can help companies increase customer loyalty, attract talented employees, foster competitive advantage and build business value. McKinsey research found that between 2018-2022, digital leaders achieved about 65% greater annual total shareholder returns than digital "laggards."

1 Discover expertly curated insights and news on AI, cloud and more in the weekly Think Newsletter. In digital transformation, domains are essentially targets or levers for transformation. Most digital transformation strategies target one or more of these domains: Business and operating models, Products, Employee experience, Customer experience, Business model transformation is a fundamental change in the way that an organization delivers products, services and value to its customers, investors or stakeholders. Examples include: Delivering video through digital streaming, instead of physical disks (Netflix, Hulu) Enabling anyone with a car to make money driving, without purchasing a medallion (Uber, Lyft) Allowing customers to deposit checks without visiting the bank (mobile deposit) Organizations pursue business model transformation for any number of reasons—for example, to meet changing customer expectations, boost flagging sales, or differentiate themselves in a highly competitive market. They might also see a chance to disrupt a market or industry in their favor with a new business model—or have a need to respond to a disruptive competitor. While business model transformation grabs the headlines, business process optimization is an increasingly common digital transformation driver. Process optimization can include: Consolidating isolated or redundant workflows, Creating intelligent workflows by using AI, Replacing manual tasks with AI and automation, Process optimization can help organizations lower costs, reduce waste (time, effort and materials), make better use of human capital, and help all stakeholders make smarter decisions faster. Organizations are incorporating digital innovation into their products, and into the way their products are developed, produced and delivered. The most obvious examples involve the embedding of digital technology into everyday products that meet customer needs. Automobiles, for instance, are continually transformed in this way. Innovations range from the ability to view and operate a smartphone from a car dashboard, to sensors that prevent crashes and unintended lane changes, to vehicles that incorporate computer vision, geolocation, machine learning and robotic process automation (RPA) to operate with minimal or no human intervention. By implementing Internet of Things (IoT), operational technology and automation on the factory floor, manufacturers can speed production, reduce errors and defects and eliminate manual labor. By adopting agile or DevOps practices organizations can speed software development. Companies can also add value and competitive differentiation by offering technology alongside their existing services—witness the tracker apps offered by shipping companies and pizza vendors. Employee experience is a holistic approach to talent management that helps ensure that employees have the tools they need to succeed and thrive at work. Employee experience certainly impacts employee recruitment, morale, productivity and retention, but it can also have a direct impact—positive or negative—on customer experience, business performance and brand reputation. Digital transformation efforts to improve employee experience can include: Innovating user experiences for internal systems such as onboarding applications, employee benefits portals and internal communications, Providing access to popular messaging and collaboration tools, Supporting work from home (WFH) or remote work without sacrificing capabilities or productivity, Enabling employees to connect securely to corporate resources with the devices they prefer, including their own mobile devices or computers, by using 'bring your own device' (BYOD) policies and initiatives, Customer experience, or CX, is the sum of customers' perceptions resulting from all their interactions with a business or brand—online, in-store and in day-to-day life. In the end, all digital transformation journeys lead to the customer experience domain. Continually improving the customer experience is a competitive imperative for most organizations. In the digital age, continually improving the customer experience requires continual digital innovation. It's not just that customers expect to be able to do business anytime, anywhere and on any device—today customers depend on it. They plan their mornings knowing their phones tell them exactly how long it takes to drive to work, and their evenings knowing they can meet the food delivery driver at their door. They ignore customer service call center hours, knowing they can get answers 24/7 from a chatbot. They stop saving receipts knowing that they can download their bank and credit card history at tax time (or anytime). Customers count on these and scores of other digital innovations, and they are ready to count on new ones. Successful digital transformation positions organizations to anticipate and deliver the next innovations and experiences customers will want. Virtually any digital technology can play a role in an organization's digital transformation strategy, but these technologies are most closely associated with transformation initiatives. Cloud computing The original digital transformation enabler, cloud computing enables organizations to use the latest IT technologies, boost efficiency and scale with demand while managing costs. A hybrid cloud infrastructure, combining orchestrated public cloud and private cloud resources from multiple vendors, provides the application portability, vendor flexibility and IT agility needed for enduring digital transformation success. Mobile technology Customers' dependence on mobile devices drove the earliest digital transformation initiatives, transformed existing business models (for example mobile tickets and wallets) and created entirely new ones (for example, Uber). Today customers insist on doing more business through mobile apps, whether simply ordering