

# Wi-Fi Attitudes Shift

## Executive Summary

In August 2008, the Webtorials Editorial/Analyst Division surveyed the Webtorials subscriber base for the fifth consecutive year concerning enterprise wireless LAN (WLAN) deployment plans, attitudes and experiences. This report series summarizes the findings, which were gathered from a Web-based response pool of several hundred, geographically diverse Webtorials subscribers throughout the world. Only responses from individuals who said they are actively involved with their companies' WLANs have been included in the results.

This year's findings will be published as a series of four short reports. Part 1, here, provides an overview of the survey results in the "Key Findings" section below. The three subsequent reports, to publish throughout the remainder of 2008, examine selected findings more closely in the following topic areas:

- Deployment Trends in Wireless Networks and Devices
- Enterprise Strategies for 802.11n
- What's Running over Wi-Fi: A Look at Application Adoption

For more information on the demographics of the respondents to this year's survey and other background information, visit <http://webtorials.com/abstracts/2008-WLAN.htm>.

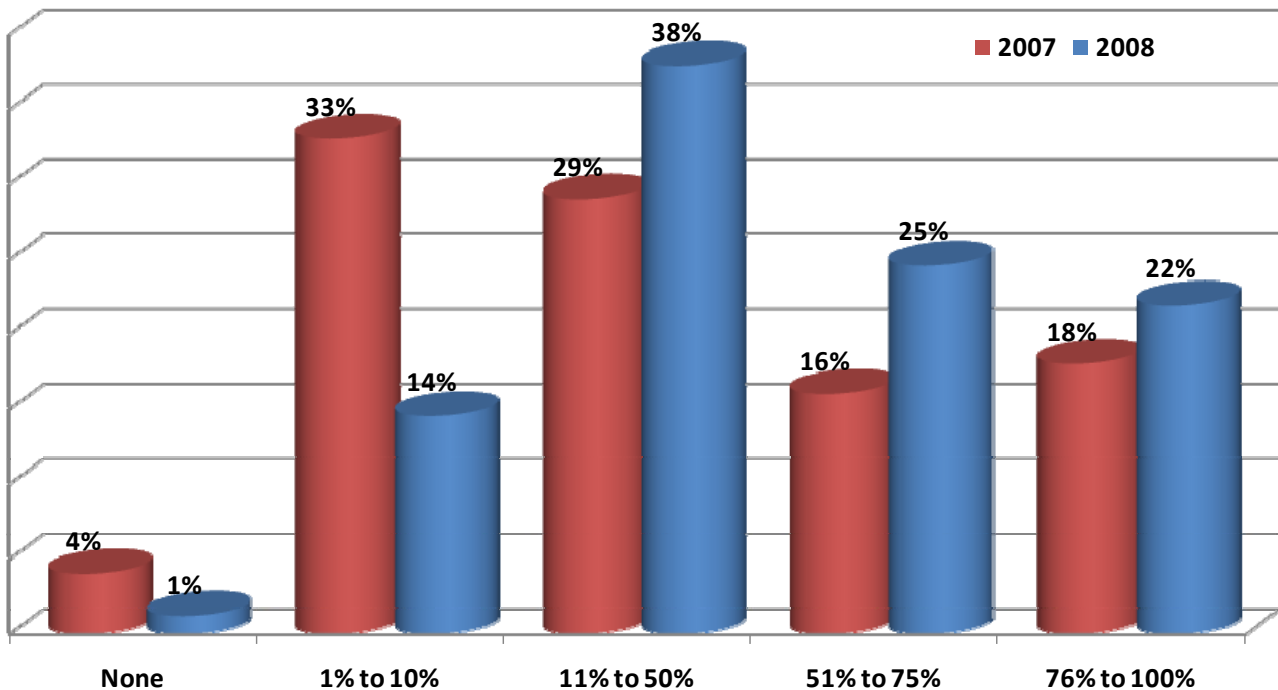
## Key Findings

Generally, 2008's survey confirmed that Wi-Fi deployments have grown pervasive in common areas of mainstream enterprises. Most noticeably, organizations are far more willing than last year to embrace pre-standard technology (Draft 2.0 802.11n) as mobility ramps up within their user populations and as they look ahead to collaborative and location-based application deployment over their Wi-Fi networks.

Below are the primary specific findings:

- Wi-Fi client deployments are catching up with infrastructure installations.** Increasing numbers of employees are getting outfitted with Wi-Fi devices. Nearly half of survey respondents (47%) said that 51% to 100% of their employee populations are equipped with a Wi-Fi-enabled device, such as a laptop, smartphone or personal digital assistant (PDA). This figure is a measurable jump from last year, when just 34% said that half or more of their companies' employees possessed Wi-Fi devices (**Figure 1**).

