



Driven by  
Experience™

Research Report



# Retail

## Competing and Winning with New Customer Experiences

A report on location-based networks for wireless access in an Experience-First World





## Key Findings in Retail



### **Both customers and retailers value new connected retail-customer experiences.**

Of the retailers surveyed, 78 percent agree connected retail-customer experiences are important to organizational growth, while nearly 95 percent of surveyed consumers said they'd prefer to patronize retailers that offer one of the surveyed connected conveniences over retailers that do not.



### **Retailer IT teams report that remote employees have network connectivity issues that impact productivity and security.**

About half of IT teams say they've had difficulty troubleshooting home networks, and 55 percent say that internet connectivity issues impair work-from-home productivity.



### **New connected customer experiences are good for business.**

Connected convenience for faster service is especially attractive to males, who are not known to traditionally love shopping. Connected experiences also appeal to younger customers who have never known a world without online or mobile shopping.



### **In their next wireless access solution, retailers want a unique combination of features and functions.**

They want the ability to remotely troubleshoot home-office connectivity (78 percent), cloud-based management with no scalability limitations (80 percent), and compatibility with existing access point mounts (81 percent).



### **Retailers are investing in infrastructure for new customer experiences.**

The top three network-based use cases that retailers have in progress or plan to implement in 2022 are in-store marketing, promotions, and advertising that goes directly to the consumer's mobile device (93 percent), wireless access network refresh (74 percent), and technology for managing the number of people in common or public spaces (80 percent).



### **Wi-Fi network refresh, at nearly 60 percent, is the top enterprise investment priority.**

During the next year, retailers in the U.S. aim to refresh network security. U.K. retailers' top priority is Wi-Fi equipment for remote employees.

## Key Findings in Retail



**Only 50 percent of retailers recognize that using Bluetooth Low Energy (BLE) that is included within access points eliminates battery beacons for location services.**

Virtual BLE (vBLE) in wireless environments delivers management and operational flexibility with big savings. It's easy to add or move virtual beacons by using simple cloud-based software without site surveys or ongoing calibration. There are also no physical beacon batteries to change. Built-in AI eases operations, improves network performance, and gives detailed space usage reporting.



**Retailers need the flexibility of wireless deployment found in a location network. Among survey retailers,**

76 percent prefer location-enabled solutions that integrate into Wi-Fi networks over stand-alone options. Retailers should take advantage of solutions with integrated Wi-Fi, IoT, and BLE to manage asset location, customer engagement, and security. A location network offers very reliable Wi-Fi, which is table stakes for a retailer, but a location-enabled network adds an additional level of functionality and provides the new customer experiences and operational efficiencies required to better compete and win in retail.

# Creating New Retail Experiences that Win New Customers

Competing and winning with new retail customer experiences means a lot of things. It's higher service levels, connected experiences, and a new level of convenience. Above all, it's experiential while it's experimental. And this is true for every retailer, regardless of the size or the type of products they sell.

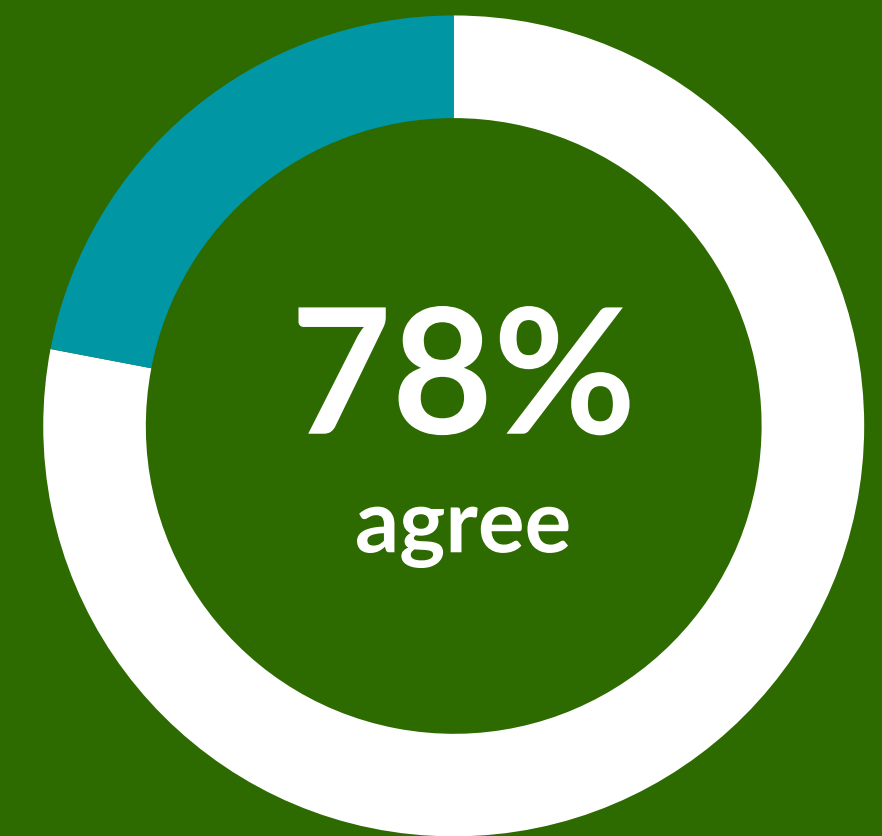
Demand for new, connected retail experiences continues to grow as retailers compete for in-store, brick-and-mortar customer traffic. Retailers must create a comprehensive, digital omnichannel strategy to enhance the customer experience, increase shopper orders, and lower overall operational costs.

To provide insights on how retailers can compete and win with new experiences, we surveyed more than 2000 consumers and 125 large retailers. Together, these two surveys help understand the new experiences consumers demand and what retailers are doing to win the race for the customer.

## Specifically, the market research highlights how:

- ✓ Customer acceptance and demand for new experiences continues to shift.
- ✓ Emerging technologies transform shopping and engagement, even amidst COVID-driven changes.
- ✓ Using location networks is becoming an essential foundation of the experience-first world.
- ✓ Retailers are evaluating wireless access and location-based network solutions.

## New customer or guest experiences are important to growth



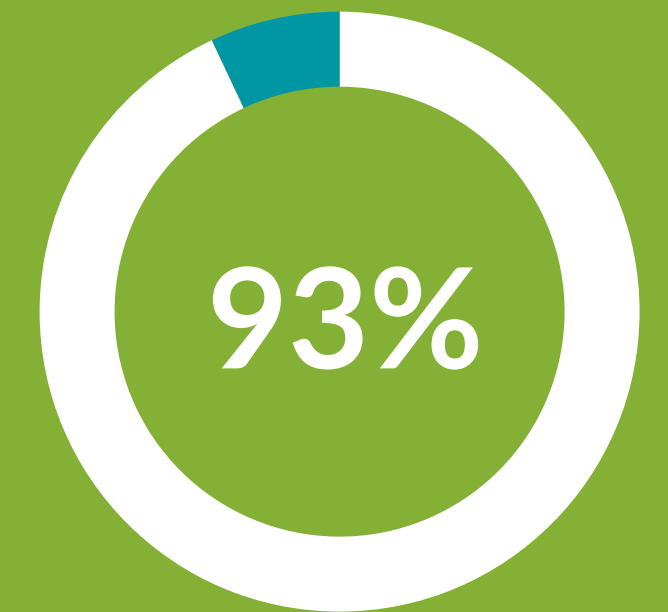
Source: Juniper Workplaces and Public Spaces Enterprise IT Survey, 2021

## Digital tools are reinventing the shopping experience.

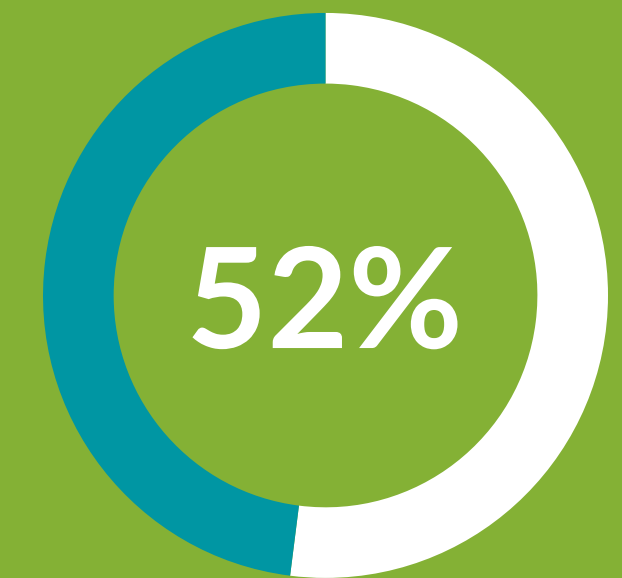
Providing an integrated, best-in-class omnichannel customer experience requires digital technology. Now, nearly all consumers have downloaded a retail app, and the top reasons are to track orders and deliveries, manage loyalty accounts, and get special offers.

