



EXECUTIVE SUMMARY

2020

CIO Tech Poll: Tech Priorities

IT leaders focus on tech that can advance the business, but cybersecurity spending still dominates

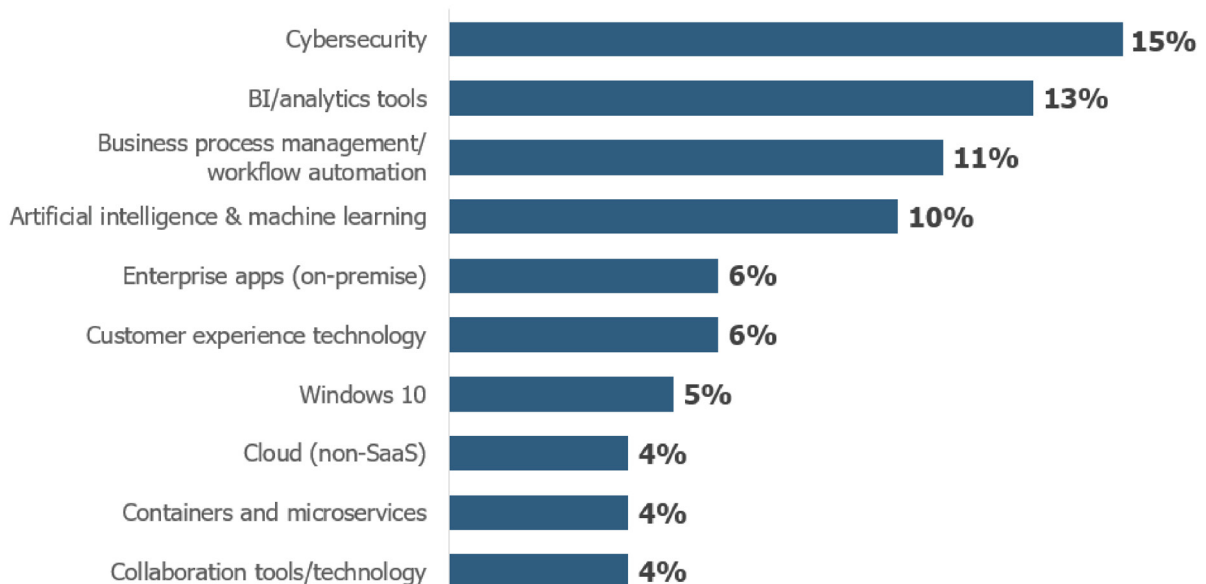
Opposing economic forces continue to sway tech priorities and the distribution of IT budget dollars in 2020. Organizations face a delicate balancing act between driving innovative solutions and dealing with the realities of securing IT ecosystems.

On one end of the scale, disruptive technologies have the potential to significantly alter the way businesses or entire industries operate, and organizations can't afford not to weigh the potential benefits before making the technology investment.

The promise of artificial intelligence and machine learning to transform business has IT leaders particularly intrigued. The business value created by AI is expected to reach \$3.9 trillion in 2022, according to Gartner, and IDC predicts worldwide spending on cognitive and AI systems will reach \$77.6 billion by 2022.

On the other end of the scale, organizations face the realities of a growing and more complex cyber risk landscape, making cybersecurity their most important mandate for 2020. That's not surprising as the average cost of a data breach in the United States hit \$8.19 million in 2019, up from \$7.91 million in 2018, according to the Ponemon Institute. This is especially true for smaller businesses where a devastating cyber breach could financially ruin a company. Some 19% of SMBs say cybersecurity is their most important tech project in 2020, whereas only 9% of enterprises see it as their top priority and instead place business intelligence and analytics tools at the top of their project lists.

SINGLE MOST IMPORTANT TECH PROJECT TO DATE



What technologies will capture the largest share of IT budgets in 2020? IDG surveyed 219 IT leaders across all industries to find out which technology areas they will be focused on in the next 12 months and to measure the direction of spending within those categories.

