Wireless LAN Adoption
A Quantitative Analysis

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Research Overview

- This research is part of a larger annual study of network cabling in enterprises
  - Examines connection technologies for
    - Campus backbones
    - Vertical and Horizontal networks

- Over the past two years, companies have increasingly deployed wireless networks as part of their overall network infrastructure

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Sample Demographics

- Based on a survey of US organizations conducted June 2001
  - Sample size N=129
  - All respondents have management responsibility for data networks at their organizations
  - Sample represents
    - Companies from 40 states plus DC
    - Companies from broad range of industries
    - Distribution of medium and large enterprises

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Supply Drivers

- Key developments that are contributing to WLAN market acceptance
  - Standards have converged
    - 802.11 standard is stable and widely supported by equipment vendors
  - Technology has matured
    - Issues of security, reliability, speed, and range have been addressed
  - Key vendors have added credibility
    - 3Com, Alcatel, Cisco, among others are shipping product
  - Competition has reduced prices
    - $600 for LAN access points, $200 for NICs

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Demand Drivers

- Changes in workplace practices driving demand
  - Employees equipped with laptops and PDAs need network access
  - LAN-related moves/adds/changes are costly and disruptive
  - Awareness of WLAN technology increasing
   - WLANs are increasingly seen as a viable alternative to wired LANs

Current Use of Wireless LANs
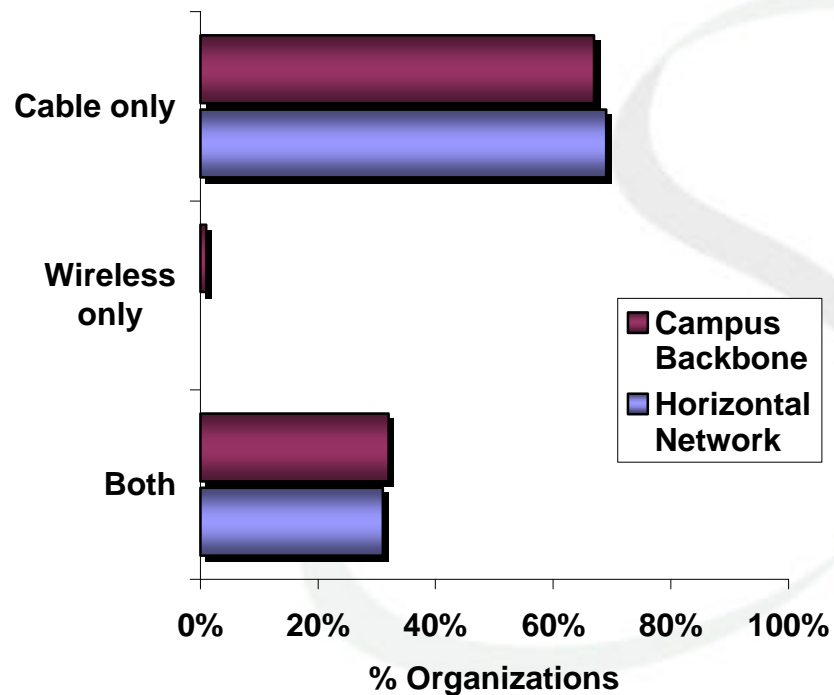
- Over a third of companies with wireless LANS use them for *both* horizontal and campus networks

Chart: % Organizations

- Cable only
- Wireless only
- Both

Legend:
- Campus Backbone
- Horizontal Network

X-axis: 0%, 20%, 40%, 60%, 80%, 100%

Q: Does your campus backbone/horizontal network operate over cable (copper or fiber), over a wireless connection, or both?

