




2021 EXECUTIVE SUMMARY

IDG Digital Business Study



Fueled by the need to adapt to pandemic-driven changes, companies accelerated digital transformation, training efforts on customer and employee experience along with agile innovation.

The pandemic hastened companies' transition to digital-first business, emphasizing the need to improve remote worker productivity along with the ability to leverage data insights to better understand customer requirements and optimize business performance.

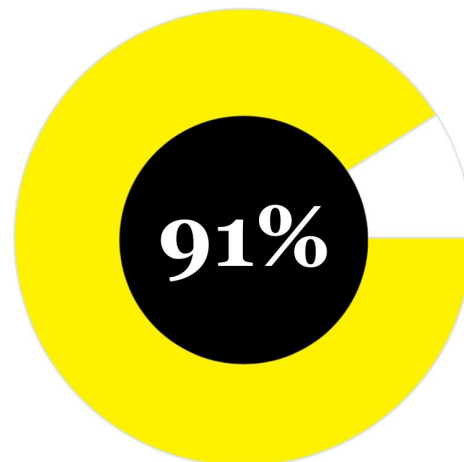
According to IDG's 2021 Digital Business survey, the lion's share of companies (91%) are heavily immersed in the planning and execution stages of digital business or have fully transitioned to make the change. While companies were well underway with this transition, a significant number were pressed into action by the global pandemic: Sixty-one percent of companies responding to the survey said they were forced to implement a digital-first strategy due to business challenges brought on by COVID-19, and 42% found themselves in catch-up mode, trying their hand at a digital-first strategy to stay at pace with their competitors.

Of the 607 total survey respondents, only 9% said they have no intention of adopting a "digital first" approach, citing reasons related to current culture/lack of executive support (30%), and to a lesser degree, budgetary (26%) and skill set (23%) limitations. Small- to mid-size businesses with less than 1,000 employees were more likely to stay off the digital business path (14%) compared to larger enterprises with 1,000 employees or greater, at 4%.

While the percentage of companies adopting a digital first strategy mirrors the landscape in 2019, the last time this survey was executed, the definition of digital business has shifted somewhat, most likely in response to priorities dictated by the global COVID-19 pandemic. When asked what digital business means to their organization for the 2021 survey, almost half (49%) of respondents said it was about enabling worker productivity (driven by mobile apps, data access, and AI-

61%

say that the global pandemic forced their organization to begin a digital-first strategy



of organizations have adopted, or have plans to adopt, a "digital-first" business strategy

1,000+ 96% <1,000+ 84%

assisted automation), which makes sense given the near-overnight shift to remote work in March 2020.

Following that mandate, survey respondents correlated digital business to increasing understanding of customer needs through data collection and analysis (43%), better managing business performance by leveraging data availability and visibility (42%), and meeting customer experience expectations through initiatives like personalization and enhanced customer touchpoints (40%). In comparison, customer experience took top billing in 2019 followed by a focus on worker productivity and business performance optimization.



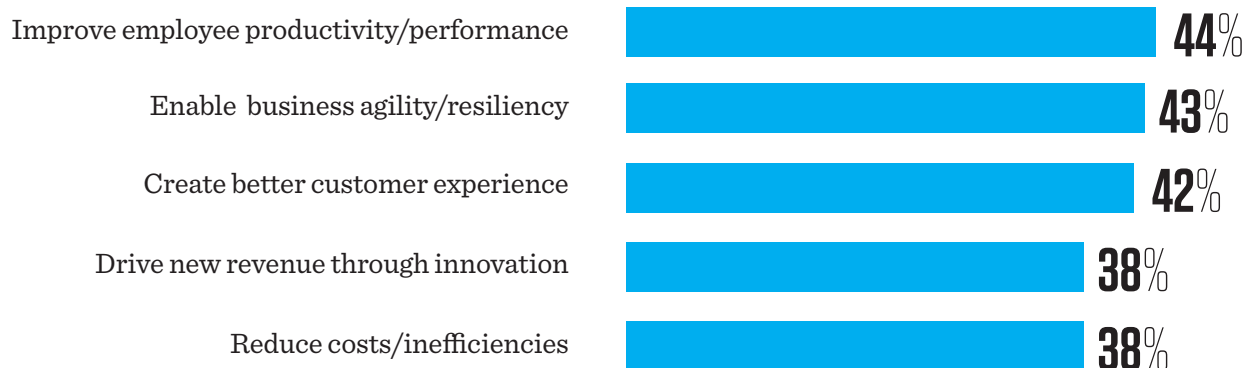
Average spend on digital initiatives
over the next 12 months

On average, companies plan to spend \$16.5 million on digital business initiatives over the next 12 months, up from \$15.3 million in 2019. The majority of dollars (on average 56%) will be funneled to new technology solutions and upgrades to support digital business compared to 44% of dollars ascribed to building out the right people and skill sets, including acquiring new talent and developing an existing workforce. Companies and firms in the services sector are more likely to deploy budgets to shore up people and competencies while companies in the manufacturing and retail sectors, as well as businesses in the APAC region, were predisposed to directing investment towards building out new technology solutions.