Tech Spending Breakdown

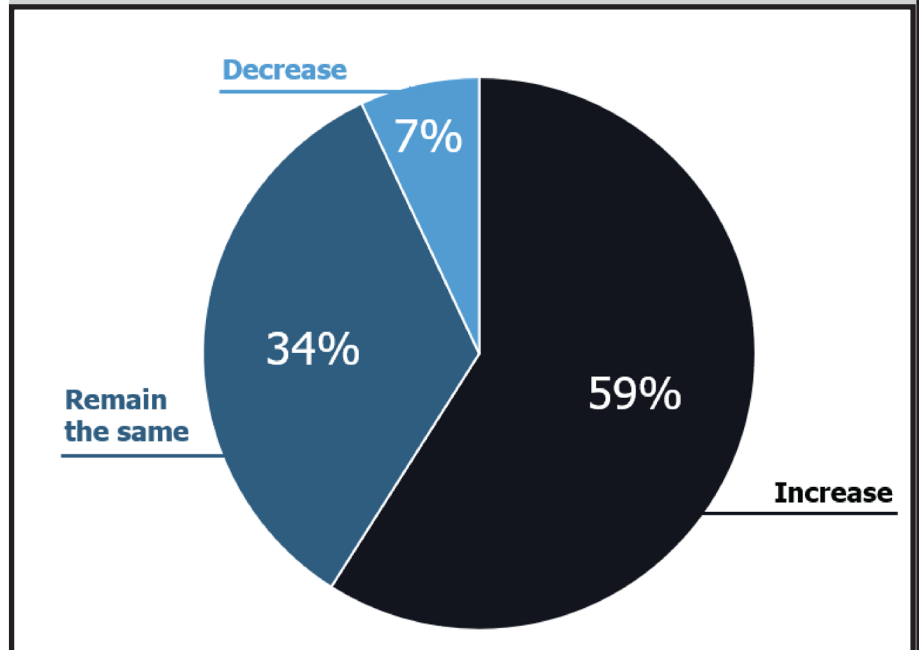
Tech budgets will continue to inch up again this year as they have since 2011, with fewer companies decreasing their IT spending. Overall, 59% of IT leaders expect their tech budget to increase in the next 12 months, up slightly from 57% in the last two years. Just 7% of IT budgets are expected to decrease, down from 9% in 2019. The balance of IT leaders expects their IT budgets to remain the same.

The largest spending increases are in security and analytics. When asked which IT categories will see the biggest increase in budget, cybersecurity led the way. More than two-thirds of organizations (68%) will increase spending on cybersecurity in the next 12 months, according to the survey, with 16% of organizations planning to upgrade their cybersecurity solutions within the next year.