More than half of consumers say they routinely use a smartphone while shopping within a store.

**The upshot is that the consumer is ready for new ways to interact and engage using Experience First Networking.**



■ Download retail app  
■ Never downloaded



■ Routinely use smartphone to help me shop while in stores  
■ Do not routinely use

*Source: Juniper Remote Workplaces and Public Spaces Consumer Survey, 2021*



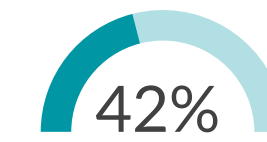
## The foundation of customer experience is the retailer's mobile phone app—which nearly half of consumers already use.

Why customers download retail apps points the way to what consumers want in a new interactive shopping experience. The top requirement, at 42 percent, is to track order and delivery status, the second is managing their loyalty accounts, the third is the ability to receive promotions, and finally, the fourth highest requirement is to learn about available, in-store inventory.

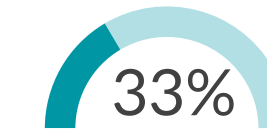
Regardless of what is first or fourth on this list, one thing that stands out is that customers are willing to interact directly with a retailer to solve a problem faster or get better service.

A location-based network and the data it produces can help, which provides retailers with new data insights and intelligence for greater consumer understanding. The IT team also gains better network performance insight. Regardless of whether marketing or IT uses these insights, the store network is the foundation to help customers get information faster and enhance staff and customer experiences.

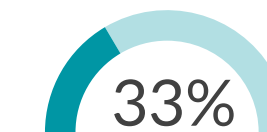
### Why customers download retail apps



Track order or delivery status



Manage loyalty account



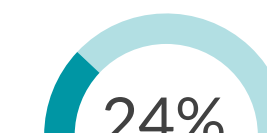
Get personalized or exclusive offers



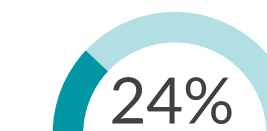
Look up store's inventory



Get notifications on product availability



Get faster response than main website



Notify store you arrived to pick up grab-and-go



Stay up-to-date with favorite stores or service



Get location-specific special deals while in store



Use mobile-based, rapid check-in

Source: Juniper Remote Workplaces and Public Spaces Consumer Survey, 2021

## New connected experiences are good for business—95 percent of surveyed consumers prefer to patronize retailers that offer connected conveniences over ones that do not.

Intense competition for customers means that the job of earning the customers' business is never over. Retailers continually need to deliver beyond customer expectations in each interaction, requiring businesses to anticipate customers' needs.

Without the right kind of data—location data—it's an impossible mission.

Emitted by mobile devices like phones, tablets, and fitness trackers, location data allows public spaces like airports, hotels, and retail stores to gain an extensive understanding of consumer behavior.

Retail stores learn how consumers move within public spaces, their interests, busy times, and long waits. Location data enables improved operations, new conveniences, and innovative, omnichannel experiences.



Source: Juniper Remote Workplaces and Public Spaces Consumer Survey, 2021

# Of new services enabled by a location-enabled network, consumers most want real-time product availability and info before entering a store.

The next popular location service, at 43 percent, is those in-store promotions sent to consumers' phones while they are shopping in the store.

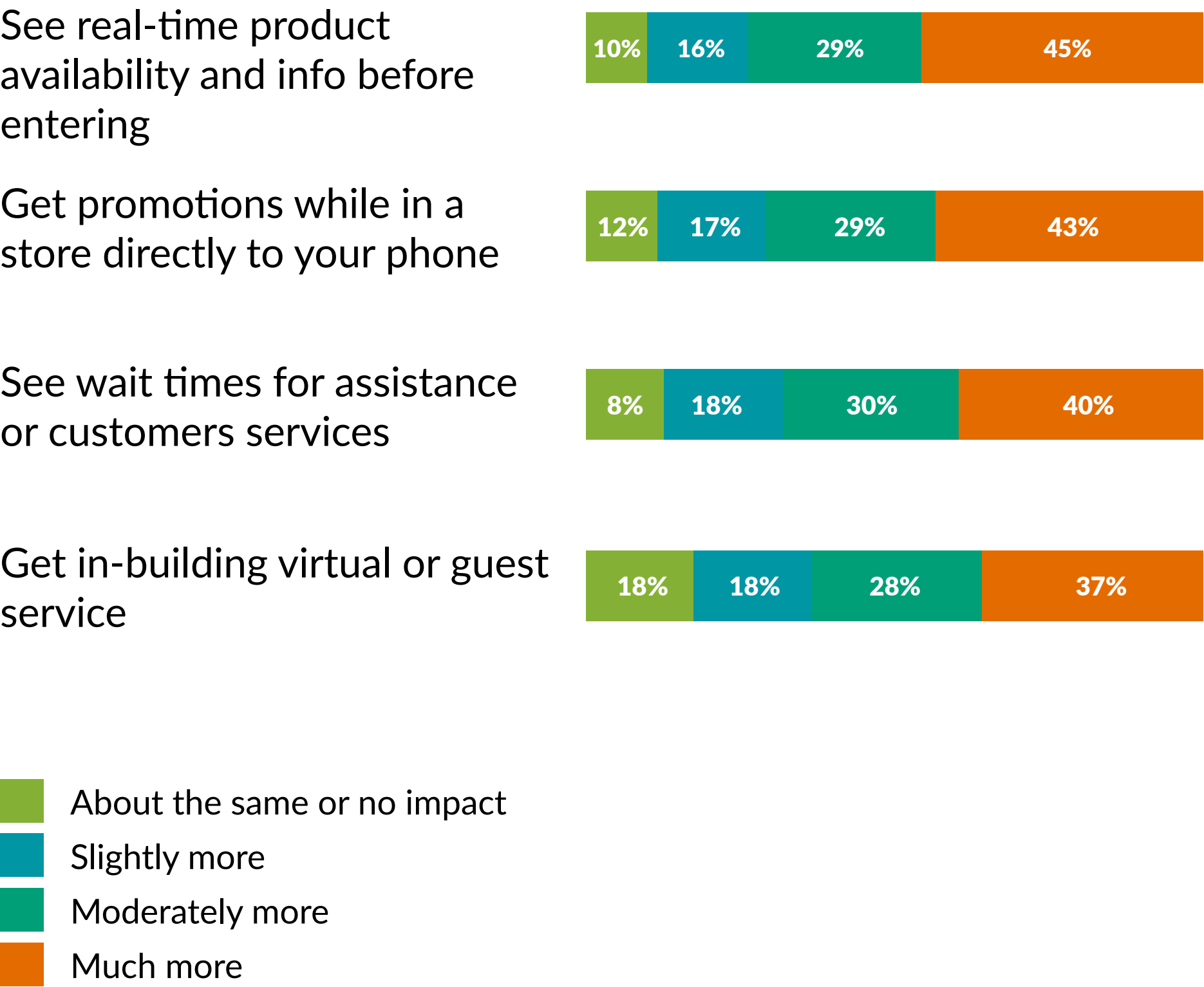
The third most popular is the ability to see wait times and coming in last is in-building virtual or guest services.

Connected convenience for faster service is especially attractive to males, who are not known to traditionally love shopping.

Retailers that need to reach younger consumers, those in the 24- to 34-year-old age group, may find these connected services as a good way to develop new relationships with consumers who never knew a world without wireless devices or online shopping.

This age group has a strong interest in many of these connected services, including using a mobile device to get virtual services.

## How much consumers prefer retailers with these connected experiences



Source: Juniper Remote Workplaces and Public Spaces Consumer Survey, 2021



# Some customer experiences move beyond a transaction, requiring a customer account—giving the retailer valuable customer information and first-party data.

By offering new experiences like remote check-in using a smartphone or “Grab and Go” services, retailers could entice consumers to create accounts, which help improve customer relationships and revenues.

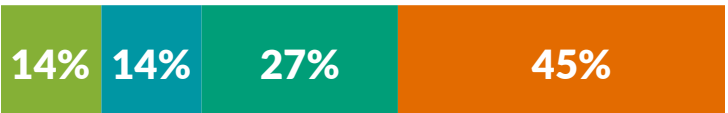
Why? Because retailers can augment location data with additional first-party data sources like:

- Marketing automation data containing online or mobile promotional response leading to in-store purchases.
- Historical transaction data to know what a consumer is likely to buy in-store vs. online.
- Online shopping click-through via web data showing impacts on in-store behaviors.
- Customer support contact center interaction data to correlate how successful problem resolution impacts in-store buying.