Top Digital Business Priorities

Customer experience took top billing for digital business objectives in 2019, and while still considered important, that goal leveled out somewhat in this year's survey, an indicator that progress is being made and freeing organizations to concentrate on other goals. In 2019, 67% of IT decision-makers emphasized the creation of enhanced customer experiences as the number one digital business objective compared to only 42% of respondents in this year's survey.

WHAT'S DRIVING DIGITAL BUSINESS STRATEGIES?



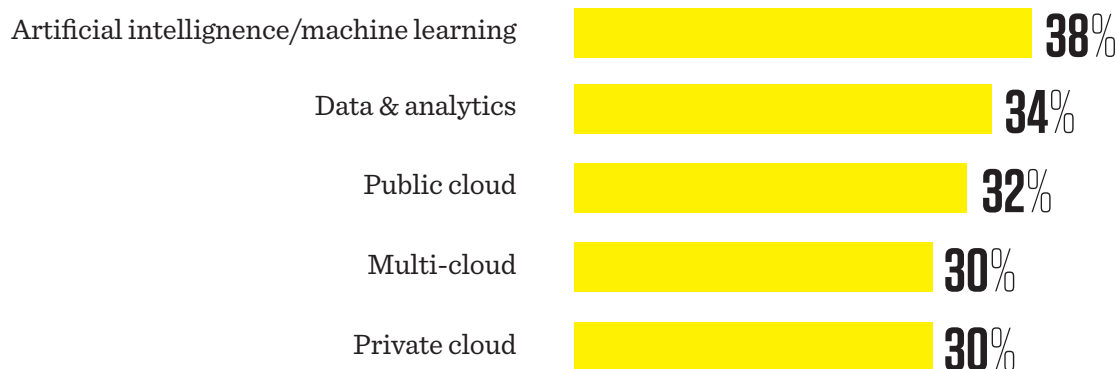
Respondents in the high tech (56%) and government/non-profit (58%) sectors ranked customer experience higher than their counterparts this year. In the 2021 survey, the top-ranked digital business goal was boosting employee productivity and performance, cited by 44% of respondents, followed by enabling business agility and resiliency (43%). These goals were both critical for sustaining revenue and keeping operations running smoothly in the midst of pandemic-induced shutdowns and business disruptions.

By far, artificial intelligence (AI) and machine learning (ML) were most likely to be called out as key technology building blocks for achieving digital business goals over the next 12 months, as 33% of ITDMs say they are actively researching AI/ML to become a digital business and only 16% are not interested. Most emerging technologies—from hybrid, private, and multi-cloud to mobile capabilities to software-defined infrastructure like storage and networking—were on the radar or being actively considered by approximately a quarter of respondents, give or take a couple of percentage points. Augmented reality was the least cited as a critical technology enabler with 39% of respondents confirming they had no interest in pursuing the technology over the next 12 months.

Among respondents indicating a lack of interest in the various technologies and models as part of their digital business plans, security concerns and lack of need seemed to be the principal deterrents. Companies shying away from DevOps, Robotic Processing Automation (RPA), and edge computing also said they had not yet determined a need for those cutting-edge technologies and strategies, hence why they were not yet factored into digital business roadmaps.

Over the next year, the top investments slated to fuel digital business goals include AI/ML, cited by 38% saying they anticipate investing more dollars into these technologies, followed by big data/analytics (34%), public cloud (32%), and private and multi-cloud (30%). Companies in the healthcare sector were more committed to investing in AI/ML technologies (51%) while financial services firms were placing bets on public (46%) and private (44%) cloud. For high-tech entities, multi-cloud environments were seen as central to their digital business roadmaps. The post-pandemic climate

INVESTING MORE IN THESE TECHNOLOGIES TO BECOME A DIGITAL BUSINESS



forced another important shift in technology buying patterns—most responding companies (66%) are now shifting to a remote-first mindset when evaluating and orchestrating new purchases, and 54% say that the amount of time it takes their organization to implement new technologies has decreased over the past 12 months.