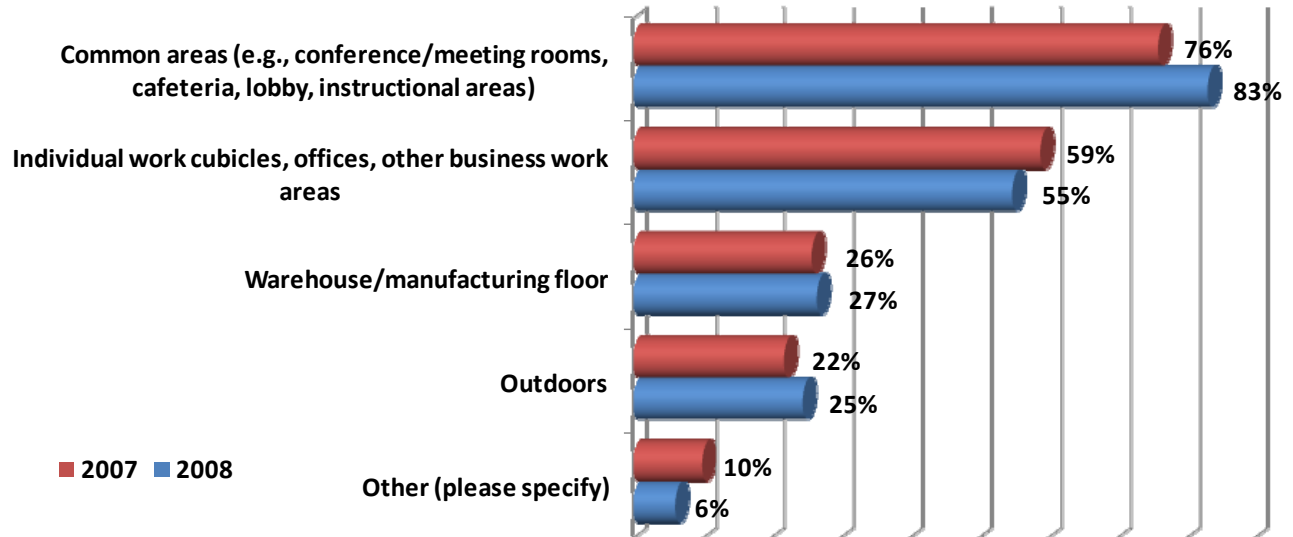
Figure 1. Wi-Fi Client Growth



The number of respondents with at least half their user population carrying Wi-Fi equipped devices grew 13% from 2007 to 2008.

Growth in the Wi-Fi infrastructure was less dramatic. Those with Wi-Fi coverage in common areas of the building last year were 76%, which grew to 83% this year. However, those respondents reporting wireless coverage in individual work cubicles and offices actually declined from 59% in 2007 to 53% in 2008 (Figure 2).