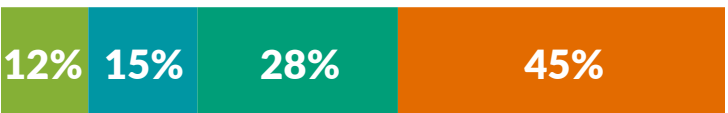
And that’s not all, retailers could also enrich this first-party data with third-party data to fully understand consumers’ interests, purchase preferences, share of wallet, or advertising channels.

# How much more customers would sign up and go to businesses for these smartphone experiences

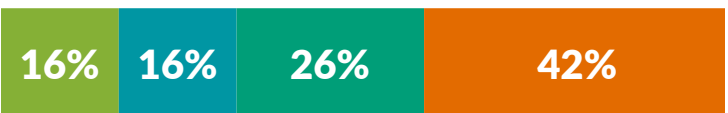
Get your order automatically brought to you as soon as you arrive outside a store or restaurant



Automatically check-in for appointments, event, transportation, car rentals or hotels without stopping at check-in desk



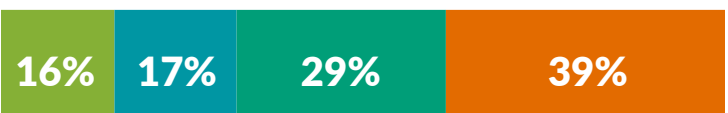
Pay at the register using contactless payment



Pay automatically when you walk out



Get personalized promotions while in store, hotel or restaurant



- About the same or no impact
- Slightly more
- Moderately more
- Much more

Source: Juniper Remote Workplaces and Public Spaces Consumer Survey, 2021

## In spite of recent challenges, retailers view the current business environment as a growth opportunity.

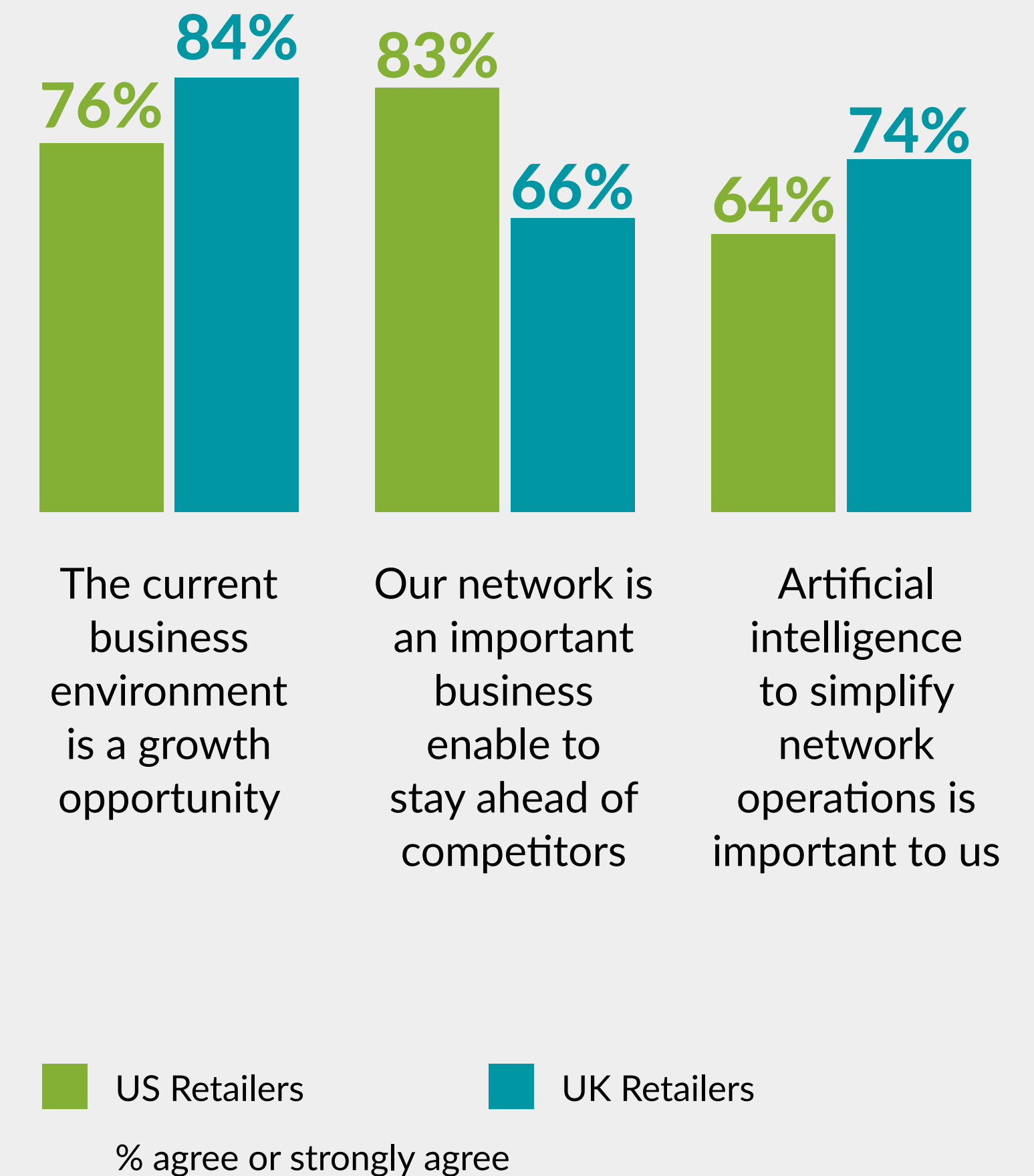
More than 80 percent of U.S. retailers and about two-thirds of U.K. retailers agree that the network is an important business enabler to stay ahead of the competition.

Lastly, 64 percent of U.S. retailers and 74 percent of U.K. retailers agree that artificial intelligence (AI) is important to simplify network operations.

Thanks to AI and network automation, IT and network teams can cut costs and ease network operations.

By using a location network that leverages a native, cloud-based, AI engine, retailers can grow new efficiencies as organizations confront the simultaneous challenges of:

- Supporting remote users
- Securing the new hybrid workplace
- Rolling out new customer experiences in stores

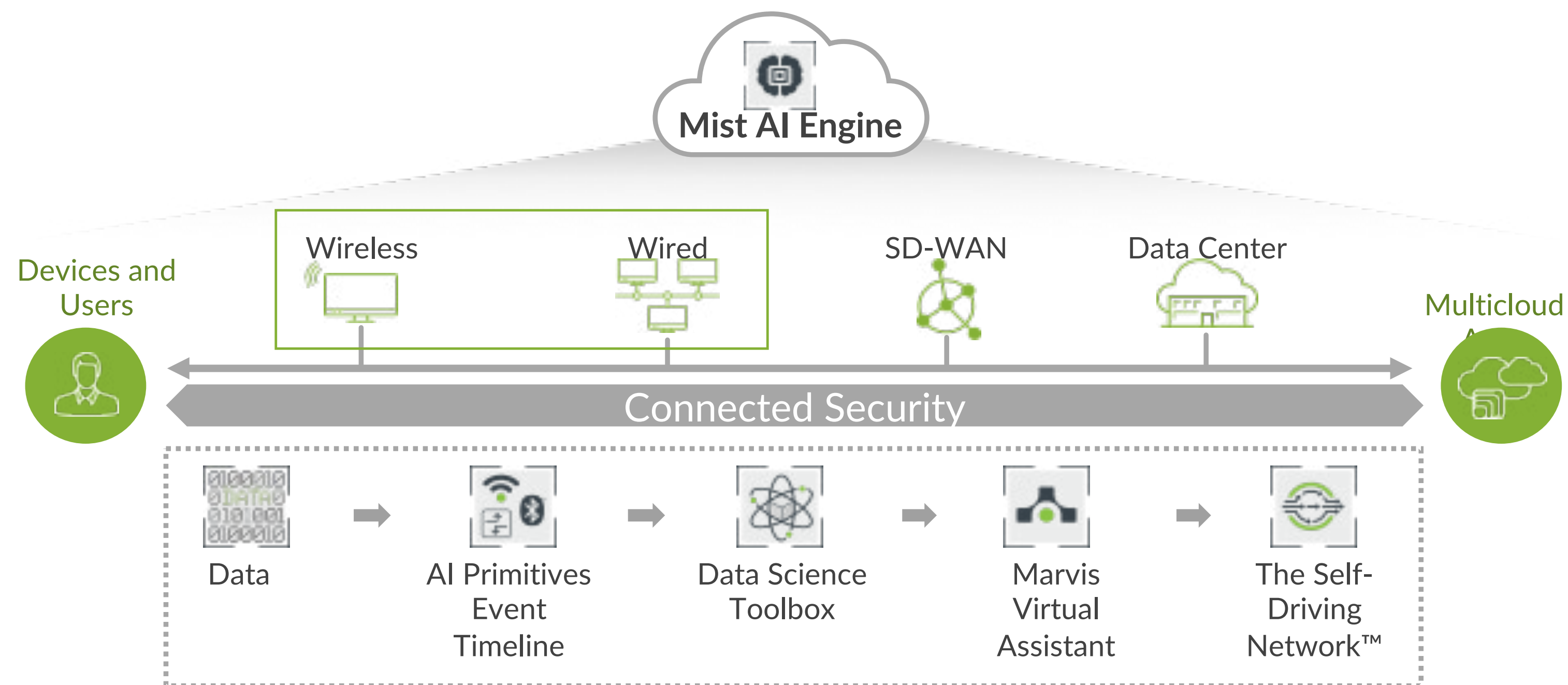


Source: Juniper Workplaces and Public Spaces Enterprise IT Survey, 2021



## What is a location network, and why care about its location data and AI engine?

A location network enables enterprises to efficiently support all mobile-first and remote-first initiatives by extending insight and automation across the IT stack to manage remote offices, public spaces, and everything in between.