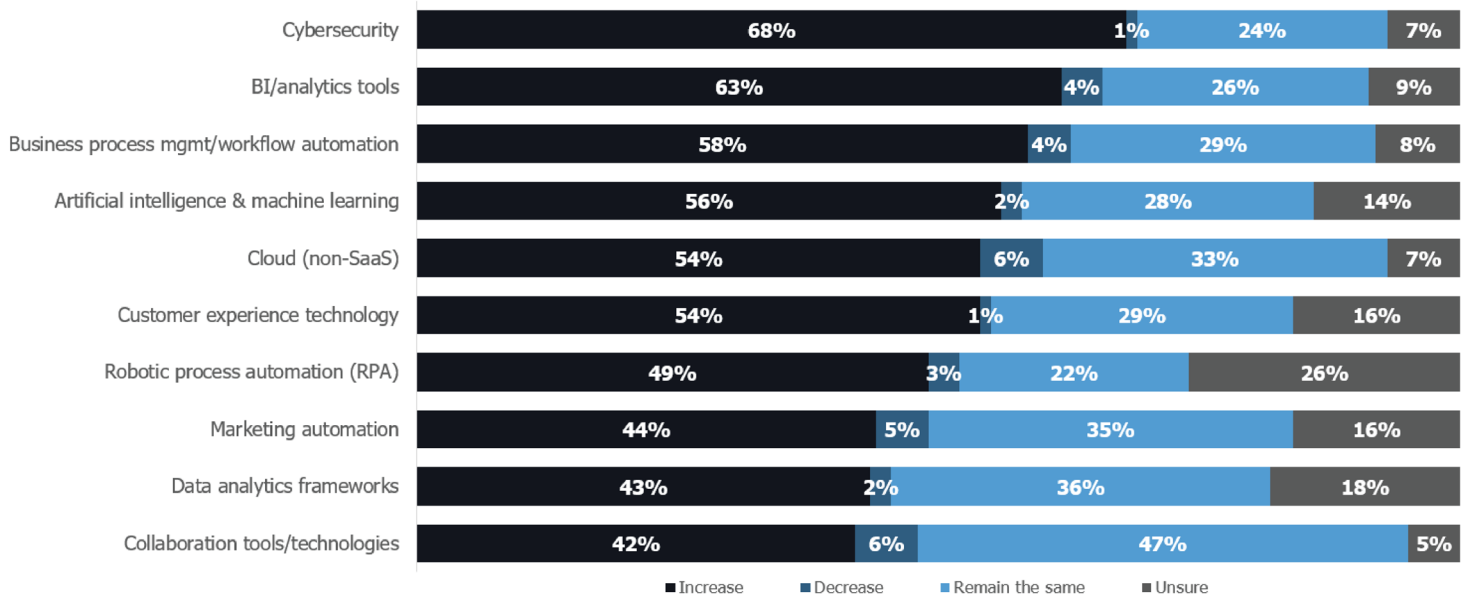
Business intelligence and analytics tools follow cybersecurity with 63% of IT leaders expecting an increase,

which aligns with the 22% who say that their organizations are piloting this technology. Spending on business process management came in third, with 58% of IT leaders expecting this budget to increase, and only 4% expecting it to decrease. The increase in spending for business process management and workflow automation has jumped significantly from last year. In last year's results, only 35% of organizations expected their spending for this platform to increase, but this year 58% of organizations expect an increase. When it comes to technologies that are widely adopted in the enterprise, such as collaboration tools and technologies, most organizations expect these budgets to remain the same (47%), compared to only 42% reporting this budget will increase.

