Intelligent Wi-Fi Is Rising: Tapping The Benefits Of Customer Wi-Fi In The Mobile Era

Introduction

Business decision-makers agree: Mobile apps and analytics are the keys to success in the mobile era. Companies are investing in wireless networks to give customers and employees access to a full range of mobile applications wherever they are — in a retail store, bank branch, shopping mall, airport, or corporate facility. What's often missing from the strategy is an investigation of how an intelligent Wi-Fi network serves as a platform for mobile applications and audience analytics. The more data that firms can capture and harness, the clearer a picture they can build for customer engagement, audience tracking, access opportunities, and operational improvements.

In July 2014, Aerohive commissioned Forrester Consulting to evaluate the use of intelligent Wi-Fi networks. To do so, Forrester leveraged data from Forrester surveys and supplemented that data with a custom survey of 60 US and UK business decision-makers at firms with multiple branch locations.

Companies Are Embracing The Mobile Mind Shift

Today, customers generally have instant access to any information that they desire through a myriad of devices. They are firmly in control of what they consume, thus forcing companies to develop offerings that support their preferred methods of interaction. Smartphones and tablets have become the leading choice for consumers when they are out and about, whether in retail stores, bank branches, car repair shops, or public spaces. This has led to what Forrester calls consumers' mobile mind shift: "the expectation that I can get what I want in my immediate context and moments of need."[1]

Supporting mobility for customers and for employees serving customers, therefore, has become a major priority for most businesses. According to Forrester's Forrsights Mobility Survey, Q2 2013, more than half of US and UK organizations are updating their security technologies (71%), expanding the breadth of supported devices and platforms (66%), improving mobile apps to collect more data (61%), and expanding or enhancing their data center infrastructure (59%), all in the name of supporting mobility (see Figure 1).
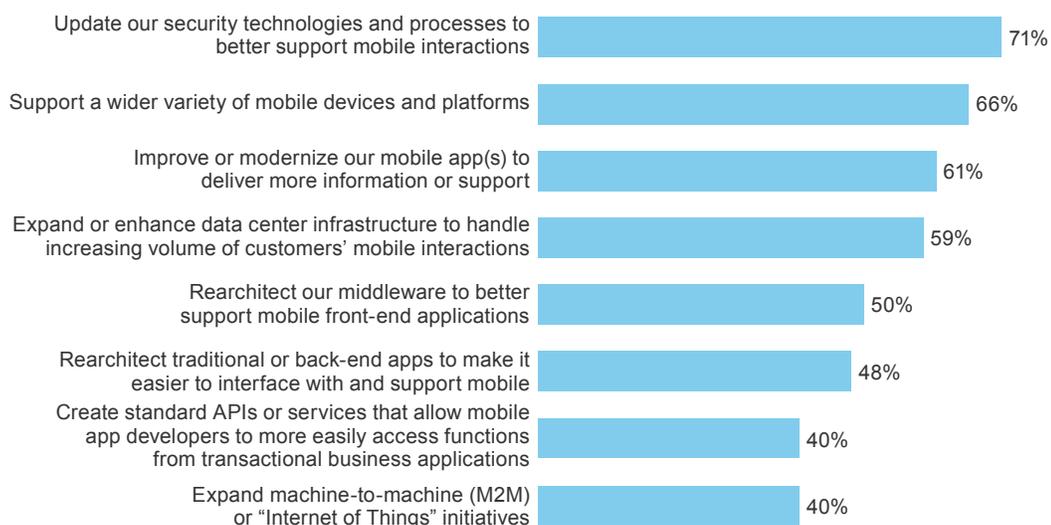
Much of the burden for this infrastructure shift falls to technology decision-makers and implementers. Among all the initiatives that they are undertaking to improve products and services, IT and technology decision-makers are most commonly prioritizing development of smartphone/tablet apps and embedding more software intelligence and connectivity into their products (see Figure 2).