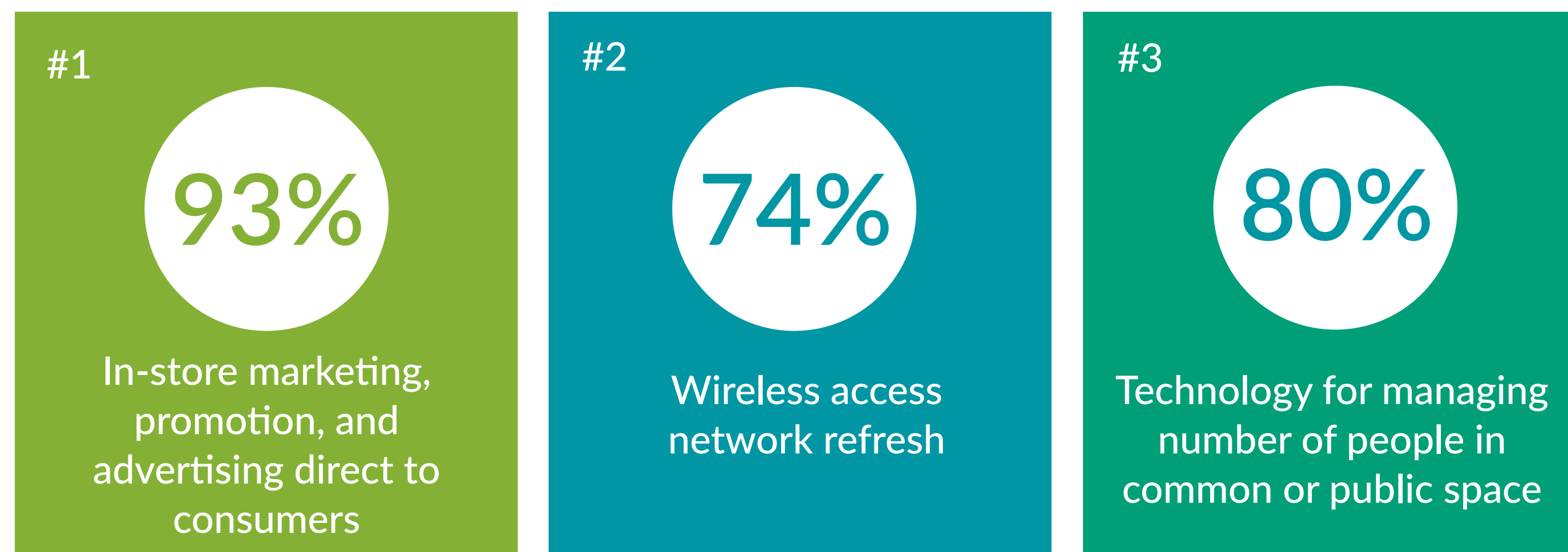


## One of the best aspects of a location network is its flexibility to meet many business requirements.

In the retail world, there are four broad types of use cases for location networks:

1. New customer experiences
2. Facility operations improvements
3. Improvements that impact both facilities operations and customer experiences
4. Remote network support, including store branches and work-from-home home offices

### Top wireless network uses cases retail IT respondents are pursuing



% with project in progress and planned

Source: Juniper Workplaces and Public Spaces Enterprise IT Survey, 2021

The Gap, Inc. wanted to deliver a great Wi-Fi experience to retail associates and shoppers in a highly dynamic retail environment while simplifying network operations.

#### Technology Solution:

- Juniper Mist™ Platform
- Juniper Networks® MX Series 5G Universal Routing Platforms Business

#### Results:

- Delivered a great user experience to employees and shoppers with AI-driven Wi-Fi
- Reduced technical staff visits to stores by 85 percent
- Enabled digital transformation for North American stores
- Laid the foundation to deploy game-changing services to leapfrog the competition

#### Read more:

*“Before Mist, we spent a lot more time troubleshooting. Now, we can slice and dice the data and see very clearly that we’re having a problem at a specific store.”*

- Snehal Patel, global network architect, Gap Inc



# The top customer experience use case is to amplify in-store marketing, promotion, and advertising directly to the consumer.

Brutal competition from online retail continues to reshape large retail. To bring customers back into stores means offering a new, different, and better experience to them.

Beyond a percentage or two, the two countries don't differ much on customer experience use cases. Leading, large retailers in both countries are pursuing in-store marketing, remote payment check out, and customer behavior analytics.



Source: Juniper Workplaces and Public Spaces Enterprise IT Survey, 2021

## Retailers report that they are also focusing on operational improvements to include inventory, asset tracking, and theft prevention technology.

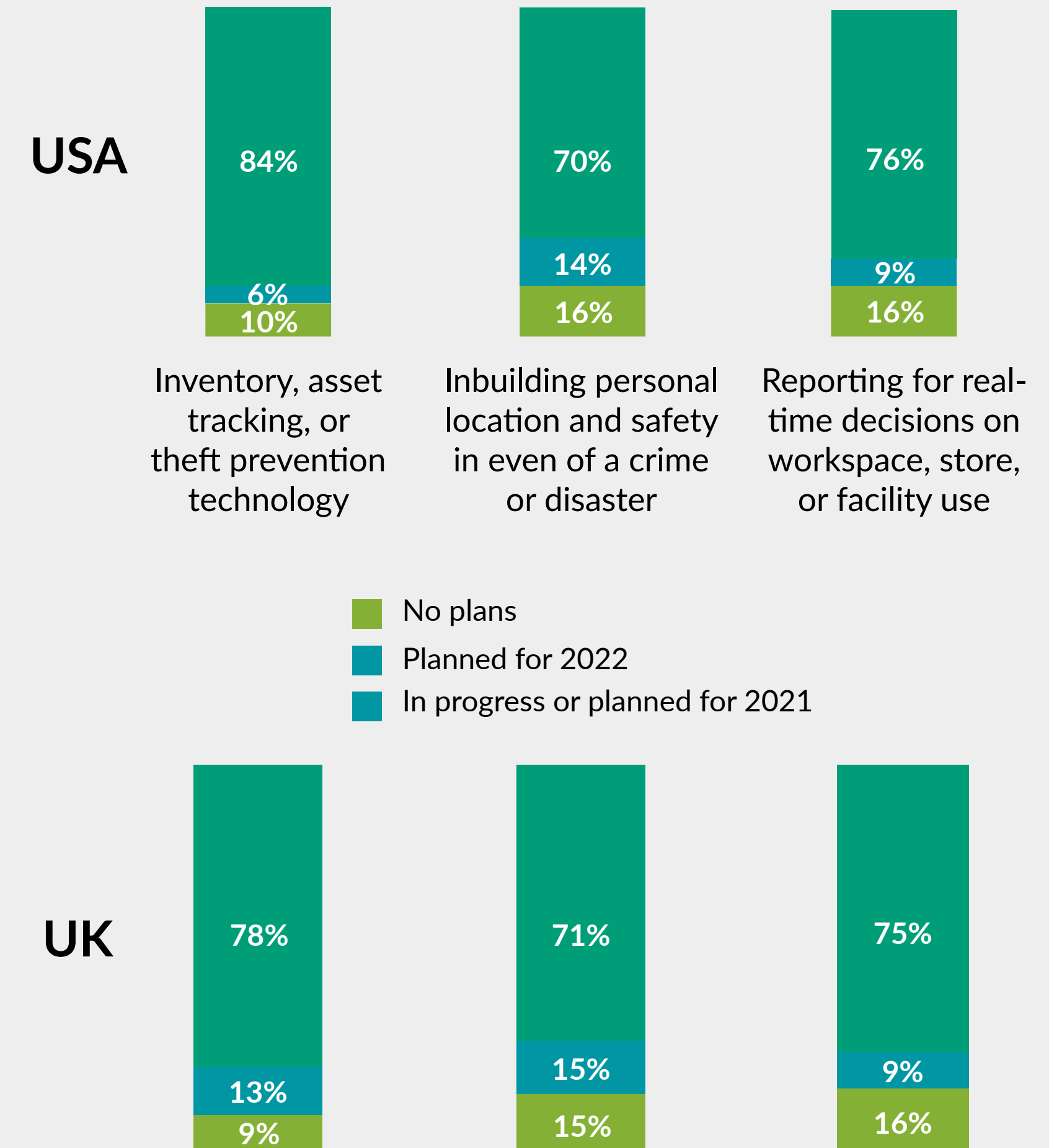
The second more common use case has to do with reporting that enables real-time decision-making on how space is currently being used.

