



VoWLAN Market & Deployment Update

Ben Guderian
VP Marketing
SpectraLink Corporation



Key Questions:

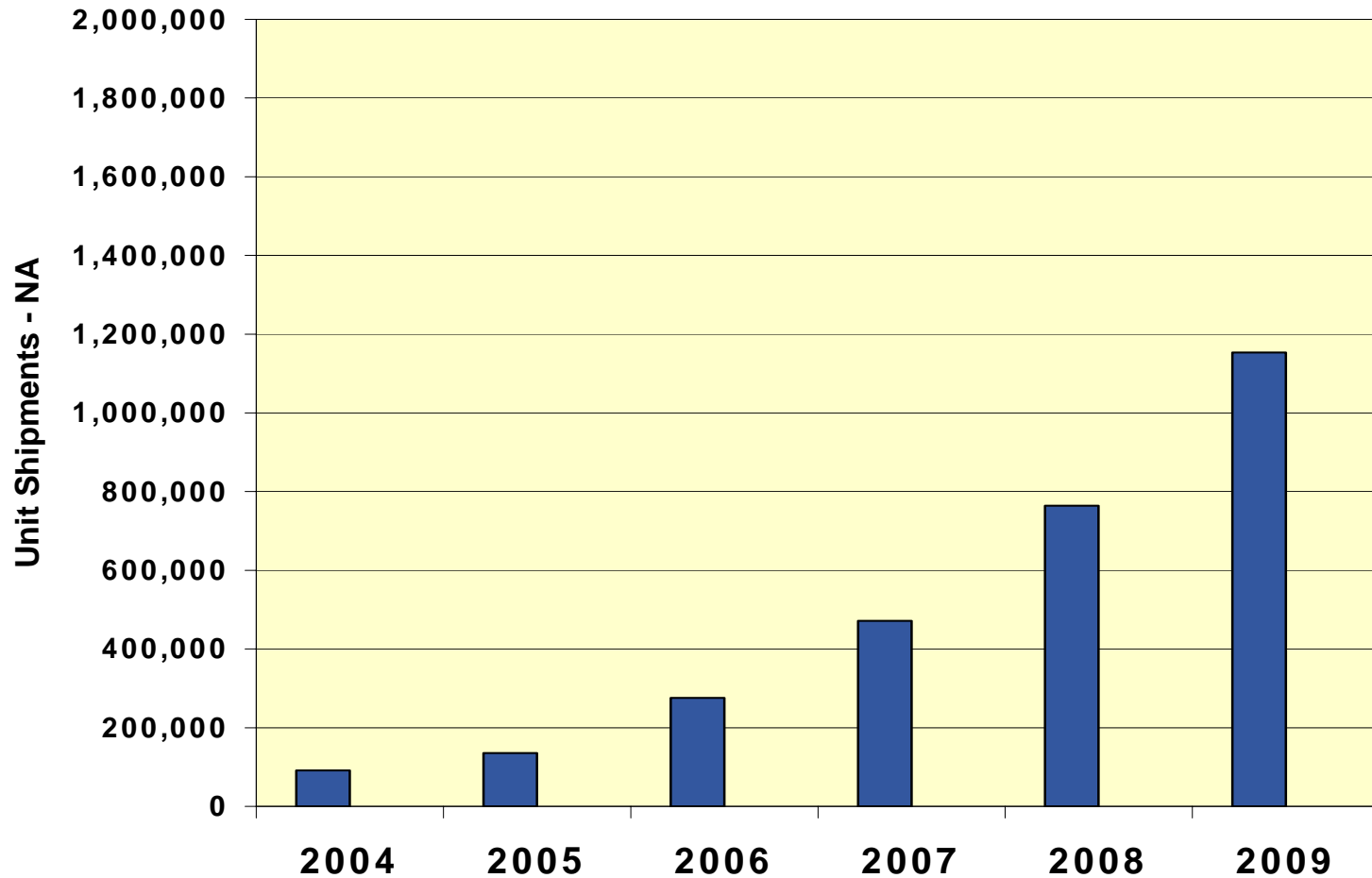


-
- ① What are early pilot deployments teaching us about voice over WLAN? What's driving early adopters?
 - ① What are the cost tradeoffs between expanded WLAN infrastructure and possible savings on cellular calling within the enterprise?
 - ① Where are the vendors, carriers and users in terms of dual-mode cellular/VoWLAN implementation?
 - ① What levels of voice quality, call drops and what types of network management systems are needed to ensure user satisfaction?

