

MORNING CONSULT[®]

VERIZON 5G BUSINESS REPORT

Industry Perspectives: Technology Decision Makers

DECEMBER 2020



Background



METHODOLOGY

This poll was conducted by Morning Consult on behalf of Verizon between November 16 – November 28, 2020 among a national sample of 700 business technology decision makers. The interviews were conducted online. Results from the full survey have a margin of error of +/- 4 percentage points.



TARGET AUDIENCE

- Works full-time at an employer or is self-employed at a business with 5+ employees
- Manager level or higher
- Has decision making power in at least one of the following areas:
 - IT/IS infrastructure and security
 - Application development
 - Wireless plans and services
- Works in one of the following industries:
 - Sports, Entertainment, and Media (50N)
 - Public Sector/Government (50N)
 - Healthcare (200N)
 - Manufacturing (200N)
 - o Retail (200N)

Key Points

Business decision makers are more aware of 5G than consumers, and 5G adoption across businesses is well underway.

- Most business technology decision makers say they have seen, read, or heard "a lot" about 5G (55%), while less than a quarter of U.S. adults say the same (23%).
- Nearly half of business decision makers say their company has already provided or is planning to provide 5Gcapable devices to employees within the next six months (48%).

Business leaders consider 5G adoption an important priority and believe it will both create new business opportunities and accelerate their company's recovery from the pandemic.

- Most decision makers say 5G planning and adoption is a "top priority" for IT/IS leaders at their company (54%), and 2 in 5 say it is a "top priority" for C-level executives at their company (39%).
- Decision makers overwhelmingly agree that 5G will create new opportunities for their company (80%), their industry (79%), and their role (79%). Most say they know which applications of 5G will be most beneficial to their company (73%), and 7 in 10 agree that access to 5G will accelerate their company's recovery from the coronavirus pandemic.

Key Points

Priorities and use cases for 5G vary across industry sectors.

SPORTS, ENTERTAINMENT, AND MEDIA

• More than half of technology decision-makers in the industry (52%) indicated that 5G planning and adoption is a top priority for C-level leaders at their organization.

GOVERNMENT/PUBLIC SECTOR

• 36% felt that 5G would have a transformational impact on cybersecurity.

HEALTHCARE

- More than three in four technology decision-makers in healthcare said 5G will change how their organization interacts with customers (78%).
- Operational efficiency (75%) was named as the area in which 5G will have the most noticeable impact for respondents' organizations.

MANUFACTURING

• Supporting system automation ranked highest amongst all industries and specific use cases for 5G deployment (49%) by manufacturing respondents.

RETAIL

- 77% of retail respondents indicated that businesses that do not adopt 5G technology will fall behind their peers.
- Enhancing wireless internet speed and reliability (60%) was named the top priority for usage of 5G.

INDUSTRY IMPACTS

IMPLEMENTATION & EXPECTATIONS

5G BUZZ

CONTENTS

5G BUZZ

Most business technology decision makers say they have heard "a lot" about 5G, compared to just 23% of U.S. adults. More than 2 in 5 business decision makers say they have seen, read, or heard "a lot" about 5G Ultra Wideband.

How much have you seen, read, or heard about...



AMONG U.S. ADULTS *



* Interviews were conducted online between December 10 – 12, 2020 among a nationally representative sample of 3,002 US adults. MOE: +/- 2 points.

5G BUZZ

Decision makers most commonly say they have seen, read, or heard about 5G through general media coverage, advertisements from service providers with 5G networks, and advertisements from companies that make 5G-capable devices.

Where have you seen, read, or heard about 5G? Please select all that apply.



INDUSTRY IMPACTS

IMPLEMENTATION & EXPECTATIONS

5G BUZZ

CONTENTS

IMPLEMENTATION & EXPECTATIONS

In an open-ended environment, decision makers cite keeping up with constantly changing technology and security concerns as the top technology challenges they face today, followed by costs and the pandemic.

Thinking about your company's technology and telecommunications needs and plans for using new innovations, what do you consider the top challenge that your company faces today?