TECH BUDGET GROWTH



LARGEST TECH SPENDING INCREASE SEEN IN SECURITY & ANALYTICS



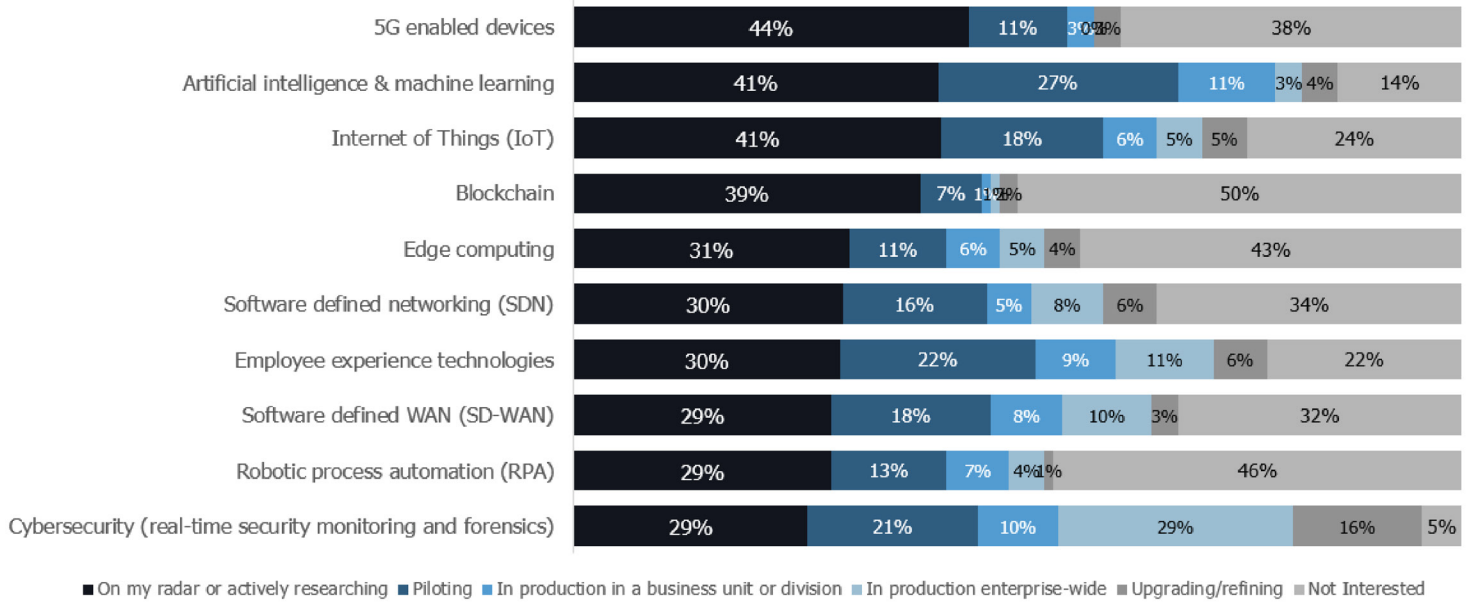
Tech on the Radar

What technologies are IT leaders most excited about exploring? Some 44% of IT leaders are actively researching 5G enabled devices. A wave of 5G-ready smartphones, laptops and other devices is expected to hit the market in the next 12 months, though many chief information officers say the technology’s business impact is years away. This fifth-generation wireless network, 5G is eventually expected to offer speeds up to 100 times as fast as today’s 4G networks.

According to IDG’s 2020 State of the Network research, the top uses cases for 5G are broadband mobile (51%), IoT connectivity (43%) and branch/remote-site connectivity (41%). Still, IDC predicts that 5G will only account for about 9% of mobile-device connections by 2023 and the State of the Network research finds that organizations will likely not start using 5G for the next 2.5 years.

About 41% of IT leaders are actively researching AI and machine learning, with equal numbers looking into the potential of the Internet of Things. Organizations believe that AI/ML will have the most significant impact on their business in the future by providing greater sales and marketing insights to improve the customer experience. In fact, 47% of organizations believe that AI will have the most significant impact on their organizations in the next three to five

STATUS OF TECH INITIATIVES



years. That number is slightly higher for enterprises than for small and mid-sized business, 56% vs. 44%. If executed correctly, AI will also allow machines to complete tasks and solve problems smartly and efficiently. Many of the technologies that are being actively researched are also the technologies that are experiencing a higher increase in tech budget – especially for AI and machine learning where 56% of IT leaders say budgets will increase in the next 12 months.

AI/ML Considered the Most Disruptive Technologies

Nearly two-thirds (62%) of IT leaders see AI/machine learning as a disruptive technology, up 2% from last year. Organizations outside North America feel even more strongly, with 72% of organizations identifying AI/ML as disruptive vs. 60% of North America organizations.

Not surprisingly, disruptive technologies such as big data/analytics (32%), blockchain (24%) and Internet of Things (24%) are considered less likely to be disruptive, probably because they have not been fully implemented in a lot of businesses. However, technologies such as predictive analytics have a strong possibility to alter business processes due to its ability to predict trends and determine patterns.

62%
of IT leaders
see AI/ML as
a disruptive
technology

Company size also influences perceptions of disruptive technologies. For instance, 5G and Wearables are two categories where SMBs and enterprises have significantly different views on the technologies impact on their business. Some 22% of SMBs think that 5G is a disruptive technology compared to only 13% of enterprises. With Wearables, 14% of SMBs think it will be disruptive, compared to only 9% of enterprises.