Wi-Fi Telephony Market Growth



Wi-Fi Handset Shipments (North America)



Infonetics Research – 7/06

What We've Learned



Enterprise Wi-Fi telephony is complex

- ⦿ Roaming, QoS, security issues

...but standards-based and proprietary solutions exist

Enterprise Wi-Fi telephony is expensive

- ⦿ 2x the cost of wired phones

...but enterprises have real needs

- ⦿ Solid ROI in verticals based on productivity, mobility, responsiveness

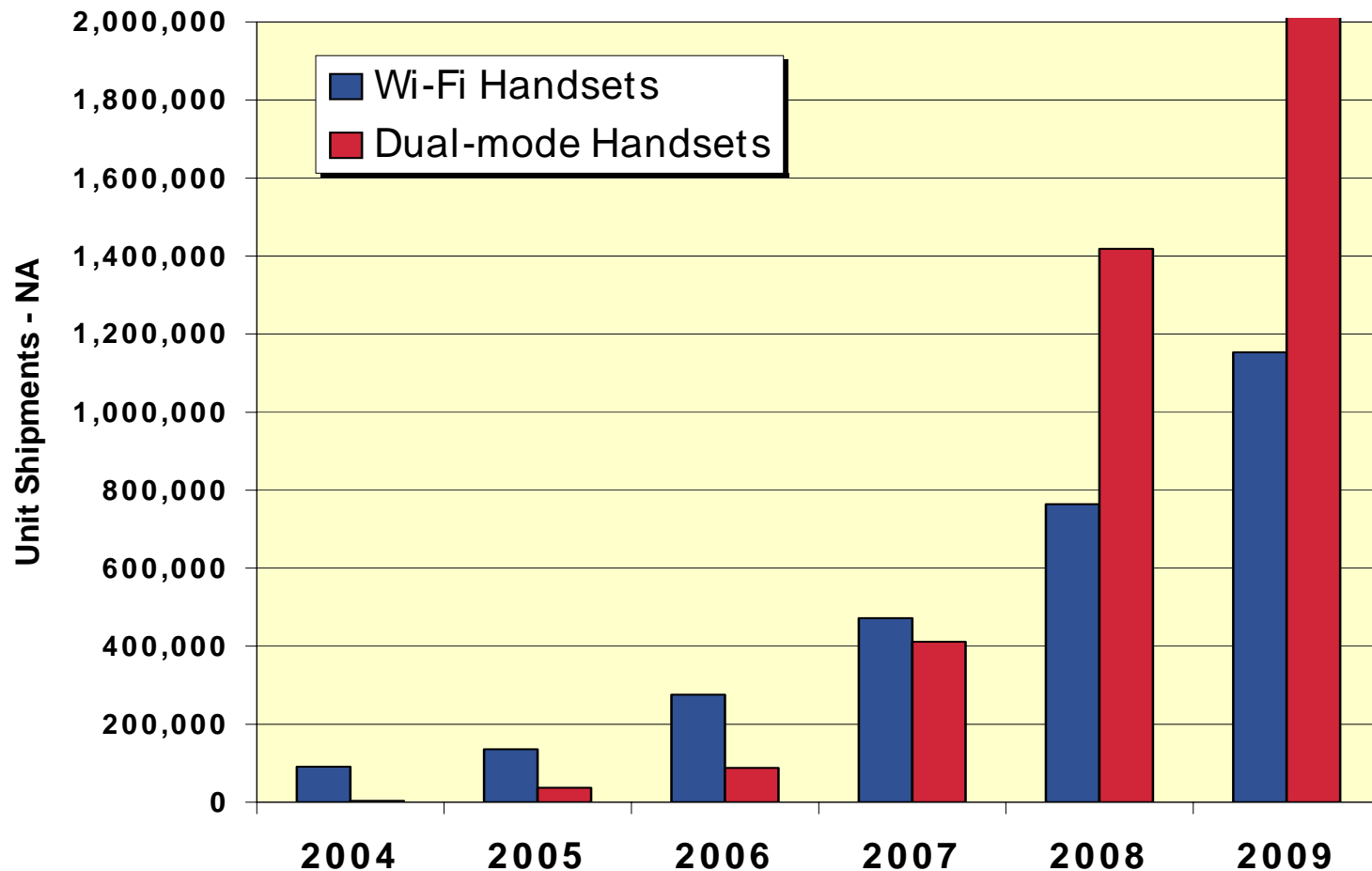
Interoperability is key

- ⦿ Single vendor solutions
- ⦿ Rapid pace of innovation with Wi-Fi technology and architecture

Wi-Fi Telephony Market Growth



Wi-Fi & Dual-mode Handset Shipments (North America)



Infonetics Research – 7/06

Realities of Dual Mode

Wi-Fi in cell phones

- ◎ Targeted at broadband data applications (Internet access)
 - > Poor voice over Wi-Fi support (if any)
 - > Poor roaming between APs
 - > Poor support for applications other than browsers
- ◎ Not necessarily embraced by cellular service providers
 - > Threat of lost airtime revenue
 - > Support issues with Wi-Fi networks
- ◎ Industry conventional wisdom:
 - > Wi-Fi eats up battery life
 - > Cellular coverage is ubiquitous, so why use Wi-Fi for voice?



The exceptions

- ◎ Use Wi-Fi to extend cellular services without additional cellular network investment
- ◎ Use dual-mode to generate new revenue and protect against lost revenue

Enterprise Dual-Mode Inhibitors



Key Inhibitors	Potential Mitigation	Issues
PBX integration	Cellular PBX feature extensions	Sufficient functionality for travelers, teleworkers
	SIP softphone app over Wi-Fi	Limitations from PBX SIP support, device Wi-Fi telephony support
	PBX-specific softphone app over Wi-Fi	Limited device support, Wi-Fi telephony performance
