

A New Chapter for Mobile: How Wi-Fi Will Change the Mobile Industry as We Know It

IBSG Service Provider FastFacts

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In 97 countries around the world, there are now more mobile devices than people.¹ No wonder mobile networks are clogged with massive amounts of new traffic! Mobile operators are struggling with how to provide the mobile broadband experience customers expect, in a cost-effective, scalable, and profitable manner. Wi-Fi, the “silent sleeper” of wireless access networks, may hold the answer.

The mobile industry is on the brink of a fundamental change driven by Wi-Fi. Just think of some recent key developments:

- There has been massive growth in Wi-Fi-enabled smartphones, tablets, cameras, and game consoles—and nearly half of network traffic growth is Wi-Fi.²
- The number of Wi-Fi access points is also exploding, including nearly a quarter-billion homes³ and more than 4 million public spaces⁴—and more and more public hot spots are free.
- At the same time, economic modeling by Cisco IBSG shows that mobile operators can reduce costs and improve customer experience by offloading mobile data to Wi-Fi networks.

A New Mobile Player in Town

It's not surprising that Wi-Fi is becoming an integral part of wireless network design. After all, Wi-Fi has truly come of age and now realistically represents a viable wireless access network. But will Wi-Fi be a complement to—or substitute for—mobile wireless networks? Consider the following:

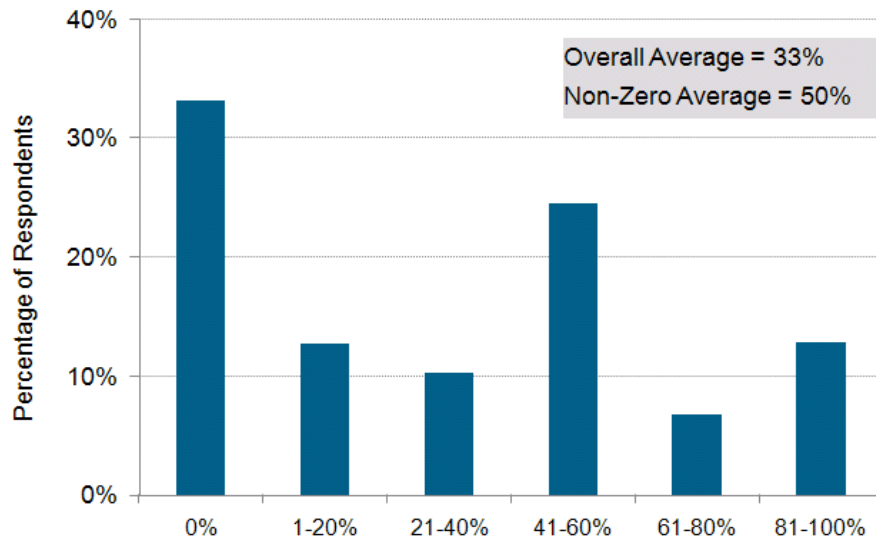
1. **Wi-Fi covers most of the places where we are:** 80 percent of the time, people connect to the mobile Internet from their home, office, or other indoor location—all areas that are addressable by Wi-Fi.
2. **Much of what we do is nomadic, not mobile:** Two-thirds of all smartphone activities are typically “nomadic,” such as email, web browsing, gaming, using productivity tools, and making video calls. Wi-Fi is ideal for these pursuits.
3. **New nomadic devices will consume even greater amounts of mobile data:** While a smartphone typically consumes 24 times the data of a standard mobile phone, tablet PCs and laptops consume 122 times and 515 times more, respectively.
4. **Consumers will happily use Wi-Fi as an alternative to mobile:** U.S. smartphone users already use Wi-Fi a third of the time to access the web. (See Figure 1.)



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5. **Wi-Fi can offer a more cost-effective solution, and a better user experience:** Wi-Fi delivers higher speed, good coverage, and a better experience—all at a lower cost than traditional mobile.
6. **There are several ways to make money from Wi-Fi:** In addition to the traditional business of retail hotspots, there are now several other viable business models including charging mobile carriers, offering advanced services or reducing broadband churn.

Figure 1. Wi-Fi Access by U.S. Smartphone Users (Percent of Total Browsing).



Source: Cisco IBSG Connected Life Market Watch, 2011

Creating Winning Strategies

To succeed in Wi-Fi, operators need to have a clear understanding of the devices involved, which customer segments they are targeting, and their own strategic Wi-Fi objectives. Several types of service providers can create winning strategies to succeed in Wi-Fi:

Mobile Operators typically have very limited Wi-Fi capability. The primary business model for mobile operators is cost reduction—using Wi-Fi to offload growing data traffic to avoid significant outlays in new cellular network equipment.

Wi-Fi Network Providers do not have their own mobile networks but operate Wi-Fi networks, either in public hotspots or by extending home and business broadband services. The primary business models for these providers are (1) selling wholesale access to mobile operators for data offload, and (2) selling access and value-added services to retail hotspot owners and end users, and as part of a churn management tool and sales differentiator for their wired broadband services.

Integrated Providers operate both mobile and wireline broadband networks, and typically have some Wi-Fi capabilities. Their primary business model is to use Wi-Fi for offloading data traffic from their mobile networks to reduce cost, manage churn, and differentiate their fixed broadband offers.

Wireless networks will evolve over time, but one thing is certain: Wi-Fi is a critical element of current and future mobile networks. The explosive demand for mobile connectivity means

that there is more than enough business to go around. Success will depend on the coexistence of traditional mobile, Wi-Fi, and other next-generation wireless access technologies.

Learn more about how Wi-Fi will change the mobile industry by reading “A New Chapter for Mobile?” at <http://www.cisco.com/web/about/ac79/docs/sp/New-Chapter-for-Mobile.pdf>

Endnotes

1. International Telecommunication Union, October 2010.
2. Cisco Virtual Networking Index, 2011.
3. IDC, November 2010.
4. In-Stat, August 2010.

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More Information

Cisco Internet Business Solutions Group (IBSG), the company's global consultancy, helps CXOs from the world's largest public and private organizations solve critical business challenges. By connecting strategy, process, and technology, Cisco IBSG industry experts enable customers to turn visionary ideas into value.

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