



# Cisco IT Executive Presentation Wireless LAN



**Version 13, Q3, FY09**

Produced by the Cisco on Cisco team within Cisco IT

# Real-Time Access to Resources and People

- Worldwide mobility at the office, on the road and at home
- Global, scalable, and secure
- Every employee has seamless access to the wireless LAN (65,000+ users)— ~8200 access points, ~650 Wireless Controllers, ~400 sites, 100 countries
- Wireless voice supported at all sites (792x wireless VoIP handset and PC based IP Communicator software)
- Guest networking for customer access



# Executive Summary



97% of Cisco employees use the WLAN on a regular basis

37% of Cisco's employees use wireless as their primary connection

75% describe wireless as "Critical" or "Highly useful" to their job

Average of an additional 49 minutes productive time per user per day



Reduction in cabling costs in new buildings saving \$400-\$700 per employee

Service availability has increased by reducing Service Impacting Incidents by 90% - (avoiding approx US\$1.5M in lost user productivity/yr)

Enhanced guest networking: 322,000 guest sessions past 12 months (avg 26,800 per month) = US\$4M+ in Service cost avoidance



Original IT support costs ~\$400K/yr (per 2-3 employees) reduced by 30%

Productivity gains far exceed WLAN service costs

46% reduction in front-line helpdesk calls (indicative of improved user satisfaction, stability & ease of use)



Documented employee productivity improvement equates to \$18.5K/user per annum

Enabling technology for CCW (Cisco Connected Workplace)

# WLAN Management

Status: 65,000+ users – wireless at every Cisco location



**Ubiquitous Access**

**8200 Access Points**  
**~650 Wireless Controllers**  
**~400 Buildings**  
**300 Locations**  
**100+ Countries**



# Snapshot – the past, present & future

Category	2001 Where we started	2005 Where we were	2009+ Where we're going
Infrastructure	<ul style="list-style-type: none"> <li>Completed initial WLAN deployment</li> <li>3,000 AP 350s, distributed, VxWorks</li> </ul>	<ul style="list-style-type: none"> <li>25% of APs new model 1200 series</li> <li>Migrated from VxWorks to IOS</li> </ul>	<ul style="list-style-type: none"> <li>"NexGen WLAN"</li> <li>8,500+ APs</li> <li>Cisco Unified Wireless Network</li> <li>LWAPP access points</li> <li>Outdoor campus coverage</li> </ul>
Security	<ul style="list-style-type: none"> <li>WEP (encryption)</li> <li>LEAP (authentication)</li> </ul>	<ul style="list-style-type: none"> <li>WPA (encryption)</li> <li>Migrating to EAP-FAST (authentication)</li> </ul>	<ul style="list-style-type: none"> <li>802.11i</li> <li>Wireless Intrusion Detection Systems (WIDS)</li> <li>RF Rogue AP detection</li> </ul>
Management	<ul style="list-style-type: none"> <li>No management tools</li> </ul>	<ul style="list-style-type: none"> <li>Wireless LAN Solutions Engine (WLSE)</li> <li>Internal Management Tool (EMAN)</li> </ul>	<ul style="list-style-type: none"> <li>Wireless Control System (WCS)</li> <li>EMAN integration</li> </ul>
Clients	<ul style="list-style-type: none"> <li>34,000 Cisco adaptors</li> </ul>	<ul style="list-style-type: none"> <li>~50,000 &amp; ~2,000 phones</li> </ul>	<ul style="list-style-type: none"> <li>80,000+ users</li> <li>80,000-100,000 client devices</li> <li>Heterogeneous CCX environment</li> </ul>
Enhanced Services	<ul style="list-style-type: none"> <li>None</li> </ul>	<ul style="list-style-type: none"> <li>Guest WLAN networking (using BBSM)</li> <li>Wireless VoIP (7920)</li> </ul>	<ul style="list-style-type: none"> <li>NexGen Guest Networking</li> <li>Location Based Services (LBS)</li> <li>Smart phones (dual-mode voice)</li> </ul>
SLA	<ul style="list-style-type: none"> <li>P4 (48 hr fix)</li> </ul>	<ul style="list-style-type: none"> <li>P4 (48 hr fix), treated as P2</li> </ul>	<ul style="list-style-type: none"> <li>P2 (4 hr fix)</li> <li>Wireless as primary access medium</li> </ul>