Keeping up with technology changes	19% "Keeping up with the rapid pace of technological innovation"
Security	19% "Protecting our network, servers, and end user devices from new cybersecurity threats"
Costs	10% "Budget constraints often put a wrench in what we can do"
Covid-19	9% "Covid-19 crisis and all the issues surrounding it"
Employee adaptation	7% "The tech is getting more complicated for some of the employees they are going to need more training on the devices we are moving towards"
Integration and compatibility	7% "Integrating new software and hardware into our existing workflows and technology"
Remote work	6% "Being able to securely meet our employees' IT needs who are currently working remotely"
Equipment performance	5% "Consistently functioning tech without glitches"
Talent	4% "Not having enough technical experts like developers and other talent to push technology"
Cloud technology	3% "Migrating legacy software to the cloud"
Customer service	3% "How we can thoroughly reach our customers needs"
Internet and bandwidth	3% "Internet connection stabilization"
Choice	3% "Deciding what technology to use and choosing the best provider among so many offers on the market"
00/	

Showing categories > 2% "Other" responses that did not fall into a distinct category total to 11%

IMPLEMENTATION & EXPECTATIONS

Nearly half of decision makers say their company has already provided or is planning to provide 5G-capable smartphones or devices to employees within the next six months. While just 18% say their company has already subscribed or is currently working on subscribing to a 5G-enabled fixed-line business internet service, 1 in 3 say their company plans to within the next six months.

Which of the following best describes your company's plans when it comes to the following?



IMPLEMENTATION & EXPECTATIONS

Most decision makers at organizations that provide company-owned devices say their company has already provided or plans to provide 5G-capable devices within the next six months. Meanwhile, just over a third of decision makers at organizations where employees use personal mobile phones say their company already has or plans to provide an upgrade stipend within the next six months.

Which of the following best describes your company's plans when it comes to the following?

Already done / currently doing this

■ Planning to do in the next 13 – 24 months ■ No current plans to do this

Planning to do in the next 7 – 12 months

■ Don't know / No opinion

PROVIDING 5G-CAPABLE SMARTPHONES / DEVICES TO EMPLOYEES



Planning to do in the next 6 months

PROVIDING AN ALLOWANCE OR STIPEND FOR EMPLOYEES TO UPGRADE THEIR WIRELESS DEVICE AND SERVICE TO 5G



IMPLEMENTATION & EXPECTATIONS

Most decision makers say 5G planning and adoption is a top priority for IT/IS leaders at their company and about 2 in 5 say it is a top priority for C-level leaders and engineering/product development leaders.

In general, how much of a priority is 5G planning and adoption for the following stakeholders at your company?



IMPLEMENTATION & EXPECTATIONS

Upfront costs are cited as the most common barrier to 5G adoption in an aided environment, followed by security concerns and concerns related to compatibility with existing systems.

Which of the following challenges or barriers to 5G adoption does your company face, if any? Please select all that apply.



IMPLEMENTATION & EXPECTATIONS

Decision makers view all potential impacts of 5G as important to their company. On net, higher internet speed, enhanced security, faster downloads and uploads, and faster mobile phone connections emerge as most important.

Thinking about the potential impacts of 5G, how important are the following to your company?



NET

IMPLEMENTATION & EXPECTATIONS

While most respondents view smart factories, connected vehicles, smart cities, and AR/VR as important to their company, they are viewed as less important relative to other potential impacts tested.

Thinking about the potential impacts of 5G, how important are the following to your company?



IMPLEMENTATION & EXPECTATIONS

Decision makers overwhelmingly agree that 5G will create new opportunities for their company, their industry, and their role. Most say they know which applications of 5G will be most beneficial to their company, and 7 in 10 agree that access to 5G will accelerate their company's recovery from the coronavirus pandemic.

Do you agree or disagree with the following statements?



INDUSTRY IMPACTS

IMPLEMENTATION & EXPECTATIONS

5G BUZZ

CONTENTS

INDUSTRY IMPACTS

When asked in an open-ended environment how 5G will transform their industry, decision makers most commonly reference faster speed, enhanced productivity, data transfer capabilities, and general positive transformation.

Thinking about the potential impacts of 5G within your industry, what 5G use case or application do you think will change or transform your industry the most?



Showing categories > 2% "Other" responses that did not fall into a distinct category total to 20%

INDUSTRY IMPACTS

Thinking about the potential impacts of 5G within your industry, what 5G use case or application do you think will change or transform your industry the most?



KEY QUOTES BY INDUSTRY

INDUSTRY IMPACTS

Decision makers anticipate that 5G will have a transformational or noticeable impact at their company across all areas tested. This sentiment is strongest when it comes to cybersecurity, operational efficiency, employee productivity, employee collaboration, and innovation opportunities.