A Playbook for Transformation

While there are a number of important steps to ensuring successful digital business transformation, the majority of companies recognize that strategy and an official roadmap must be a crucial part of the plan. Forty-one percent of responding ITDMs said developing a business case was the most crucial lever for achieving digital business goals, a tactic practiced more routinely by companies in the healthcare sector (51%) and far less so among retail players (19%). Most organizations also leaned heavily on technology needs assessment, IT skills assessment, and data security/protection strategy to achieve their desired digital business outcomes. Least important to the mix: persona development (grouping users and/or customers into groups based on behaviors.)



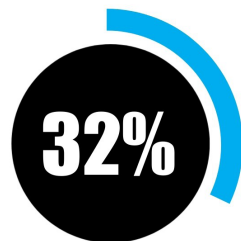
41%

say that developing a business case/roadmap for their overall digital strategy is the most crucial step to digital business success

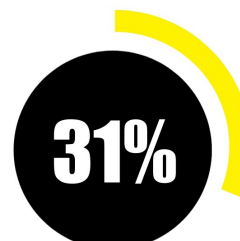
That said, companies heading down the digital business path did have some success metrics in place. About half (51%) of those responding measured their success through improved employee productivity, garnered by achieving process efficiencies and automation. This is an important benchmark during a period when many companies turned completely to remote operations and in the later stages of the pandemic, to creating hybrid work models. Strong customer satisfaction scores, indicating excellent customer experience, increased profitability, and an enhanced ability to quickly enable innovation were also cited as strong indicators of digital business success.

While the biggest obstacles to digital business success varied little between 2019 and now, their order of importance and impact has shifted slightly. A year ago, companies were struggling most with lack of

CHALLENGES ASSOCIATED WITH DIGITAL BUSINESS SUCCESS



Too many competing priorities



Lack of sufficient budget



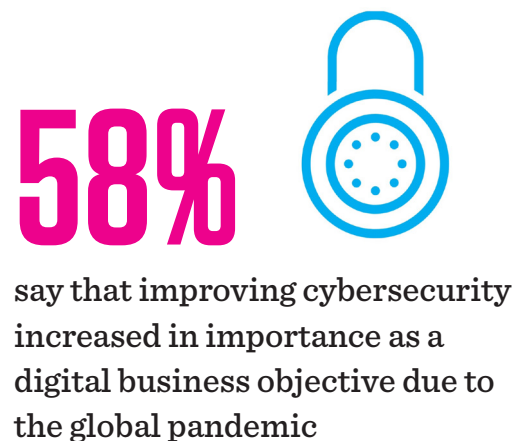
Complexity of IT infrastructure

staff and skill sets (32%) followed by insufficient budgets and too many competing priorities, both at 30%. Today, competition for resources among projects is the more significant challenge, cited by 32% of respondents, followed by the lack of talent and skills (31%) and insufficient budgets (31%).

Where companies have made the most progress on their digital business transformation journeys is in the area of data security/protection strategies – with 47% in progress and a quarter have already completed this stage. Following that, technology needs assessments and IT skills assessments are other areas where firms have made strides and completed the requisite work. Data management strategies (50%) and change management (44%) initiatives to adapt the organizational culture are also likely to still be in progress at responding firms. Success metrics, developing a business case roadmap, and devising a workforce strategy, complete with roles and responsibilities, are at the top of planning list for most as they map out transition roadmaps.

Pandemic Detours Ahead

The COVID-19 pandemic defined much about everything this last year and a half, and digital business was no different. Given the sudden shift to remote work, online commerce, and new online engagement and experiences, organizations shuffled the deck when it came to top digital business priorities, some taking center stage while others were put on the back burner. The pace of online interactions escalated, making cybersecurity improvement a key objective for most companies (58%), especially those in the financial sector and government (60%). Enabling business agility/resiliency increased in importance for 58% of companies as well, with slightly higher impact in manufacturing, services, and government entities.

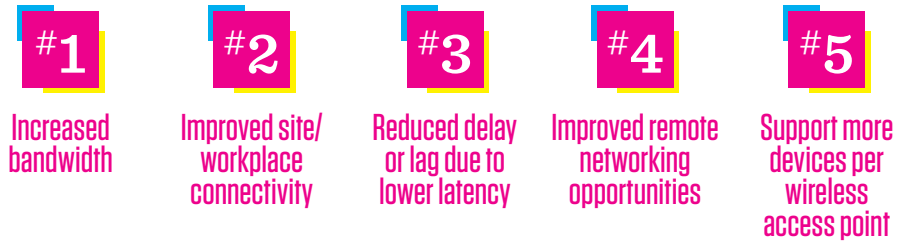


With consumers gravitating to online purchasing and many employees working remotely during the pandemic, creating better customer experiences (56%) and employee experiences (52%) became a critical focus for IT to ensure business continuity and to keep high levels of engagement. As those programs were prioritized, others decreased in importance, including efforts aimed at reducing costs and inefficiencies, improving employee productivity, and staying ahead or on pace of the competition. Digital programs aimed improving staff retention rates and morale, reducing complexity, and enabling sustainable growth stayed pretty much the same despite on-going changes.