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WLAN Installation Plans

Yes

No

Don't know

0%   20%   40%   60%   80%   100%
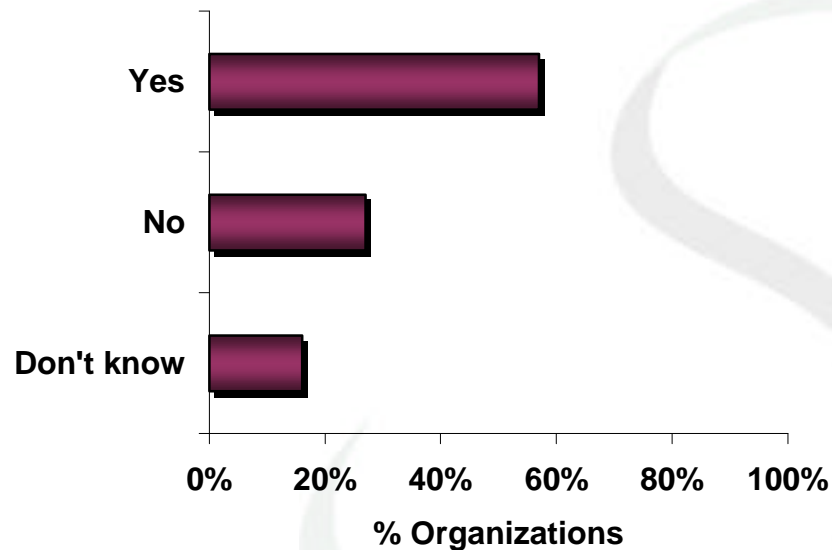
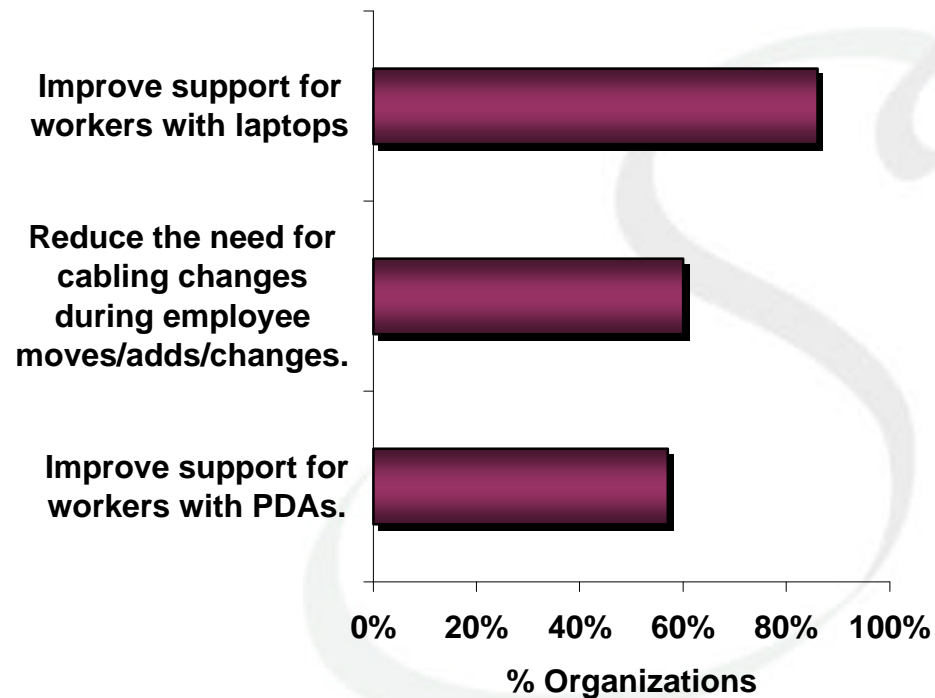**% Organizations**

Q: Do you have plans to install a wireless LAN in the next two years (regardless of whether or not you already have one)?

- **Almost two thirds of organizations have plans to install WLANs in next two years**
  - **Large companies more likely to be planning WLANs**
- **Nearly half of all companies expect to use wireless LANs as commonly as wired LANS by end of 2003**

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WLAN Drivers

Improve support for workers with laptops

Reduce the need for cabling changes during employee moves/adds/changes.

Improve support for workers with PDAs.

0%　20%　40%　60%　80%　100%

% Organizations

Q: My organization is installing a wireless LAN/expanding its wireless LAN to . . .

- Trends towards increasing worker mobility is a significant driver
  - Analysts often overlook cabling costs as a driver of network technologies

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Bluetooth

- Until very recently, Bluetooth has
  - Not been actively marketed by vendors
  - Not been receiving good publicity from industry observers
    - Over past several months Bluetooth has been starting to receive some favorable press

- In spite of this, a third of organizations are likely to support Bluetooth device on their corporate networks
    - Less than 10% are "very likely"

Important Wireless LAN Trends

1. Two thirds of companies expect to be using wireless LANs by 2003

   - Nearly half of them expect to be using wireless LANs as commonly as wired IANS

2. Wireless LANs are expected to enhance rather than replace wired LANs

   - Allows flexible connectivity for workers with laptops and PDAs

   - Reduces cost of cabling move/add/changes

3. Bluetooth has some support in the market, but many are still unfamiliar with this technology

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For more information

- For information on this and other Sage Research studies, including the Cabling 2001 Report, contact

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