Business in the Wireless Decade

Patrick Scannell,
Product Manager,
Sprint Managed Wireless Solutions
Agenda

- Meeting Agenda and Objectives
- The Bottom Line
- The Big Picture
- Wireless Network Profiles
- Case Studies of Wireless Productivity
- Q&A
This is the Decade of Wireless

- Business has fundamentally changed
- Technology is fundamentally changing, again
- It’s early – winners and losers TBD
- Good reasons to win, can’t avoid playing
- Sprint’s the perfect partner
How Does Wireless Create Value?

- Faster decision making/increased productivity
  - Anytime anywhere access to information
  - Processes and procedures must evolve

- Increased flexibility

- Increased accuracy
  - Information inputted and transmitted on site
  - Telematics

- Hard cost savings abundant from reduced wiring costs

- Hard cost savings from Reduced FTEs and Inventory

- Time cost of money
Sprint’s Vision

To Sprint, the vision is a world no longer restricted by lines and cords. The future of telecommunications is total access solutions. It is one seamless, total communications experience.
Types of Wireless Network Profiles

Wireless Wide Area Networks (WWAN)
- Sprint PCS
- Private Radio Frequency

Wireless Local Area Networks (WLAN)
- 802.11x (a,b,g,e)
- Hyperlan

Wireless Personal Area Networks (WPAN)
- Bluetooth
- IR
WWANs: Key Benefits

- Near ubiquitous coverage
- Relatively inexpensive investment for public options
- Allows the work to be done where the work is
- Numerous devices and networks
WWANs: Security Example

End to End Security via Sprint PCS

- CDMA Encryption
- CDMA Authentication
- 3DES Encryption
- Optional Customer-Provided Encryption
- User Authentication

- PCS Network
- Gateway
- Internet
- Sprint Frame Relay Network
- VPN Gateway or Router
- Customer LAN
- Firewall
- AAA Server

Sprint
WLANs: Key Benefits

User Mobility/Improved Productivity — Users can access files, network resources, and the Internet without having to physically connect to the network with wires.

Rapid Installation — The time required for installation is reduced because network connections can be made without moving or adding wires, or pulling them through walls or ceilings.

Flexibility — Enterprises can also enjoy the flexibility of installing and taking down WLANs in locations as necessary. Users can quickly install a small WLAN for temporary needs such as a conference, trade show, or standards meeting.

Scalability — Easily be configured to meet specific application and installation needs and to scale from small P2P networks to very large enterprise networks.
WLANs: Security

Early implementations had major security issues
- WEP was a “wimp”
- War drives

Current standards and best practices can secure – if used
WPANs: Key Benefits

- Increased portability and flexibility
- Inexpensive
- Real-time information transfer within close areas
- Enables information-rich devices
- Numerous devices and networks
Overview: Wireless network profiles

WWAN, WLAN, WPAN: Competing or complementary?

Example - PCS and Wi-Fi: Complementary Technologies

PCS entering the public 802.11b market in 2003 with Wi-Fi Zones

PCS Vision customers can use the high-speed, nationwide Sprint wireless network for maximum mobility and the LAN-speed Wi-Fi network at locations targeted specifically to business users

- Wired speed of WLAN
- Ubiquitousness of WWAN
- Easily managed on a single account
Case Studies of Wireless Productivity

- Business Type: $100 million/yr perishable foods sales, distribution and manufacturing firm.
- Business Challenges include:
  - Inefficiencies in inventory
  - Durability issues
  - Paper-based work orders that had to be faxed, mailed or called into office
- Business Solution:
  - Ruggedized handheld with barcode scanner
  - WWAN and WPAN connectivity
  - New software client
Case Studies of Wireless Productivity

Drivers - Pains

- Equipment Durability
- Access to Build to’s
- Inventory process
- Account history with notes
Case Studies of Wireless Productivity

Warehouse and Production - Pains

- Production NE Demand; result is excess inventory and shortages
- Production and warehouse logistics constrained
- Recall capabilities non-existent
Case Studies of Wireless Productivity

IT - Pains

- Desire to shift from reactive technology maintenance to proactive business-focus change agent
- Each route/device serviced 4/year, at an avg. cost=$150, or a total of $600 per year
- Performance on handsets
- Inability to perform build-to’s
- $30,000 yearly software support agreements for mobile client
Sales

- Account histories available while on customer site
- Not much need to enter orders from the field
- Others?
Case Studies of Wireless Productivity

Phase 1 Solution: Ruggedized bar code scanners with WWAN and Blue tooth and new software

• Why?
  – Reduce device management costs
  – Reduce productivity losses associated with broken equipment
  – Increase productivity and quality of inventories
  – Enable a component of recall abilities
  – Reduce printing productivity losses
  – Real-time inventory management in Dist. Chain
  – Order history with notes
  – Real-time inv. Management in supply chain
  – Automatic EOD settlement orders
Drivers – Estimated Savings Opportunities

Labor savings potential: $236,748.60
Hardware saving potential: $19,800.00
Software savings potential: $30,000.00
Reduction of inventory: $1,537,536.00

Total estimated savings potential: $1,824,084.60
Case Studies of Wireless Productivity

Phase 2: Fully digital supply-production-distribution chain

- Remote Sensor Monitoring
- Route Monitoring
- Automatic Alarming with E-Mail and Paging
- Automated HACCP Recordkeeping
- Exception Reporting
- Real-time orders & inventory
- Integrated Production/Sales

Underlying Products & Technology

- Integrated ERP
- Real-time inventory

- Wireless fleet
  Management – Temp, location

- Integrated Orders – Production
  Wireless factory floor
  Real-time inventory

- Remote sensing
  Route Monitoring

Automatic order via real-time inventory integration
Wireless Solutions – Critical Success Factors

• True end-to-end integration across whole solution, spanning the devices, applications, wireless networks and wireline components
• Reliability across all levels
• Security of a data session across all components
• Support and management of all components
Why should a business go wireless?

- Extend your competitive advantage
- Substantially compress the customer billing cycle
- Lower the cost of servicing customers, improve customer service and satisfaction, and present an image of being leading edge
- Differentiator – less than 20% of corporations have implemented mobile computing solutions
- Positive press and analyst coverage from strategically deployed mobile computing solutions
What should you look for in a Wireless vendor?

- A partner
- Industry leader with strategic vision
- Industry leading wireless capabilities
- Industry leading wireline capabilities
- End-to-end integration