lunch or dinner from their favorite restaurant, or managing their banking and investments. Internet of Things (IoT) The Internet of Things (IoT) is the universe of devices equipped with sensors that collect and transmit data over the internet. IoT devices are where digital technology meets physical reality. Applications like supply chain logistics and self-driving cars generate real-time data that AI and big data analytics applications turn into automation and decisions. Artificial intelligence (AI) and machine learning AI and machine learning enable a computer or machine to mimic the capabilities of the human mind. AI learns from examples, recognizes objects, makes decisions and quickly processes large tasks. Generative AI applications can answer customer service inquiries, deliver content on demand, and perform other activities automatically and without human intervention, freeing employees for higher-value work. AI also enables personalization on demand and at scale across marketing, customer service, sales and other areas of a business. Automation Organizations also use automation, and specifically robotic process automation (RPA), to perform repetitive tasks such as bookkeeping, sending invoices, or looking up or archiving records. Unlike AI, which can learn from data and perform tasks more accurately over time, RPA is limited to following processes that have been defined by a user or programmer. DevOps and DevSecOps DevOps accelerates delivery of higher-quality software by combining and automating the work of software development and IT operations teams. DevSecOps continuously integrates and automates security throughout the DevOps lifecycle, from planning through feedback and back to planning again. DevOps and DevSecOps practices provide the agile development foundation organizations need to respond with speed to market changes and innovate software continuously. Digitization Digitization is the conversion of paper-based information into digital data. It's also a cornerstone of foundational transformation initiatives in healthcare (electronic medical records or EMR), government (making public records more accessible and enabling citizens to make service requests online), and other industries. Blockchain Blockchain is a distributed, permanent and immutable ledger or record of electronic transactions. Blockchain provides total transaction transparency to those who require it and is inaccessible to those who don't. Organizations are using blockchain as a foundation for superresilient supply chains and cross-border financial services transformations. Ecosystems Digital transformation has created many ways organizations can partner with each other to serve customers. The rise of business ecosystems, driven by APIs and other advanced technologies and a growing interconnectedness between noncompetitive companies. Software providers can enable users to sign in with accounts from third parties. For example, an email provider can create a marketplace where users can connect their task management software or customer relationship management (CRM) provider. Digital twins This new technology-led approach involves creating digital facsimiles of physical products or environments to test out ways to improve efficiency or effectiveness. For example, a manufacturer can make a digital twin of their shop floor to find ways to improve the location of machinery to increase output or reduce safety issues. Or a product manufacturer can create digital replicas of their products to identify ways to produce ones that are more ergonomic or easier to use. Digital twins help organizations improve their business in the future while not burdening existing operations with trial-and-error improvements. Experts and organizations credit digital transformation with everything from improved supply chain and resource management to significant gains in overall productivity, profitability and competitive advantage. Some of the most frequently cited benefits include: Improved customer satisfaction and loyalty Successful digital transformation can improve an organization's customer experience and customer relationships. Enabling customers to engage by using the device and channel of their choice (web portal, social media, in-app), providing 24/7 customer service through a chatbot, delivering personalized content in context during any transaction—these are just some of the ways organizations can better satisfy and retain customers by using digital technology. Rapid, continual innovation Digital transformation should enable organizations to innovate products and processes continually. Adoption of hybrid multicloud infrastructure provides access to the best digital tools and technologies as they emerge. Agile and DevOps practices enable developers to rapidly integrate these technologies into their applications and systems. Greater resilience to change The same flexibility and agility that enables rapid innovation also helps the organization respond faster to changes in customer demand, new market opportunities and competitive threats. In its earliest days, digital transformation enabled startups to disrupt entire industries; today it also helps organizations respond quickly and effectively to would-be disruptors. More efficient workflows and operations Digital tools can help organizations create more streamlined workflows, processes and infrastructure as a result of their transformations. Through automation and AI, organizations can cut down laborious menial tasks and free up their vital employees to spend more time with customers and other stakeholders. A more engaged workforce Digital transformation can improve employee engagement in any number of ways, from providing access to the latest tools and technologies to driving a culture of agile innovation in which employees are encouraged to experiment, take risk, 'fail fast' and learn continually. According to the latest Gallup Q12 meta-analysis, which evaluates the connection between employee engagement and business outcomes, companies with higher levels of engagement show significantly higher performance in everything from absenteeism to sales productivity and profitability.