Here are some examples of why this is important.

Say there's a particularly long customer service line to handle returns. In this case, a simple and easy report would detect a long time and alert store managers to dispatch more help to the return desk.

Other examples would be detecting an empty aisle that needs restocking, or the wine tasting space was reserved for a certain day and time but is not being used after all. In both cases, facility operations managers can immediately restock or allow another customer to use the wine-tasting space.

Such reporting allows fast decisions that keep customers happy, keep employees busy, and maximize profit.



Source: Juniper Workplaces and Public Spaces Enterprise IT Survey, 2021

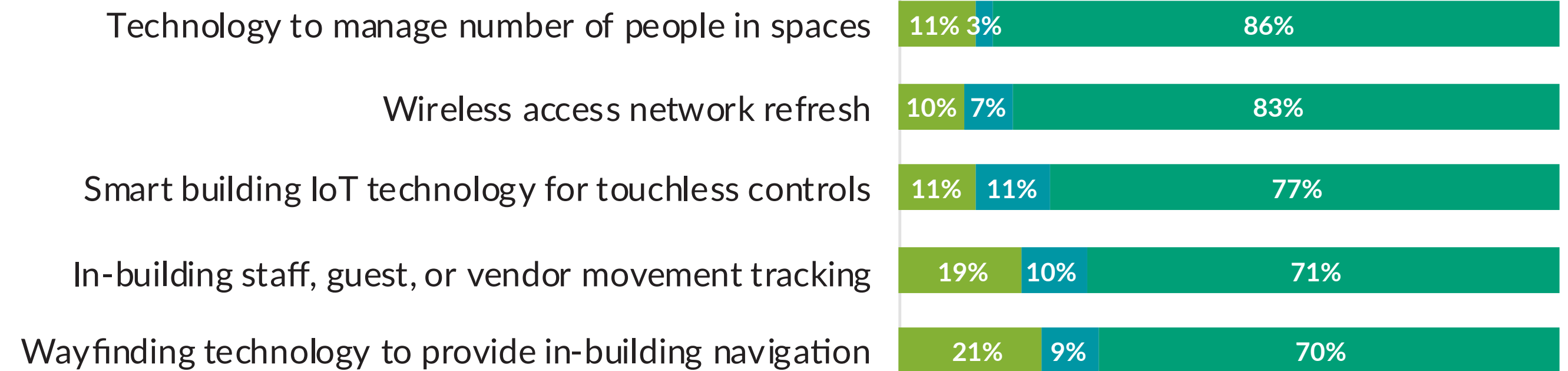


**For use cases impacting customer experience and facility operations, the top use cases are technologies for managing crowds, wireless access network refresh, and smart building controls.**

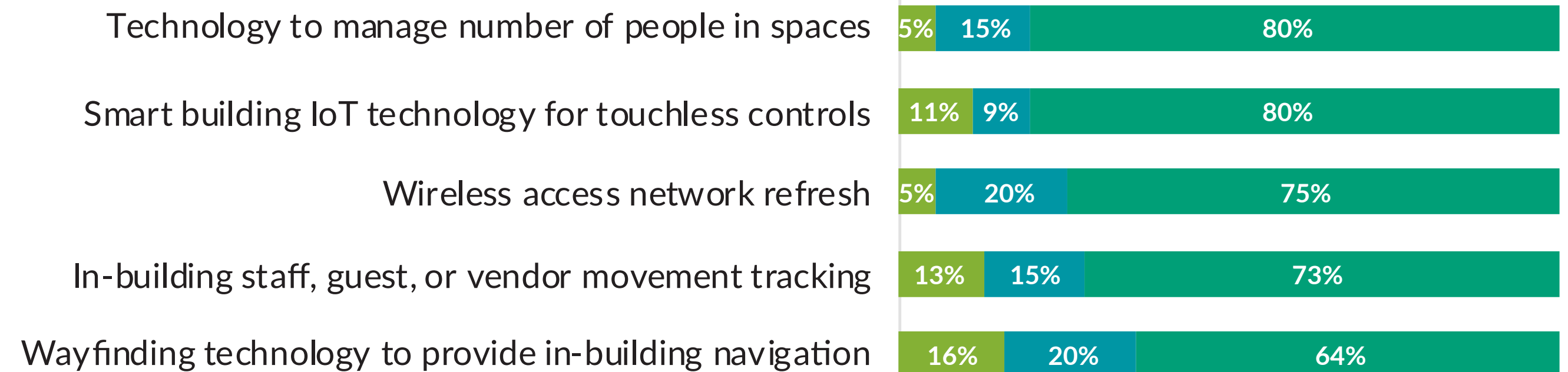
These use cases don't neatly fit into only customer experience or only facility management. Instead, they tend to benefit both customers and facility operations.

### In-progress or planned location network-enabled use cases

#### USA



#### UK



■ No Plans   ■ Planned for 2022   ■ In Progress or planned in 2021

Source: Juniper Workplaces and Public Spaces Enterprise IT Survey, 2021

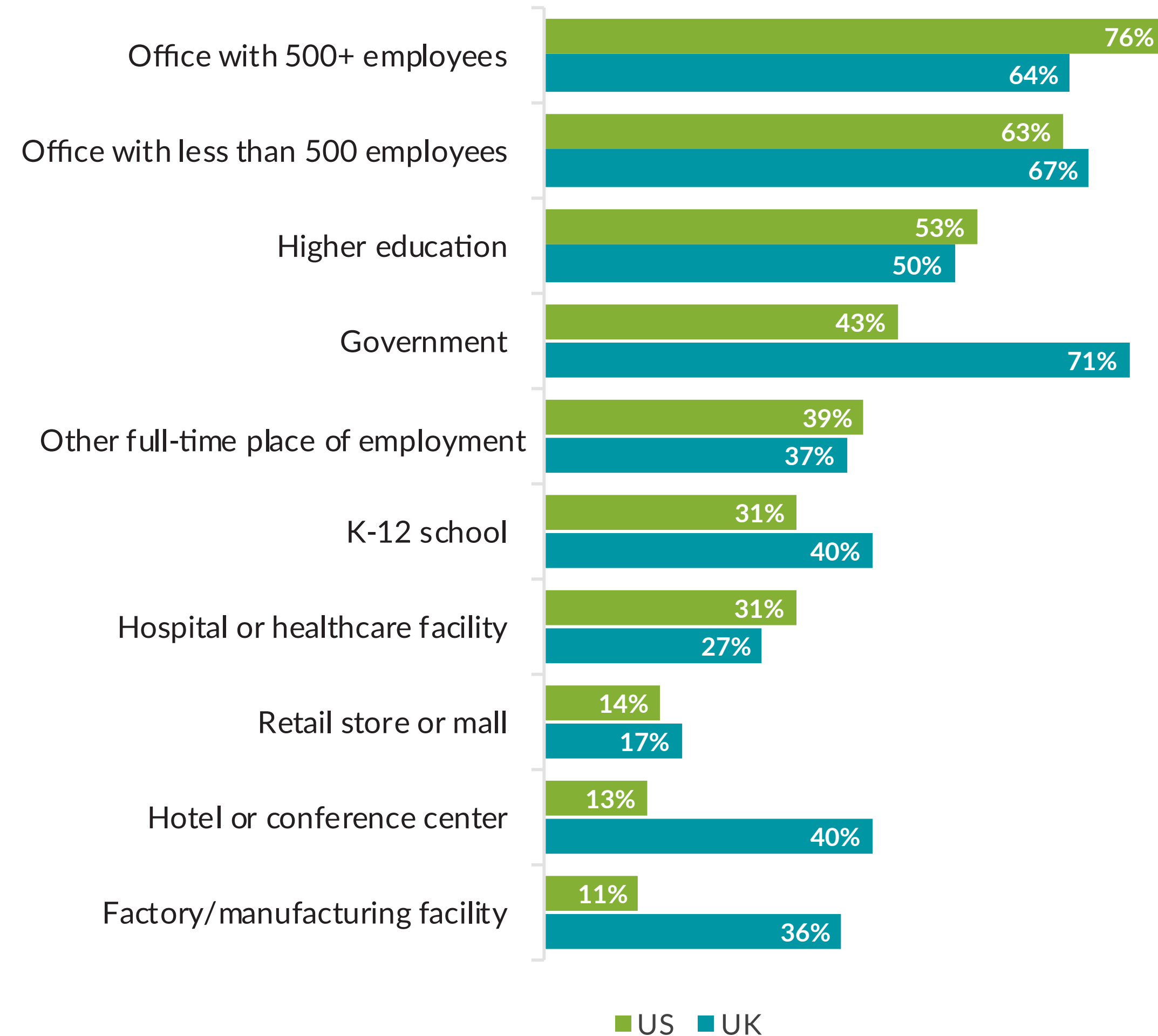
## By mid-2021, half of the full-time workforce still worked from home, including some employees in retail.