How much of an impact do you think 5G will have on the following at your company?

 Significant impact - transformational No impact 	 Moderate impact - noticeable Don't know / No opinion 	e changes	Slight impact	- incremental change	es	Transformational + Noticeable
Cybersecurity	44%		31%	12%	8% 5%	6 75 %
Operational efficiency	42%		33%	13%	7% 4	75 %
Employee productivity	42%		33%	15%	7% 3	% 75 %
Employee collaboration and communication	42 %		34 %	12%	9% 3	<mark>% 76</mark> %
Innovation opportunities	41 %		34%	12%	9% 4	75 %
Customer experience	39%		34%	15%	8% 3	<mark>% 73</mark> %
Employee mobility	38%		35%	15%	9% 4	73 %
Business intelligence and analytics	37%		36%	15%	8% 4	73 %
Business growth	37%		32%	18%	10% 4	% 69%
Automation of processes and operations	37%		36%	15%	8% 4	73 %
Opportunities to create new product or service offerings	37%		32%	16%	10% 5%	69 %
Customer collaboration	34%		36%	16%	10% 4	70 %
Opportunities for cost savings	33%	3	5%	18%	9% 5%	68%
New customer acquisition	31%	32%		18%	14% 4	% 63%

90%

80%

100%

INDUSTRY IMPACTS: SPORTS, ENTERTAINMENT, MEDIA

Decision makers in sports/entertainment/media consider high-bandwidth connections to allow for multiple broadcast streams and to eliminate miles of cable most valuable for their industry relative to other 5G applications tested. The largest gap between value and perceived likelihood to interact with or respond to emerges for use of AR and VR to deliver enhanced experiences at live events.

Below are some potential applications and use cases for 5G in your sector. How valuable do you consider each of the following? And, how likely do you think your company is to implement, interact with, or respond to the following applications and use cases for 5G in the next two years?

•% VERY OR SOMEWHAT VALUABLE •% VERY OR SOMEWHAT LIKELY

High-bandwidth connections to allow for multiple broadcast or video streams	74% 🔴 84%
Use of high-speed, high-bandwidth wireless connections to eliminate miles of cable and wiring	80% 📕 84%
Use of augmented and virtual reality (AR and VR) to deliver enhanced experiences at live events	64% 78%
Use of augmented and virtual reality (AR and VR) to allow consumers to experience media, sports content, and entertainment in new ways	70% 72%
High-bandwidth access to fans and concert goers in public venues	70% 72%
Use of augmented and virtual reality (AR and VR) to make virtual live events feel similar to in-person experiences	66% 70%
Use of artificial intelligence (AI)-powered digital actors and entertainers to interact with fans and consumers in real time	66% 68 %

0%

10%

20%

30%

40%

50%

60%

INDUSTRY IMPACTS: PUBLIC SECTOR

Decision makers in the public sector consider real-time video surveillance and faster data transfer to and from first responders to be the most valuable applications of 5G. Respondents are 24 points more likely to view the use of AR and VR in dangerous situations as valuable than they are to say their organization is likely to implement, interact with, or respond to the use case.

Below are some potential applications and use cases for 5G in your sector. How valuable do you consider each of the following? And, how likely do you think your company is to implement, interact with, or respond to the following applications and use cases for 5G in the next two years?



•% VERY OR SOMEWHAT VALUABLE •% VERY OR SOMEWHAT LIKELY

90%

100%

INDUSTRY IMPACTS: HEALTHCARE

Decision makers in healthcare view use of remote health monitoring devices as the most valuable application of 5G in their industry, while use of mobile networks for high-quality telemedicine is viewed as the application that respondents believe their organization is most likely to implement, interact with, or respond to in the next couple years.

Below are some potential applications and use cases for 5G in your sector. How valuable do you consider each of the following? And, how likely do you think your company is to implement, interact with, or respond to the following applications and use cases for 5G in the next two years?