2 Stronger cybersecurity Digital transformation can uncover issues with legacy technology or existing cybersecurity measures that put an organization at risk. Adopting the latest security technologies can help an organization better detect and respond to threats, reduce successful attacks, and prevent or minimize any resulting damage. New revenue streams Infusion of the latest technologies into a company's IT portfolio can help create new opportunities for revenue, including revenue streams from websites, mobile apps, upselling through chatbots and more. AI and sophisticated metrics can help identify new product and service opportunities based on customers' website behaviors and buying patterns. And customers might simply be more inclined to purchase from companies that offer more options for doing digital business. Most people have read or heard how companies like Netflix and Uber have disrupted their business models and industries through digital transformation. But other organizations also have compelling stories about digital transformation initiatives that revolutionized their businesses. Here are just a few examples: Consumers have always known Audi for making beautiful, high-performance cars, but the company risked falling behind electric car startups as more people wanted to move away from gas-powered cars. The German automaker not only wanted to enter the electric market in a significant way but also wanted to embrace the digitization of its offerings through connected cars and autonomous driving. Audi has a clear understanding of what it needs to do to compete in a highly competitive marketplace driven by sustainability and convenience. Seeing the US' only tennis major in person is an amazing experience, but not every tennis fan can make it to New York. The US Open wanted to ensure that the 15 million-plus fans could experience the tournament's hundreds of matches through the US Open app and website. The US Open used generative AI models to turn more than 7 million tournament data points into digital content that gave fans more context about the matching being played. The UK's system of public healthcare providers needed to balance providing more digital services to clients while maintaining a strong security posture. Its digital, data and technology delivery partner, NHS Digital, created a Cyber Security Operations Centre (CSOC) that is as a single point of coordination between NHS and external partners. It now monitors more than 1.2 million NHS devices for threats and blocks more than two billion malicious emails a year through targeted filtering. The independent German gas and oil company knew that AI would help it better harness data generated from across the organization. While several internal business and corporate units had begun using AI, it needed a centralized initiative to deploy it at scale. It started AI@Scale where projects incorporated scalability at the start. One such deployment automated data extraction from 2,000 PDF documents, freeing up employees to focus on more impactful work. The Korean manufacturing business conglomerate understood that even one successful cybersecurity attack might have devastating consequences. Its Doosan Digital Innovation (DDI) group consolidated multiple regional security operation centers (SOCs) to a unified, global SOC to streamline its security posture and deployed AI-based pattern matching. As a result, response times have decreased by about 85%. Unlock the power of agentic AI with new Watsonx.governance capabilities Unlock trustworthy AI with integrated governance and security Cybersecurity 2028: Your workforce, built for the AI frontier Access, integrate, govern and secure all your enterprise data from one place—wherever it resides AI solutions Go from AI pilots to production with AI technologies built for business AI models Get started with cost-efficient AI models, tailored for business and optimized for scale Consulting Engage with IBM Consulting to design, build and operate high-performing businesses Analytics Support data-driven decisions for your business IT automation Discover how automation solutions increase productivity while managing costs Compute and servers Handle mission-critical workloads while maintaining security, reliability and control of your entire IT infrastructure Databases Run your applications, analytics and generative AI with databases on any cloud Security and identity Secure hybrid cloud and AI with data and identity-centric cybersecurity solutions Welcome to the Digital Spy forums. 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Expand for more options. Discuss ITV's dating reality show. Love Island UK 2025 (Summer) - Episode 9 - June 18 - 9pm - ITV2 Expand for more options. Discuss ITV's masked singing competition, international versions of the show and spin-offs here. Expand for more options. Racers, start your engines... the place to discuss all things RuPaul's Drag Race-related, including your favourite contestants. New All Stars Married at First Sight Australia - 2025 (E4) New Actor Game (Part 8) PlayStation VR The Song Title Game :) (Part 12) Boom Radio Expand for more options. What are you reading at the moment? (Part 4) DS TEST England v India (Starts Friday 20th June at 10am) Expand for more options. Talk about all things desktop, laptop, notebook or netbook-related, plus Windows, macOS, Linux and Chrome OS. Application Information Windows 11 Expand for more options. Discuss all things mobile phones here, whether that's networks, services, apps, or handsets, including Apple iPhone, Samsung and other Android devices. Vodafone and Three UK complete merger Wired: "The iPad is a full-on computer now" (iPadOS 26) Expand for more options. Talk about TVs - 4K, OLED, QLED and more - plus home cinema setups, projectors, speakers and other home entertainment tech. Are dvds a thing of the past? Full Fibre Installation.