Consumers increasingly turn to Wi-Fi networks, particularly when in a known or frequently visited store or space, to get the mobile apps and experiences that companies provide. A readily available wireless network serves companies' goals of providing an app experience that's easy to use and intelligent when it comes to delivering services relevant to the product or location.

FIGURE 1

Demand For Mobile Drives A Suite Of Technology Investments

"How important is each of the following initiatives in your firm's mobility strategy for supporting your customers over the next 12 months?"

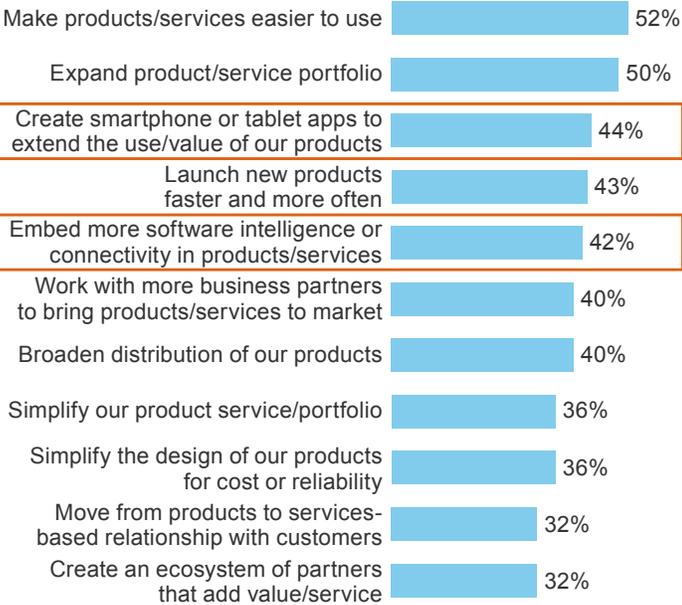| Initiative	%
Update our security technologies and processes to better support mobile interactions	71%
Support a wider variety of mobile devices and platforms	66%
Improve or modernize our mobile app(s) to deliver more information or support	61%
Expand or enhance data center infrastructure to handle increasing volume of customers' mobile interactions	59%
Rearchitect our middleware to better support mobile front-end applications	50%
Rearchitect traditional or back-end apps to make it easier to interface with and support mobile	48%
Create standard APIs or services that allow mobile app developers to more easily access functions from transactional business applications	40%
Expand machine-to-machine (M2M) or "Internet of Things" initiatives	40%

Base: 1,602 IT executives and technology decision-makers located in the UK and US

Source: Forrsights Mobility Survey, Q2 2013, Forrester Research, Inc.

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FIGURE 2

Mobile Apps And Usability Lead The Improvement List

"You said that your firm was looking to improve its products or services. What is your firm doing to address this?"

Make products/services easier to use	52%
Expand product/service portfolio	50%
Create smartphone or tablet apps to extend the use/value of our products	44%
Launch new products faster and more often	43%
Embed more software intelligence or connectivity in products/services	42%
Work with more business partners to bring products/services to market	40%
Broaden distribution of our products	40%
Simplify our product service/portfolio	36%
Simplify the design of our products for cost or reliability	36%
Move from products to services-based relationship with customers	32%
Create an ecosystem of partners that add value/service	32%

Base: 886 IT executives and technology decision-makers located in the UK and US

Source: Forrsights Budgets And Priorities Survey, Q4 2013, Forrester Research, Inc.

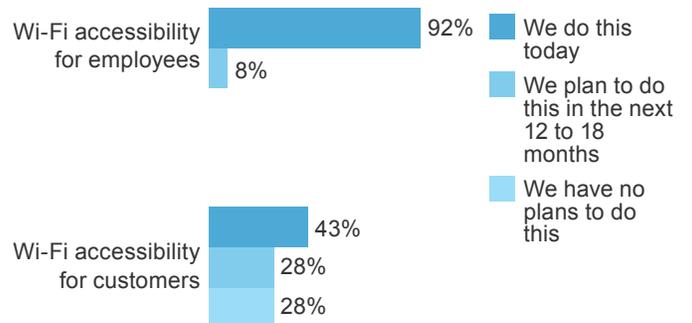## Wi-Fi Adoption Is A Growing Part Of The Solution

A critical component of a mobile-supportive infrastructure is a wireless network that customers and employees can use to connect to services and information. Most companies have had this in some form for employees, but wireless for customer use is growing as it offers ways to engage with customers while simultaneously collecting data.