Use of remote health monitoring technologies that collect medical and health data from 81% 75% individuals in one location and transmit it to providers in a different location Use of mobile networks by health care providers for high-quality video during telemedicine 79% **78**% visits 79% Fast and seamless sharing of large files to improve patient care 72% Complex point-of-care imaging and diagnostic services for emergency medical technicians 79% 69% (EMTs) 78% Wearable monitoring devices that send patient data to health care providers in real time 70% 78% Real-time sharing of high-resolution 3D medical images 72% Use of more prolific artificial intelligence (AI) tools to help medical professionals to identify, 74% 68% diagnose, and treat patients Use of 'smart objects' that respond to provider and patient needs at health care facilities 72% 64% Use of augmented reality (AR), virtual reality (VR), and next generation medical imaging to 66% 72% provide immersive medical training experiences Use of robotic technology in high-precision procedures and surgeries 71% 66% Use of augmented reality (AR), virtual reality (VR), and spatial computing for less invasive 69% treatments, like physical therapy or for mental or neurological disorders Deployment of drones equipped with medical emergency supplies to emergency sites 56% 65%

0%

10%

20%

30%

•% VERY OR SOMEWHAT VALUABLE •% VERY OR SOMEWHAT LIKELY

40%

50%

60%

70%

90%

80%

100%

INDUSTRY IMPACTS: MANUFACTURING

Decision makers in the manufacturing industry consider real-time supply chain tracking and real-time tracking of capacity and production both the most valuable use cases for 5G and the use cases their company is most likely to implement or interact with in the next two years.

Below are some potential applications and use cases for 5G in your sector. How valuable do you consider each of the following? And, how likely do you think your company is to implement, interact with, or respond to the following applications and use cases for 5G in the next two years?

•% VERY OR SOMEWHAT VALUABLE •% VERY OR SOMEWHAT LIKELY

Real-time supply chain tracking from shipment to shelves to combat theft and fraud while responding to inventory demands	82% 🔵 88%
Advanced technology allowing for real-time tracking (with 5G low latency) of capacity and production	82% 87%
Use of artificial intelligence (AI) and machine learning to support worker safety (for example, creating safer floor layouts that warn when workers drift into potentially dangerous situations)	74% 🔴 83%
Development of predictive maintenance systems that use machine learning, advanced connectivity, and high-speed data processing to identify signs and clues that equipment needs maintenance or repair	79% 👥 82%
Use of networks of sensors in harmony with AI-assisted computer vision to enable new inspection and testing measures for quality control and assurance	79% 🚺 81%
Integration of autonomous mobile robots and equipment to replace time-consuming manual procedures with more precise, efficient digitized processes	68% 76%
Increased use of autonomous guided vehicles (AGVs) in manufacturing settings and campuses	62% 68%

0%

10%

30%

20%

40%

50%

60%

90%

80%

100%

INDUSTRY IMPACTS: RETAIL

Decision makers in the retail industry consider real-time data processing to maximize efficiency and the ability to analyze foot traffic to enable dynamic floor plans that optimize product positioning to be the most valuable use cases for 5G in their sector.

Below are some potential applications and use cases for 5G in your sector. How valuable do you consider each of the following? And, how likely do you think your company is to implement, interact with, or respond to the following applications and use cases for 5G in the next two years?

•% VERY OR SOMEWHAT VALUABLE •% VERY OR SOMEWHAT LIKELY

Use of real-time data processing to maximize efficiency from point of sale to product delivery	83% 🔵 84%
Ability to analyze foot traffic and areas in which shoppers linger in physical retail locations in real time to enable dynamic floor plans and displays that maximize the positioning of products	76% 🔴 84%
Instant access to product information for consumers through an augmented reality (AR) application on their smartphone or other compatible device	75% 🔴 82%
bility for consumers to shop from anywhere using augmented and virtual reality (AR and VR)	73% 80%
Rich digital signage for retail environments that updates in real-time	78% 🔵 79%
xpansion of computer vision and sensors to allow brick-and-mortar stores to digitally process and track inventory in real time	77% 🔵 78%
Jse of AR and VR, artificial intelligence (AI), and Internet of Things (IoT) networking to deliver personalized and interactive retail experiences for consumers	74% 🚺 75%
Use of automation and advanced technologies to enable staff-less or unmanned retail stores	67% 74%
Virtual reality (VR)-powered dressing room that allows consumers to try on clothing from anywhere	62% 🔵 67%
se of holograms as emotive, life-like digital customer service reps to play a part in company /	60% 62 %

0%

10%

30%

20%

40%

50%

60%

MORNING CONSULT[®]

verizon /