Device performance	Voice-centric product design	Wi-Fi usually provided for broadband data apps, not voice
	Wi-Fi standards implementation	WMM QoS specification will eventually support enterprise-grade Wi-Fi telephony
Wireless coverage	In-building cellular solution	Calls terminated on cellular network requiring PBX feature extensions, poor wireless broadband solution
	Wi-Fi	Requires Wi-Fi enabled devices, good wireless data solution

Looking Beyond Dual-Mode

THE PHONES OF DR. MOREAU



PHONE + DIGITAL
CAMERA + ELECTRIC
TOOTHBRUSH



PHONE + MP3 PLAYER +
NOSE-HAIR TRIMMER +
CRÊME-BRÛLÉE TORCH



PHONE + PDA + BLOOD-
SUGAR TESTER + CURLING
IRON + OYSTER KNIFE

SECRET

Workplace Wireless Requirements



End user

- ⦿ Access to critical information
- ⦿ Corded voice quality throughout
- ⦿ Telephone switch features
- ⦿ Ease of use, minimal training
- ⦿ Workplace-sensitive ergonomics, durability

Information Systems / Telecom

- ⦿ Scalability for various applications and future expansion
- ⦿ Leverage existing infrastructure
- ⦿ Easy to maintain
- ⦿ Privacy and security

Summary



Wi-Fi telephony is viable for mission-critical enterprise applications today

- ◎ Quality, functionality, security, and interoperability issues are addressed
- ◎ Opportunities in vertical markets with compelling need for mobility, productivity, and responsiveness
- ◎ Long-term opportunities tied to application integration in general office environment

Dual-mode handsets still in early-adopter stage

- ◎ Poor voice over Wi-Fi support
- ◎ Targeted at existing cellular users

Significant gap between consumer-grade Wi-Fi phones and enterprise-grade

- ◎ Consumer Wi-Fi likely to be replaced by dual-mode, FMC services