› According to Forrester's Forrsights Mobility Survey, the most highly deployed mobile and wireless network technologies among US and UK businesses are in-house Wi-Fi (30% deployed, 52% plan to deploy); public Wi-Fi (11% deployed, 36% plan to deploy); and long-term evolution (LTE) (8% deployed, 28% plan to deploy).

› In customer-facing environments such as retail and hospitality, adoption of wireless for employees is even higher. Our custom survey showed that 92% of 60 respondents responsible for wireless from firms with multiple branches or outlets are offering Wi-Fi accessibility for employees to use, with the rest planning to do so within the next year and a half (see Figure 3).

› These branch and retail Wi-Fi networks are also important for customers to access directly. While only 43% of respondents offer Wi-Fi access to customers today, another 28% plan to do so. Offering Wi-Fi to customers opens the door to directly serve them while they are in a store or public space.

FIGURE 3

Most Firms Give Employees Wi-Fi Access — And Some Make It Available To Customers, Too

"What Wi-Fi technologies do you have in place in your customer environments (e.g., retail stores, bank branches, or other places where you serve customers)?"

Wi-Fi accessibility for employees	92%
	8%
Wi-Fi accessibility for customers	43%
	28%
	28%

We do this today

We plan to do this in the next 12 to 18 months

We have no plans to do this

Base: 60 UK/US-based business decision-makers

Source: A commissioned study conducted by Forrester Consulting on behalf of Aerohive, August 2014

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Organizations Can Get More Out Of Their Customer Wi-Fi

With advancements in analytics, Wi-Fi offers a tremendous (albeit largely unrealized) opportunity for companies to collect data and utilize analytics to boost their engagement with customers. Per a Forrester report, "retail stores have been living in the analytical 'dark ages' in comparison to digital channels, relegated to measurement techniques that rarely take into account customer behavior. However, new advances in location-based analytics technologies are transforming how retailers win, serve, and retain customers within the physical store."[2] Our study found that most organizations are still in the early stages of Wi-Fi maturity:
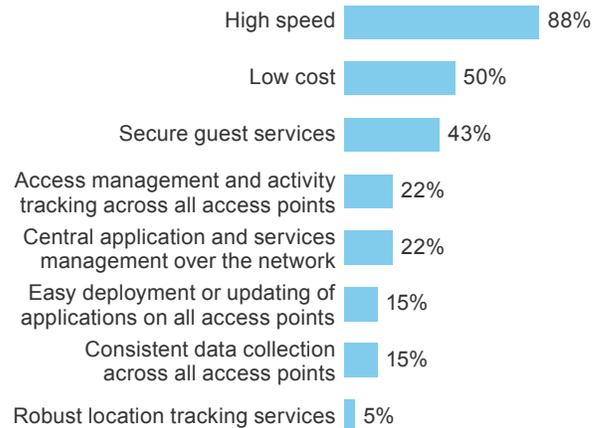
› According to our respondents, the most important attributes of a wireless network are high speed and low cost. Security leads the list after these table stakes features, and the more advanced and customer-centric capabilities of centralized management, tracking, and application deployment lag far behind today's implementations (see Figure 4).

› On the back end, only 38% of companies are using Wi-Fi to monitor store traffic. Twenty-five percent are using it to track Wi-Fi usage for individual customers, 18% are using it to encourage purchases, and 17% are using data to push appropriate messages or assistance to customers in stores (see Figure 5).