5G on the Horizon

As the number of digital applications and interactions ramp up so too does the need for more bandwidth to support high-performance engagement. Among companies factoring 5G into their current or future digital business plans, 42% are looking to the technology to increase bandwidth to support larger data volumes followed up by an ability to improve silo/workplace connectivity (39%),

TOP BENEFITS OF 5G TECHNOLOGY



and as a way to reduce delay or lag time due to lower latency (36%). Healthcare companies are way out in front of other industries in evaluating 5G to alleviate bandwidth constraints (64%) while those in the education space are far less likely to view 5G as a solution for dealing with latency issues (20%).

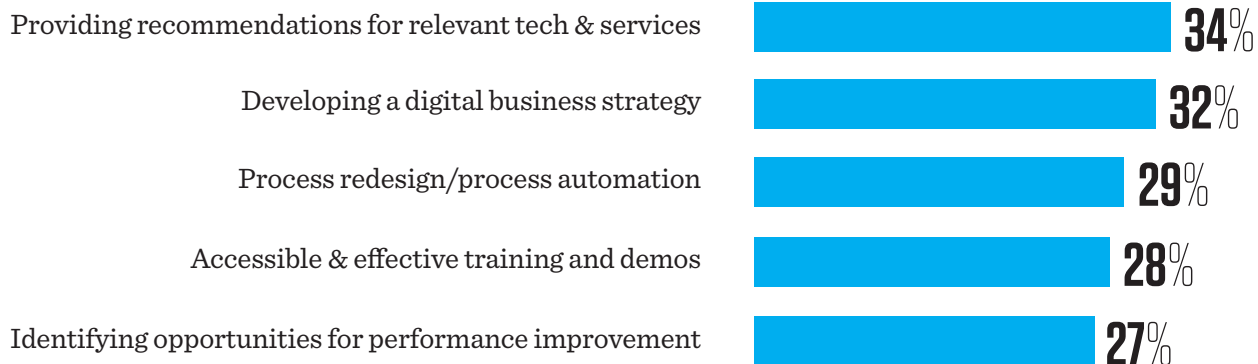
At this point in time, the majority of companies have limited instances of 5G adoption. Forty-one percent of respondents have little to no deployment of company-issued 5G devices like smartphones or tablets while 28% have issued some devices for application-, role-, or department-specific applications. Only 12% of companies allow employees to use their own devices, making it difficult to gauge 5G adoption patterns. The biggest holdup appears to be cost, especially for widespread deployments—a hurdle cited by 38% of respondents; pricing for 5G services was an issue for 36%.

5G is being deployed most actively to fix wireless or other remote access support applications, cited by 34% of respondents. Internet of Things (IoT) use cases are next in line, at 26%, followed by new digital services that capitalize on the widespread adoption of 5G for consumer devices (25%). As of now, respondents have no plans to deploy 5G for Industry 4.0 applications (44%), edge computing (42%), and SD-WAN support (38%).

The New Era of Work

As companies prepare for the future of work, creating a new workplace and hybrid work model presents significant challenges. As companies move forward with their plans, they are eying support to help with resistance to change, cited by 40% of survey respondents, as well as with organizational inertia (31%) and risk management (28%). Only 8% of companies anticipate encountering zero obstacles when making changes of this magnitude.

VENDOR SUPPORT NEEDED FOR FUTURE OF WORK



Technology vendors can be a key asset for creating a hybrid work model and for planning the future of work. More than a third of responding companies (34%) plan to tap their technology partners to provide recommendations for relevant technologies and services while 32% plan to seek help on developing a digital strategy, and 29% on process redesign and automation.

While the pendulum had already swung towards digital transformation, the pandemic period proves that being digital-first is key to long-term business success and competitive advantage.

ABOUT THE SURVEY

The 2021 IDG Digital Business study analyzed data an IDG online questionnaire given to 607 IT decision-makers between May and June 2021. All survey respondents are involved in the purchase process for major IT or security products and services and are at companies that have at least some digital business plans. Respondents represent companies in North America (49%), with some in the Asia-Pacific region (27%) and in EMEA (24%). These companies come from a variety of industries, including technology, manufacturing, financial services, professional services, education, government, and healthcare. The average company has 14,247 employees.

EXAMINING THE MARKETPLACE

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