Betting on New Tech Companies

Organizations continue to show confidence in newer vendors for their transformational technologies rather than relying solely on established vendors. Overall, 14% of tech spending will be spent on new tech companies this year, only one percent less than last year. Just about 1/3 of tech leaders (34%) expect their organization’s spending with newer tech companies to increase during the next year, 38% expect their spending to remain the same, only 3% expect this to decrease, and a quarter are unsure of how their new tech spending with change.

How do they identify and evaluate these emerging technologies vendors? IT leaders say they rely on external events/conferences and pilot testing (65% events and 60% pilot testing). These two are followed by reading reviews written by experts (53%) and following analyst firm practices (42%) and customer references (38%). SMBs are more likely than enterprises to rely on written reviews by experts to choose a new tech vendor (59% vs. 45%), and they’re more likely to become active in technology user groups to gather information (39% vs. 34%).

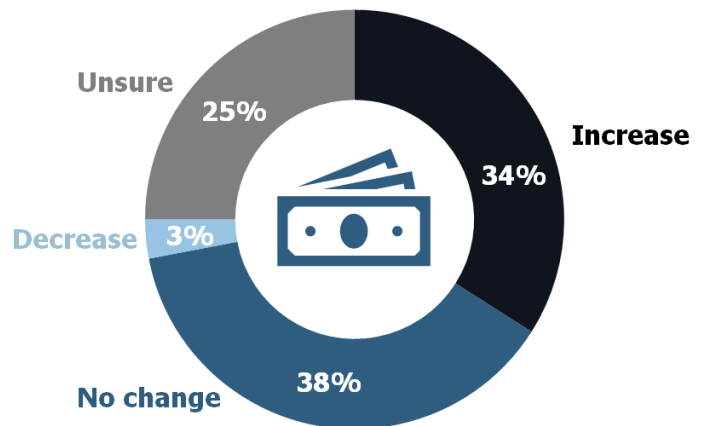
SPENDING TOWARDS NEWER TECHNOLOGIES



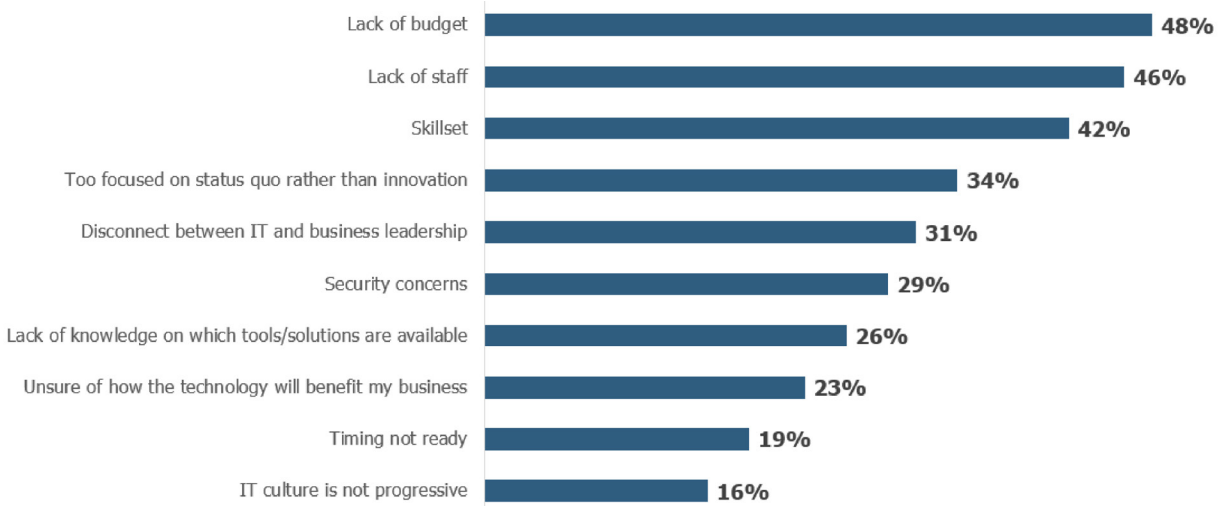
14%

of overall tech spending will be spent with **NEW** tech companies

CHANGE IN SPENDING



BUDGETS & STAFFING STILL BARRIERS TO TECH ADOPTION



Despite increased budgets and interest in new technologies that can positively impact business in the future, organizations still face familiar challenges to adoption. The top challenges that IT leaders encounter are lack of sufficient budget (48%), lack of staff (46%) and lack of skill sets (42%). Those numbers are slightly higher across the board for SMBs.

While most organizations focus on cybersecurity, security concerns are not a top challenge to implementing new technologies at only 29%, although it's a little higher for SMBs at 31% and lower for enterprises at 23%. Surprisingly, larger organizations are more likely than SMBs to say that their IT culture is not progressive enough for new tech adoption - 23% vs. 11%.

89%
are extremely/very
likely to reinvest
cost savings from
IT efficiencies

Although lack of budget is the number one challenge to implementing new technologies, it is anticipated that organizations will realize cost savings from their IT efficiency measures. The majority of IT leaders (89%) are extremely/very likely to reinvest these cost savings, most commonly into new/upgraded technologies to improve security (57%), new technologies to improve customer engagement/satisfaction (57%) and new technologies to support business goals (55%).

For those organizations planning to forge ahead with new technology adoption, nearly three-quarters of IT leaders (73%) say they will upskill employees with the most potential, which is developing additional skills to help an individual become even more valuable in their current role. Almost half of IT leaders (47%) say they will reskill employees, which is retraining employees whose skills may become obsolete and putting their talents to use elsewhere.