› Businesses are largely using Wi-Fi to support employee mobility. Seventy-three percent of respondents have Wi-Fi-enabled mobile technologies for sales and service reps, and 52% utilize Wi-Fi to optimize store operations such as point-of-sale (POS) and inventory management systems. Less than a quarter of respondents are using their Wi-Fi in ways that recognize and utilize their customers' identities, which represents a serious opportunity for companies to capture critical customer information and use it to deliver a personalized experience based on customer identity (see Figure 6).

FIGURE 4

After The Table Stakes Of Speed And Cost, Security, Tracking, And Management Lead

"What are the most important attributes of a wireless network for customer environments?"
(Pick up to top three)

High speed	88%
Low cost	50%
Secure guest services	43%
Access management and activity tracking across all access points	22%
Central application and services management over the network	22%
Easy deployment or updating of applications on all access points	15%
Consistent data collection across all access points	15%
Robust location tracking services	5%

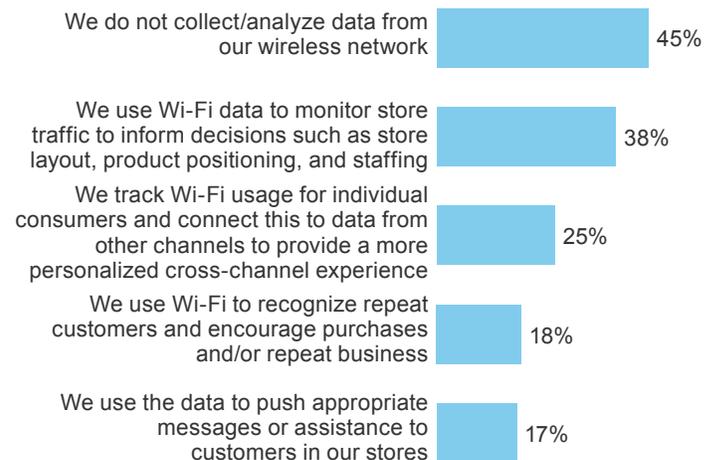Base: 60 UK/US-based business decision-makers

Source: A commissioned study conducted by Forrester Consulting on behalf of Aerohive, August 2014

FIGURE 5

Engagement Data Is Opening Doors To Better Service And Personalization

"How are you utilizing data collected from your wireless network?"
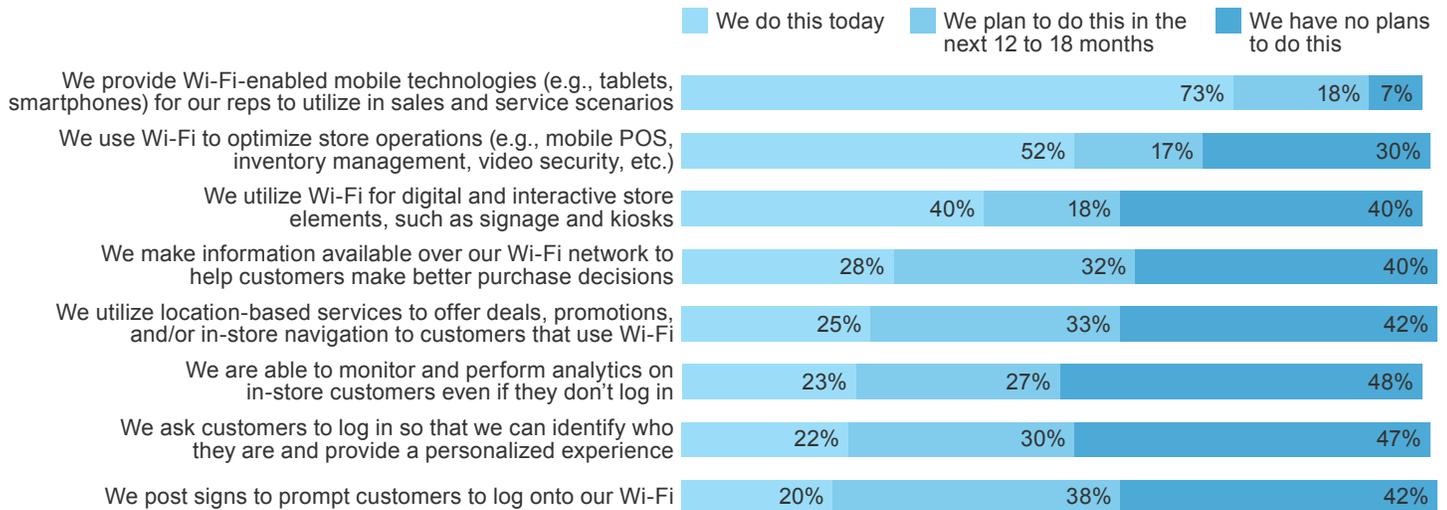(Select all that apply)