**Fair**

**Evolving capabilities**

**Excellent**

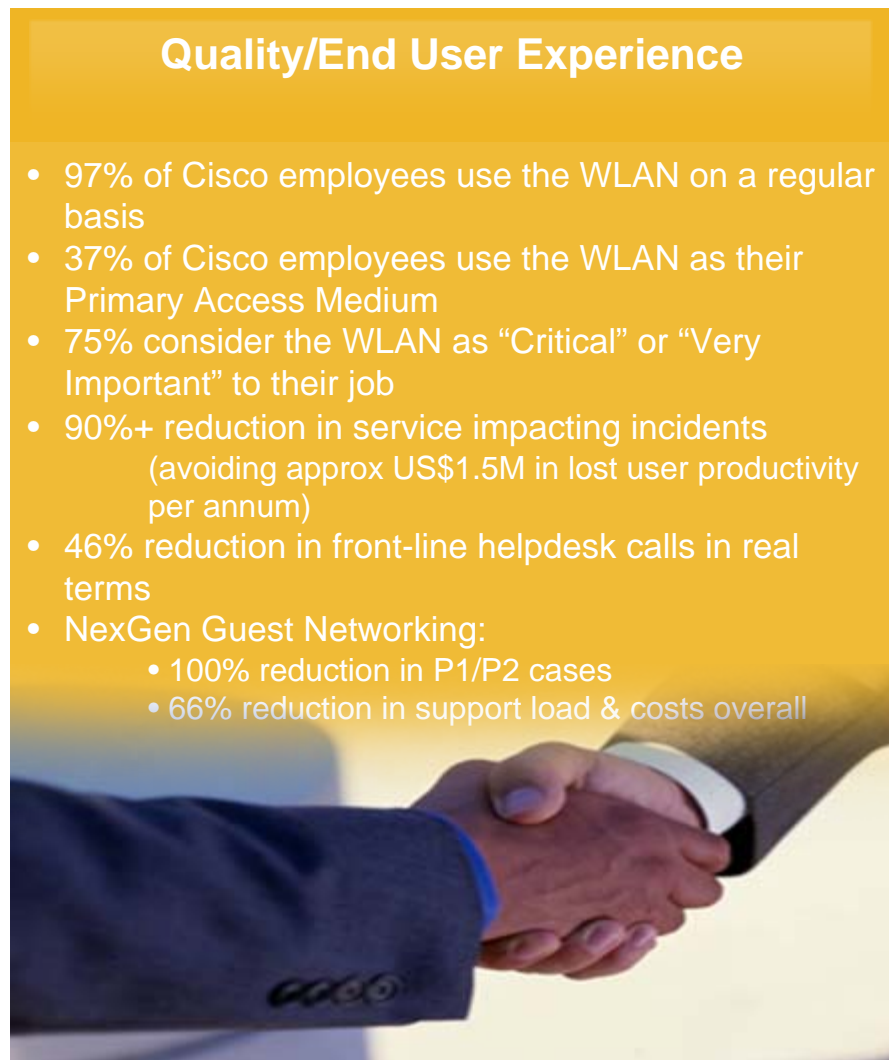
# Wireless LAN – Business Value Snapshot

## Productivity

- ~35% reduction in deployment effort
  - Campus sites – 10-20% reduction in deployment effort
  - Field sites – 50-70% reduction in deployment effort
- 49 minutes of additional productive time per user per day

## Quality/End User Experience

- 97% of Cisco employees use the WLAN on a regular basis
- 37% of Cisco employees use the WLAN as their Primary Access Medium
- 75% consider the WLAN as “Critical” or “Very Important” to their job
- 90%+ reduction in service impacting incidents (avoiding approx US\$1.5M in lost user productivity per annum)
- 46% reduction in front-line helpdesk calls in real terms
- NexGen Guest Networking:
  - 100% reduction in P1/P2 cases
  - 66% reduction in support load & costs overall



# Wireless LAN – Business Value Snapshot

## Cost Savings / Avoidance

- Reduction in cabling costs in new buildings saving \$400-\$700 per employee
- Tier 1 support cost avoidance of \$150,000+
- Tier 3 support effort has fallen by 67%  
140 hours per week to 45
- Annual reduction in Tier 3 support costs \$380,000+
- \$533,000 in reduced TCO (Tier 1, 2 & 3 support costs)
- Productivity savings of US\$18.5k per user, per annum
- Enhanced guest networking
  - 322,000 guest sessions past 12 months (avg 26,800 per month)
  - US\$4M+ in Service cost avoidance
- NexGen Guest Networking: Over \$5M in potential support/administrative overhead avoided
- \$6M IT Management cost avoidance – guest networking
- \$1.5M cost avoidance – productivity impact of Service Impacting Incidents



To learn more about real-world  
Cisco IT deployments, visit  
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