Summary

Technology budgets continue to increase year over year with a smaller percentage expecting a budget decrease this year. Organizations see the potential benefits of AI and machine learning and are actively researching these technologies, and 62% of IT leaders believe it will be the most disruptive technology for their organization in the next three to five years. However, cybersecurity and BI/analytics tools are expected to see the largest increase in spending throughout the next year. To bring on these new technologies, the majority of companies plan to upskilling existing talent (73%), followed by reskilling existing talent. However, budgets may be a deal-breaker, with 48% of IT leaders saying a lack of budget is the biggest challenge getting in the way of implementing new technology.

About the Survey

The Tech Priorities 2020 report surveyed 219 heads of IT in a variety of industries to gauge their areas of technology focus for the upcoming year and to measure the direction of spending within those categories in their organizations. Companies in the survey employed an average of 6,456 employees and had an average annual revenue of \$3.4 billion.

Examining the marketplace

Research is a valuable tool in understanding and connecting with customers and prospects. Our research portfolio explores our audiences' perspectives and challenges around specific technologies – from analytics and cloud, to IoT and security – examines the changing roles within the IT purchase process, and arms tech marketers with the information they need to identify opportunities. **To see what research is available, visit [idg.com/tools-for-marketers](https://www.idg.com/tools-for-marketers). For a presentation of full results from any of these studies and to understand how we can help you engage this audience, contact your IDG sales executive or go to [idg.com/contact-us](https://www.idg.com/contact-us).**



Want to know more about what content drives IT decision-makers and fuels their engagement during the IT purchase process? IDG's Customer Journey poster, and vertical white papers serve as your content marketing guide to strategically reach your target customers. **Find it all on www.idg.com.**

ADDITIONAL WAYS TO STAY ON TOP OF INFORMATION FROM IDG:

- **Sign up** for IDG's newsletters and receive media and marketing trends as well as our proprietary research, product and event information direct to your inbox. **Go to www.idg.com/newsletter**
- To get results from IDG research when it happens, or any other news, follow us on Twitter: **@IDGWORLD**
- Visit us on LinkedIn for research, services and events announcements:
<https://www.linkedin.com/company/international-data-group--idg/>