We do not collect/analyze data from our wireless network	45%
We use Wi-Fi data to monitor store traffic to inform decisions such as store layout, product positioning, and staffing	38%
We track Wi-Fi usage for individual consumers and connect this to data from other channels to provide a more personalized cross-channel experience	25%
We use Wi-Fi to recognize repeat customers and encourage purchases and/or repeat business	18%
We use the data to push appropriate messages or assistance to customers in our stores	17%

Base: 60 UK/US-based business decision-makers

Source: A commissioned study conducted by Forrester Consulting on behalf of Aerohive, August 2014

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FIGURE 6

The List Of Benefits Derived From Wi-Fi Is Long And Business-Enhancing

"How are you using your Wi-Fi networks in the following situations?"

	We do this today	We plan to do this in the next 12 to 18 months	We have no plans to do this

We provide Wi-Fi-enabled mobile technologies (e.g., tablets, smartphones) for our reps to utilize in sales and service scenarios — 73% | 18% | 7%

We use Wi-Fi to optimize store operations (e.g., mobile POS, inventory management, video security, etc.) — 52% | 17% | 30%

We utilize Wi-Fi for digital and interactive store elements, such as signage and kiosks — 40% | 18% | 40%

We make information available over our Wi-Fi network to help customers make better purchase decisions — 28% | 32% | 40%

We utilize location-based services to offer deals, promotions, and/or in-store navigation to customers that use Wi-Fi — 25% | 33% | 42%

We are able to monitor and perform analytics on in-store customers even if they don't log in — 23% | 27% | 48%

We ask customers to log in so that we can identify who they are and provide a personalized experience — 22% | 30% | 47%

We post signs to prompt customers to log onto our Wi-Fi — 20% | 38% | 42%

Base: 60 UK/US-based business decision-makers

Source: A commissioned study conducted by Forrester Consulting on behalf of Aerohive, August 2014

Conclusion

With the mobile mind shift comes a major opportunity for companies to utilize their wireless networks to interact with and learn from customers in ways that previously did not exist. Companies are well on the path to using Wi-Fi for associate enablement with mobile point-of-sale devices in addition to digital store elements such as signage and kiosks. Offering Wi-Fi for customers is a valuable service, but it has potential to also serve as a platform to capture critical information and engage with customers in a highly personalized fashion. The most mature companies are also encouraging customers to engage their brand via Wi-Fi while in the store, identifying who the customers are and connecting them to other channel data when they log in. Then, these companies offer coupons and/or store assistance, pairing the benefits of an eCommerce environment with those of an in-store experience.

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Methodology

This Technology Adoption Profile was commissioned by Aerohive. To create this profile, Forrester leveraged its Forrsights Mobility Survey, Q2 2013, as well as its Forrsights Budgets And Priorities Survey, Q4 2013. Forrester Consulting supplemented this data with custom survey questions asked of business decision-makers in marketing, merchandising, operations, and sales from the US and UK. The auxiliary custom survey began in July 2014 and was completed in August 2014. For more information on Forrester's data panel and Tech Industry Consulting services, visit www.forrester.com.

Endnotes

[1] Source: "Marketing Strategy For The Mobile Mind Shift," Forrester Research, Inc., April 19, 2013.

[2] Source: "Analyze This: Web Style Analytics Enters The Retail Store," Forrester Research, Inc., April 16, 2014.

ABOUT FORRESTER CONSULTING

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