Figure 2. Wi-Fi Infrastructure Coverage

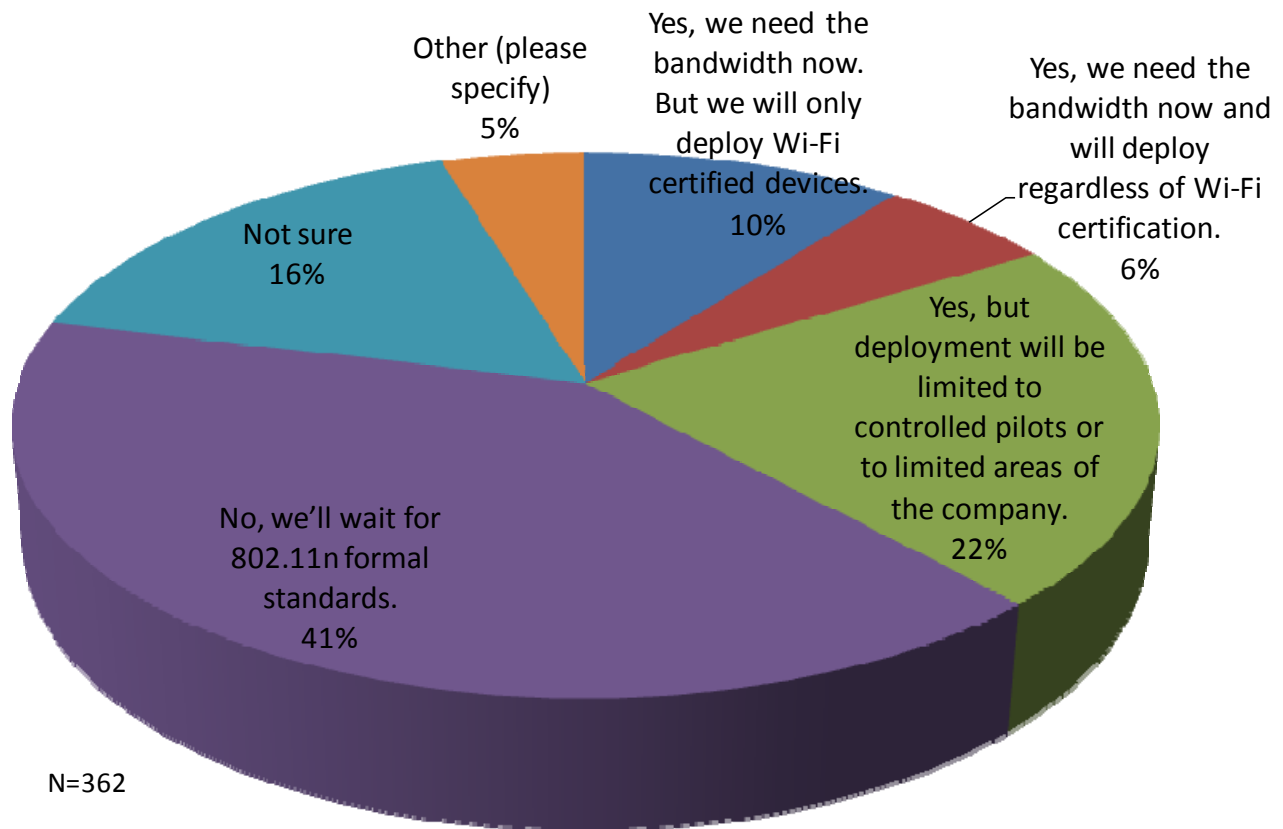


*Growth in infrastructure deployments was somewhat of a wash, giving client deployments a chance to catch up to network coverage. In addition, decisions regarding pre-standard 802.11n are likely giving enterprises pause as they move forward with their AP rollouts.*

- Next-generation 802.11n networks are being more largely embraced in pre-standard form.** 802.11n is seeing significant action and appears to be a growing requirement for even the most basic enterprise communication. The number of respondents saying that they currently need the bandwidth afforded by 802.11n (100Mbps+ throughput) and plan to deploy it ahead of formal standards ratification jumped from a paltry 1% last year to about 16% this year. The 16% figure doesn't count those who said they would deploy pre-standard 802.11n products but would confine their deployments to controlled pilots or limited areas of the company - a percentage that jumped to 22% in 2008 from 15% last year (Figure 3). Added together, over a third of respondents (38%) now say they intend to deploy 802.11n ahead of standards in some form.

These figures represent a significant shift in attitude since last year's survey. One reason for the change involves the activities of the Wi-Fi Alliance, an industry consortium that tests for interoperability among standards-based products. The Alliance began testing and certifying a number of pre-standard 802.11n as interoperable in June 2007, shortly after last year's respondents were surveyed. Now that many products are Draft 802.11n Wi-Fi-certified by the consortium, organizations have gained confidence that current products carrying the Alliance's seal of approval will work together and feel safer in buying them.

Figure 3. 802.11n Attitudes and Plans



Does your organization plan to deploy "Draft N" or "Pre-N" 802.11n products ahead of final IEEE 802.11n standards ratification?