As some retail headquarters or regional offices have re-opened, this percentage is no doubt off its peak, but headquarter-based teams will likely work in a hybrid environment.

IT teams are well-accustomed to providing high-quality user experiences to customers and employees within the organization's four walls. But now, they must also address the challenges of supporting employees in home offices.

This is where a location network comes in—the same location network can also support your remote workforce and improve their employee experiences, while it eases store operations, provides reliable customer connectivity, and innovates new experiences.

### Remote workforce



Source: Juniper Remote Workplaces and Public Spaces Consumer Survey, 2021



## Build new operational efficiencies by extending location network benefits to work-from-home use cases.

Retailers report that work-from-home employees have difficulties with Internet connectivity, and IT can't troubleshoot them. VPNs have also been problematic both in high licensing fees and poor performance.

IT also has problems managing remote users. About 40 percent of U.K. and U.S. retailers must balance split tunneling, security, and VPN performance.

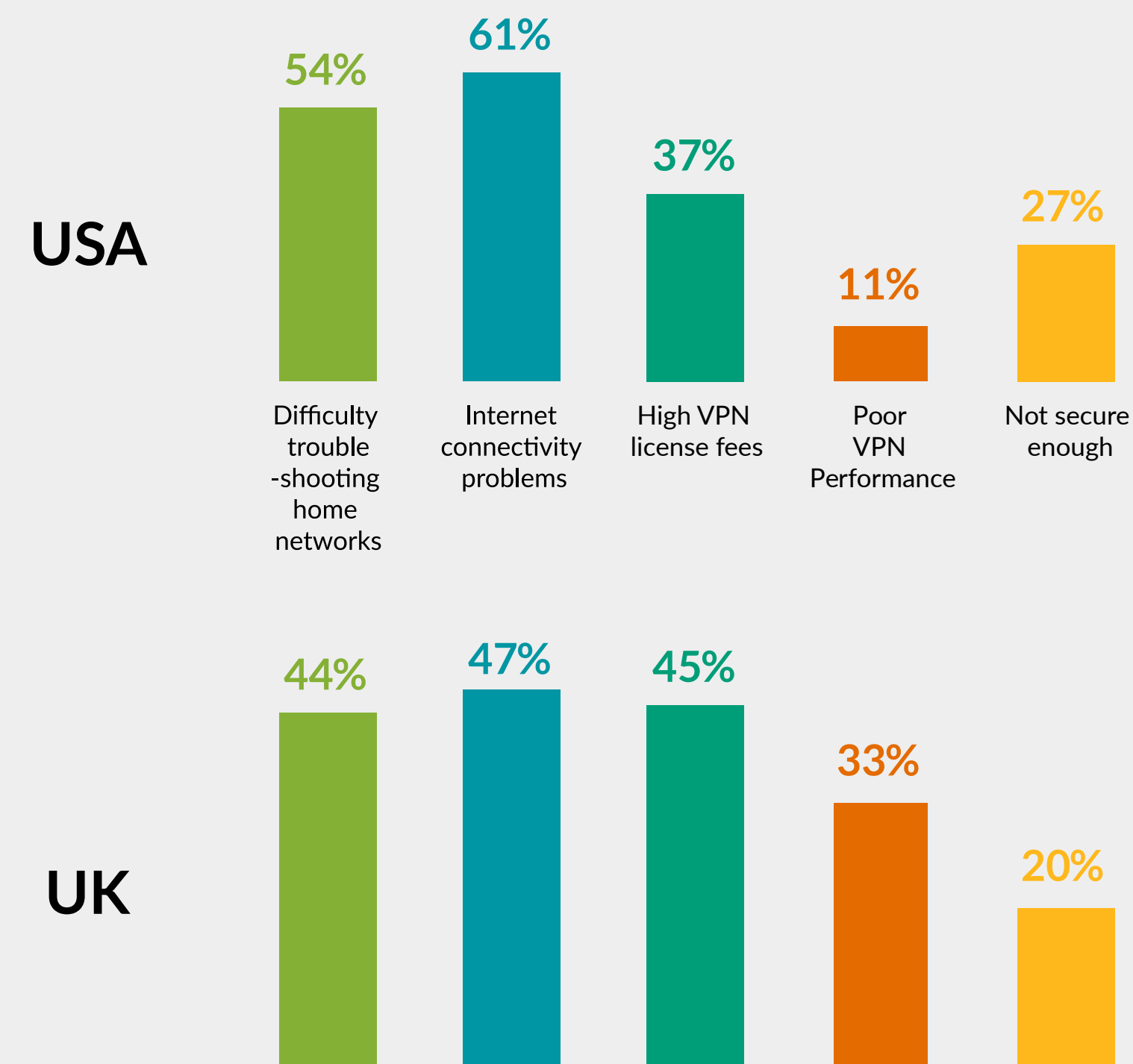
Using a location network's virtual network assistant, IT can get the same AI-driven insights into user experiences at home that they get into branch stores.

IT managers can then proactively troubleshoot and resolve issues that occur in stores, warehouses, offices, and even home office users from anywhere.

Best of all, IT can secure endpoints in a store or an employee's home—all with virtually unlimited scale that you get from a microservices cloud.

For IT, this all adds up to better visibility and higher productivity because they can solve problems and save time along the way.

### Network-related issues impacting remote user productivity



### Top 2 problems managing remote users

1. Security vulnerabilities caused by split tunneling
2. Poor VPN performance by not using split tunneling

Source: Juniper Remote Workplaces and Public Spaces Consumer Survey, 2021

# Wi-Fi network refresh, at nearly 60 percent, is the top enterprise investment priority.

Networking spending priorities are mirroring current challenges and planned use cases.

As you see here, both U.S. and U.K. retailers share the top priority of Wi-Fi refresh. From there, U.S. and U.K. retailers Enterprise network investment priorities diverge. Second, American retailers prioritize security, while UK retailers look to add Wi-Fi equipment for remote employees.

Regardless of the actual enterprise network investment priority, retailers must know that a location-based network is an excellent option for the next Wi-Fi refresh.

Top enterprise network investment priorities next 12 months	Retail	
	USA	UK
Wi-Fi network refresh	1	1
Network security refresh	2	6
Hardware firewalls for remote employees	3	3
Wi-Fi equipment for remote employees	4	2
SD-WAN - remote employee connectivity	5	4
SD-WAN for office connectivity	6	4

Source: Juniper Workplaces and Public Spaces Enterprise IT Survey, 2021

Northgate Gonzales Market wanted an upgraded wireless network with greater visibility and insight to improve employee and shopper experiences at stores, distribution centers, and headquarters.

### Technology Solution:

- Juniper Mist cloud services, driven by Mist AI
- Juniper Series of high-performance access points

### Business Results:

- Transitioned to all-new wireless network in 10 days with no downtime
- Improved operations and productivity at 41 stores, distribution center, and headquarters
- Gained AI-powered visibility and troubleshooting to optimize wireless experience for 6,000 associates using laptops, tablets, barcode scanners, and food scales
- Reduced wireless-related trouble tickets by 75%

*“We took the bull by the horns and deployed Juniper Mist to 41 stores, the distribution center, and corporate office in record time. We scheduled the rollout for 30 days, but we got Juniper Mist up and running in the stores in 10 days.”*

- Kevin Kreucher, director of IT infrastructure, Northgate Market

In their next wireless access solution, retailers most want:

- 1) the ability to remotely troubleshoot home office connectivity,
- 2) cloud-based management with no scalability limitations,
- 3) compatibility with existing access points mounts.

