

# ROI for Office Wireless LANs

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The deployment of a wireless LAN in a typical office environment, the so called "horizontal market" is difficult to justify in some cases. Let's look at how we can apply wireless LANs in these common office areas and determine associated benefits.

## Wireless for Desktop Computers

One place to add wireless connectivity is in ordinary desktop PCs. Of course the idea here is to avoid the installation of wire between the desktop and the corporate network. Because of the size of the desktop PC, we can assume that it's stationary. Are wireless desktops financially feasible today?

An 802.11 radio card today is costing approximately \$50, which is still slightly higher than what you'll pay for a wired Ethernet card. In general, it runs approximately \$150 per desktop to install Ethernet cabling, wall plate, etc. Thus, the net savings to go wireless instead of Ethernet is about \$150, not including cost differences of the network backbone. Even today, you'll probably pay more for a wireless LAN infrastructure than Ethernet, once you factor in the varying costs for hardware, RF site survey, etc. The net result is that a wireless implementation of desktops costs about the same as going with a wired solution.

Keep in mind that these thoughts also assume that the facility has no existing Ethernet connections to the desktop. If Ethernet is already available, then a wireless solution will cost more because it's being compared to an existing wired network capability.

## Productivity Gain is the Answer

For more compelling reasons to install wireless LANs, you need to show continual productivity benefits. For example, consider using 802.11-equipped laptops. This enables users to read and respond to e-mail and browse the Internet during office meetings, assuming the user can be responsive when needed at the meeting while plunking away at their laptop. Even though this seems trivial, the productivity gains can be significant.

Let's say a person attends three hours worth of meetings each day. If the user spends approximately 15 minutes per hour responding to email and other Internet-related tasks during each meeting, then user will have 45 minutes more time each day to other tasks. This seems pretty reasonable, considering the average person and office setting.

## Show Me the Real Savings!

A 45-minute productivity gain equates to company cost savings that depend on the person's cost per hour. At \$50 per hour, the savings will be \$37.50 per person-day. A smaller company with 20 users will save \$750 per day, \$15,000 per month, \$180,000 per year, and so on. After including wireless LAN costs of \$40,000, you should see a positive ROI in about three months! Even if you factor in the cost of new laptops for everyone, you should still see a positive ROI in less than one year.

As a result, the use of wireless LANs can be financially beneficial in common office environments, even if it only enables people to make better use of their time during meetings. Once a wireless LAN is in place, however, you'll surely think of additional productivity-enhancing applications.