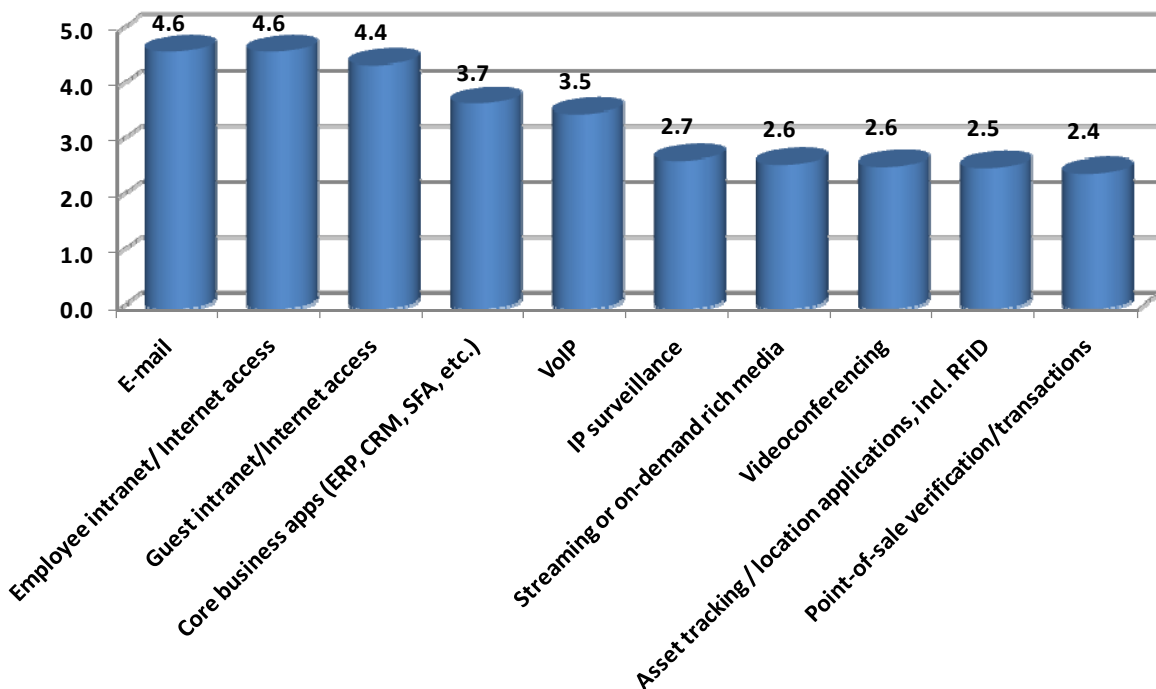
Survey respondents say that the biggest uses they anticipate for 802.11n networks, which support as much as 170Mbps throughput in today's products, are for accommodating voice over IP (VoIP) traffic (50%), collaborative application traffic (41%) and growing data loads (40%). Interestingly, more than a third (35%) said that creating an all-wireless enterprise access network was one of the two most important business applications they foresee for 802.11n, yet 61% said that they wouldn't be considering building an all-wireless network in the foreseeable future. It appears, then, that Webtorials survey-takers are thinking ahead: They know that going all-wireless will require the throughput and other characteristics of tried-and-true wired Ethernet. Draft 802.11n affords Wi-Fi comparable throughput; still, these are early days for Wi-Fi networks proving their mettle on availability, quality of service, reliability and security on a very large scale.

- Wi-Fi use persists primarily in traditional horizontal applications, but companies are eyeing location-centric applications for the future.** Improved access to mobile employees (47%) again ranked highest in why respondents' organizations were deploying Wi-Fi networks in general, compared with 46% last year. Keeping mobile knowledge workers productive wherever they are again ranked as the second largest driver behind general Wi-Fi

deployment, but by a much larger margin: the figure leaped to 46% of the respondent base from just 24% last year.

E-mail, along with employee and guest intranet/Internet access, remain the most prominent Wi-Fi applications already in use, followed by access to core business applications. Voice over IP over Wi-Fi (Vo-Fi) represented a strong fifth (36%), about the same as last year. In addition, looking out 12 months and beyond, several newer applications will be consuming Wi-Fi bandwidth, including those that are location-based, such as asset tracking and IP surveillance (**Figure 4**).

Figure 4. Applications Using Wi-Fi



*When will you deploy the following applications over a wireless LAN? Respondents were asked to rate their deployment timeframe for each application on a 5-point scale with a value of 5 representing "Already Deploying" and a value of one representing "No plans to deploy." These responses represent the average for those answering. N for each item ranged from 167 to 287, with an average of 252.*

## **Conclusion**

Organizations are rapidly adding new client devices to the Wi-Fi mix. These client deployments should serve to bridge the gap that was revealed in the 2007 Webtorials State-of-the-Market report between the comparatively small number of enterprise users equipped with Wi-Fi client access devices and the comprehensive Wi-Fi infrastructure coverage in respondent organizations.

In the meantime, organizations appear to be eyeing as yet pre-standard 802.11n networks much more seriously than they did last year. Enterprises' mobility, bandwidth and new application needs—among them collaborative, location-based and streaming capabilities—are all rising while ratification dates for the standard keep getting delayed. This situation has caused enterprises to reexamine their philosophies about adopting pre-standard wireless technology with throughput comparable with what they are accustomed to getting with standard Ethernet.

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