By using existing mounts, retailers save money because there is no need for a site survey, nor the installation of new mounts.

Also, by using a location-enabled network for wireless access that offers integrated Wi-Fi, IoT, or location beaconing (BLE), IT teams can take advantage of automated setup, deployment, and management. Gone are the days of disruptive in-store installations.

In addition, retailers can easily offer differentiated, new location services that give better in-store shopping experiences.

Retailers can also optimize operations with asset tracking and route optimization. This way, employees will always know where assets are and how to quickly move them to where they need to be.

In addition, network and IT teams can make remote troubleshooting easy—regardless of where the store or employee may be located around the world. Because of AI and unsupervised machine learning, a location network predicts network problems and performance issues before they happen.

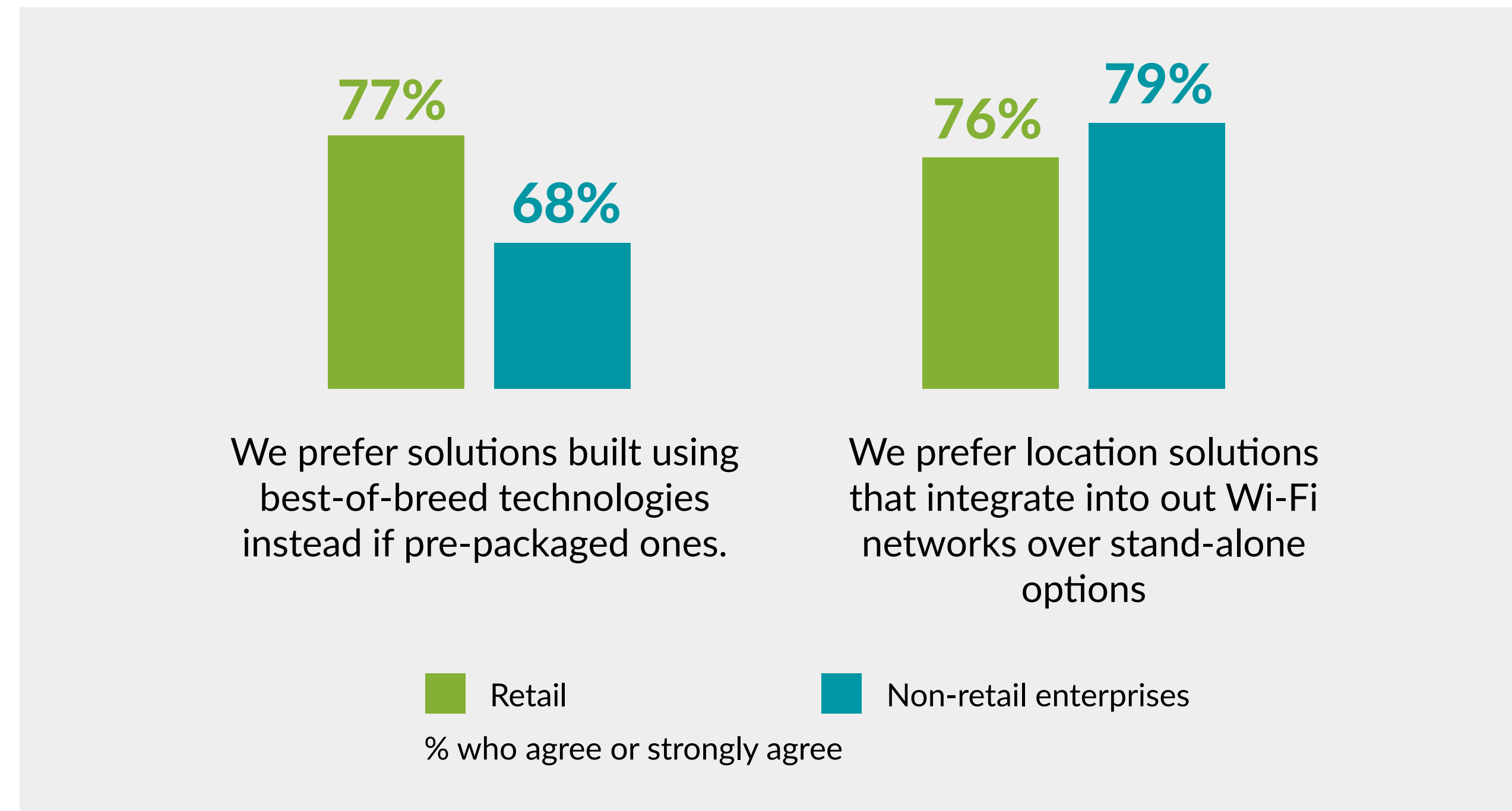
Influence level on selecting next Wi-Fi solution (% high/very high)	USA	UK
Ability to deploy and troubleshoot remotely for home office workers	83%	80%
Cloud-based management without scale constraints	80%	80%
Compatibility with existing access point mounts	74%	89%
Self-configuration	71%	60%
AIOps for proactive and automated network operations	67%	62%
Granularity of location measurement	67%	56%
100% API support for management and operations across platforms	64%	67%
Wi-Fi 6	64%	67%
AI-driven RF optimization to reduce interference	60%	58%
Location beaconing (BLE) included within access points to eliminate battery beacons	49%	52%

Source: Juniper Workplaces and Public Spaces Enterprise IT Survey, 2021



## Most retailers, compared to non-retail enterprises, tend to prefer best-of-breed technologies over packaged solutions.

In addition, retailers need to think about whether to integrate with existing Wi-Fi networks or implement it as a standalone solution. Not all solutions will integrate with the existing Wi-Fi, so if this is important, make sure your selected vendor has this capability.



Source: Juniper Workplaces and Public Spaces Enterprise IT Survey, 2021

Defining retail business requirements for your wireless network refresh

In today's retail environment, wireless access should do more than just guest and employee Wi-Fi. It needs to transform how your customers and employees engage and experience your company.

To get you started, consider these business requirements to transform your retail company to compete and win:

- Make network management faster and easier by using conversational language (AIOps)
- Easily locate assets with real-time asset tracking
- Identify the fastest routes around store and warehouses with wayfinding to identify fastest route
- Reduce operational costs by eliminating Bluetooth beacons and by using existing mounts
- Refresh wireless network without downtime
- Simplify network operations of multiple stores, distribution centers, warehouses, remote offices, and corporate offices using centralized, native cloud microservices that can easily integrate with IT service management and other API-driven apps
- Deploy a flexible foundation to experiment with new customer experiences.

# To compete and win with new retail customer experiences, start with a strong business case for a location network.

As our research shows, large retailers are realizing the opportunity location networks present. After all, about 70 percent say there's a strong business case for it, which is more than the average non-retail enterprise.

As you move to develop your business case, it bears reinforcing that while a location network saves time and money over traditional Wi-Fi access networks, it's a springboard to new revenue. Location networks enable new, creative, intelligent, and differentiated customer experiences.

This is why you will compete and win.



Source: Juniper Workplaces and Public Spaces Enterprise IT Survey, 2021

## How do you define important business case metrics for a location network?

Business case metrics should include costs, savings, and expected revenue from new, differentiated customer experiences. Costs are a function of equipment, deployment costs, and staff time for on-going management. Savings usually come in the form of time or money saved both for IT and the rest of the enterprise.

Predicting new revenue isn't always easy. Do your best to work with business functions like marketing and operations to come up with conservative, defensible, and well-sourced assumptions.

Savings can be realized from:

- Using existing access point mounts
- No site survey
- No more truck roles
- Improved productivity from IT and employees
- Centralized network operations
- More reliability and uptime due to being able to predict network issues before they happen

New revenue can be realized from:

- Deploying without network downtime
- In-store, on the spot, flash promotions
- Improved store layout and product placement from using location intelligence
- Increased customer loyalty
- New customers

Optimizing physical space for maximum revenue per square foot

New conveniences that help customers find what they want faster

# About this report

*Competing and Winning with New Retail Customer Experiences: A Report on Location Networks for Wireless Access in an Experience-First World* summarizes findings of two customer experiences surveys collected via online panels in spring 2021. The first survey was conducted with enterprise network decision-makers in key verticals called the Juniper Workplaces and Public Spaces Enterprise IT Survey, 2021. The second survey was conducted with consumers who patronize those key verticals Juniper Remote Workplaces and Public Spaces Consumer Survey, 2021.

The enterprise survey had a sample of 774 American and British enterprises with more than 500 employees, including 125 large retailers. The consumer survey included 2050 consumers with 1000 from the UK and 1050 from the United States. The consumer survey responses were weighted to represent the age and gender of populations as published by US and UK government census agencies.

The goal of the research is to understand, as COVID challenges ease, how enterprise network decision-makers prioritize enterprise network spending. The role that location networks and wireless access, remote office support, and customer, employee, user, and IT experiences fit into enterprise priorities.

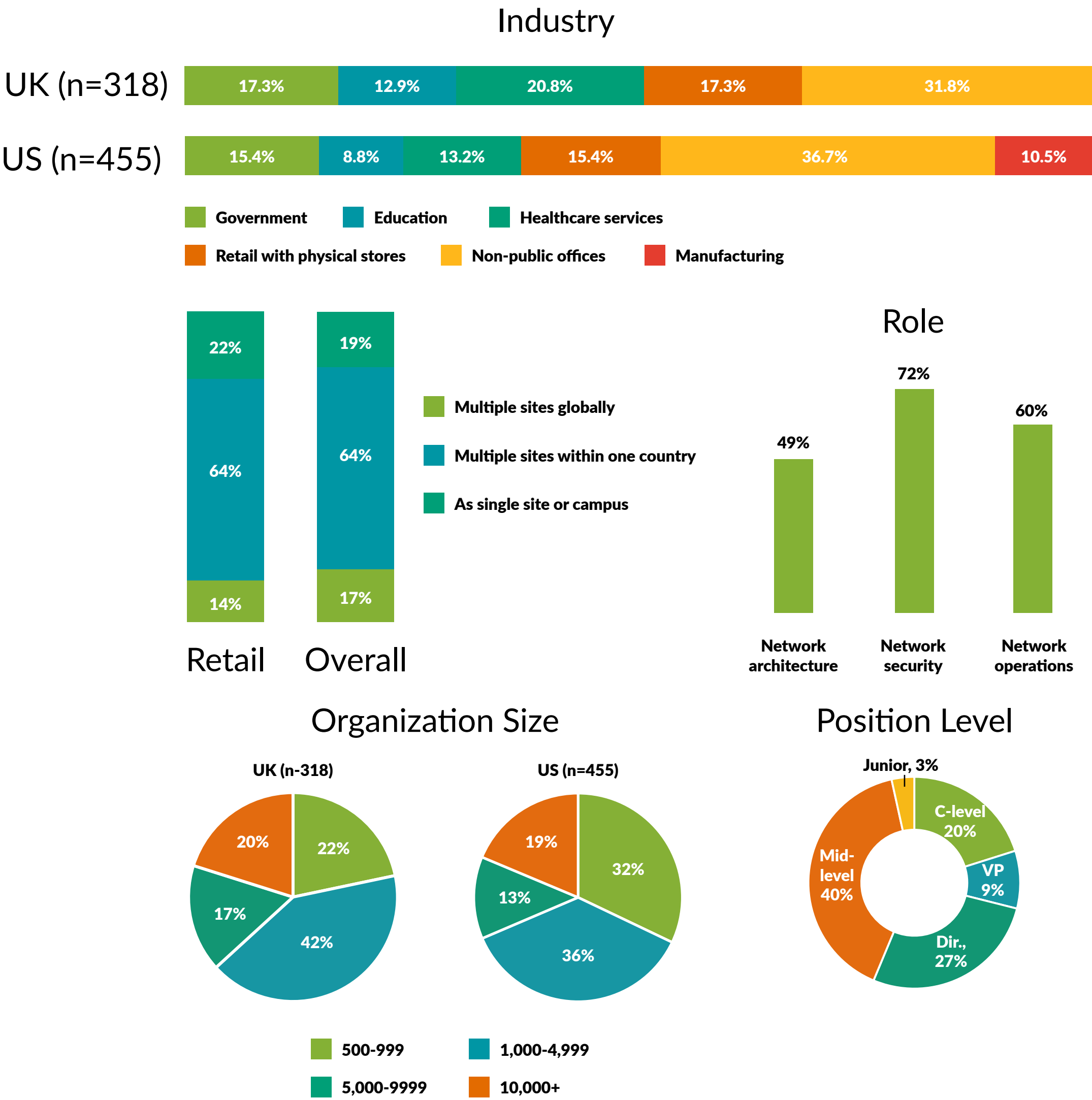
At Juniper, we aim to deliver better experiences in everything we do. We strive to deliver a simplified experience for those who run networks and those who depend on them. It all starts with software innovation. From Junos to Apstra and Paragon to Mist AI, we push the envelope on predictability, programmability, automation, and insights.

By making experience the top priority, you can build agile networks that transcend customer expectations.



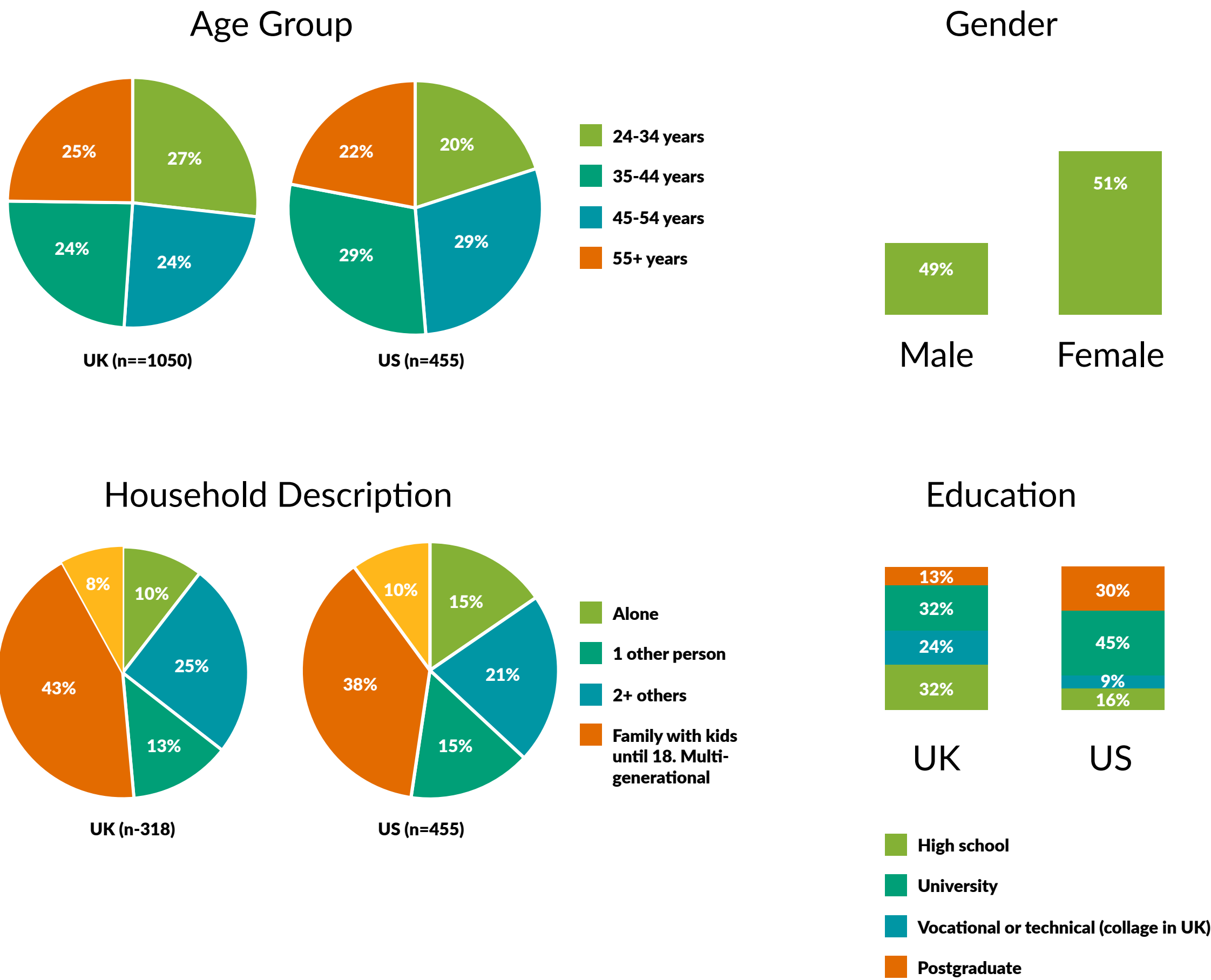
# Enterprise survey demographics

Survey data collection via online panel in February - March 2021



# Consumer research demographics and methods

Survey data collection via online panel from May 17 - May 18, 2021



# About Juniper

At Juniper Networks, we are dedicated to dramatically simplifying network operations and driving superior experiences for end users. Our solutions deliver industry-leading insight, automation, security, and AI to drive real business results. We believe that powering connections will bring us closer together while empowering us all to solve the world’s greatest challenges of well-being, sustainability, and equality.

Additional information can be found at Juniper Networks

or connect with Juniper on [Twitter](#), [LinkedIn](#) and [Facebook](#).



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