Wireless Commerce Automation

Equipment-driven Wireless Service Automation

for

Industrial Equipment Manufacturers

selling through

Global, Highly Mobile Trading Partners

Opportunity: Industrial Equipment Servicing

▪ Heavy Equipment Manufacturer

 ▪ Cellular Wireless Re-supply and Service Automation

▪ Elevator Manufacturer

 ▪ Satellite, Cellular, BlueTooth Wireless Service Automation

▪ Heavy Equipment Rental

 ▪ BlueTooth Wireless Automated Check-in and Service Automation

▪ Construction Tools Distribution

 ▪ Wireless Dealer Re-supply

▪ Aluminum Mining and Manufacturing

 ▪ Wireless MRO Ordering and Automated Re-stocking

Agenda: From Opportunity to Investment

- Business Opportunity
- Agenda
- Market Opportunity
- Products and Services
- Compelling Customer Value
- Viral Business Model
- Competition
- Sustainable Competitive Advantage
- Management Team
- Investment Opportunity
- Compelling Reasons to Invest

Opportunity: How is Problem Currently Solved?

Human proxies - pitfalls of a human-based solution:

- telephone tag
- slow human response time
- mis-communication
- poor planning
- bent or broken policies
- additional service cycles if parts aren't locally available

Custom hard-wired telephone or LAN based solutions:

- doesn't work for mobile equipment (e.g. heavy equipment, trucks)
- doesn't work for stationary equipment with poor infrastructure (e.g. elevators in China)
- expensive wiring for some environments (e.g. mines, construction sites)
- expensive to maintain

Market Opportunity: Large Global Market

- Industrial Equipment Vertical Markets
  - 22,000 companies: >$100 million revenues
  - 2,675 companies (12%): >$1 billion revenues

  - hundreds of thousand machines shipped per year
  - to millions of customers total
  - who now own hundreds of million machines
  - Producing trillions of $ revenue per year
  - Suffering 1%?? downtime per year
  - Resulting in millions of $ industrial lost opportunity per year

- The market opportunity is large
- The customer need is great
- The demand for forward sales and retrofit sales will be strong

Market Opportunity: Target Markets

Application Horizontal Markets:

- **Commerce Automation**
- **Mobile Service Automation**
- **Mobile Resupply Automation**

Regional Markets:

- **North America** (2000)
- **Europe** (2001)
- **Asia/Pacific Rim** (2001)
- **South America** (2002)
- **India** (2002)

Industry-specific Vertical Markets:

- **Mobile ASPs**
- **Building Equipment**
- **Construction Tools**
- **Heavy Equipment**
- **Trucks**
- **Automotive**
- **Aerospace**
- **Defense**
- **Ship Manufacturing**
- **Healthcare Devices**
- **Computers**
- **Networking Devices**

Market Opportunity: Why These Verticals?

Market Analysis:

▌ Industrial Verticals 4 times larger than High Tech Verticals (800B/yr vs 200B/yr)

▌ High demand to reduce service/support costs for semi-commodity verticals

▌ Concentration of high-value mobile equipment

▌ Under-served by Technology

▌ Less Competition

Customer Analysis:

▌ Access to potential Anchor Accounts

  ▌ Heavy Equipment

  ▌ Construction Equipment

  ▌ Building Equipment

▌ Using common vertical participants as reference accounts on entry to new vertical
(e.g. Heavy Equipment Caterpillar account as reference in Construction Tools, Construction Tools reference for Building Equipment)

Market Opportunity: What do They Share?

Groups of Verticals:

- Construction related
  - Construction Tools
  - Building Equipment
  - Heavy Equipment
- Vehicle related
  - Heavy Equipment
  - Trucking
  - Automobile
  - Aerospace
- Defense
  - Aerospace
  - Ship Manufacturing
  - Military Logistics
  - Milspec Electronics
- High Tech
  - Electronics
  - etc.

Share:

- Common Participants
- Supply Chains
- Distribution Chains
- Channel Structures
- Service Models
- Support Policies
- Diagnostic Reporting Standards

e.g. Cat is in Heavy Equipment, Construction Tools, Building Equipment (generators), Trucking (diesel engines) and Automotive (Cat OEM)

Software Products: Overview

Applications, Servers and Agents:

- **Wireless Commerce Applications**
- **Wireless Service Applications**
- **Wireless Re-supply Applications**

- **Secure Wireless Application Server**
- **Business Automation Servers**

- **Wireless Equipment Agents**

Wireless Service Automation

- 1-to-1 Marketing
- Product Catalog
- Customer Management
- Billing Management
- Invoice Management
- Parts Management
- Warrantee Management
- Problem Management
- Training Management
- Maintenance Management
- Diagnostics Management
- Machine Management
- *Service Management*
- *Service Team Management*

Software Products: Customer Value Proposition

▌ **Reduce equipment downtime**

▌ **Improve deployment of consumable & repair parts**

▌ **Reduce inventory costs**

▌ **Improve control over service & re-supply processes**

▌ **Reduce overhead & field personnel costs**

▌ **Increase revenue**

▌ **Increase customer revenue**

▌ **Increase customer loyalty**

▌ **Increase customer satisfaction**

Business Model: Pricing

Customer	Application Licenses	Server Licenses	User Licenses	Machine Licenses	Total $
Division	Commerce Automation $50,000	Secure Application $50,000	50 @ $1,000 $50,000	1000 @ $100 $100,000	**$250,000**
Regional	Commerce Automation Service Automation $100,000	Secure Application Integration Server $100,000	250 @ $800 $200,000	2500 @ $80 $200,000	**$600,000**
Global	Commerce Automation Service Automation Sales Automation $150,000	Secure Application Integration Synchronization $150,000	1000 @ $500 $500,000	10,000 @ $50 $500,000	**$1,300,000**

Business Model: Exponential, Viral, Annuity

Scalable model exploits exponential & viral capture of vertical markets

- **Open up vertical markets through major "anchor accounts"**
  - Beach-heads for entire supply/distribution chains.
  - Enhance product value to current customers when trading partners buy-in
  - Sales strategy rewards for introductions to and support closing sales
  - Enhanced accessibility: 1 customer leads to 12 which lead to 144 which lead to....
- **Machine-driven service e-commerce**
  - 10-100 times more machine "client" licenses than huma
  - Machine client licenses become an annuity stream
- **Services deliver follow-on recurring revenue streams**
  - Product maintenance (20% per year)
  - Wireless business information brokering
  - Commerce trading hubs
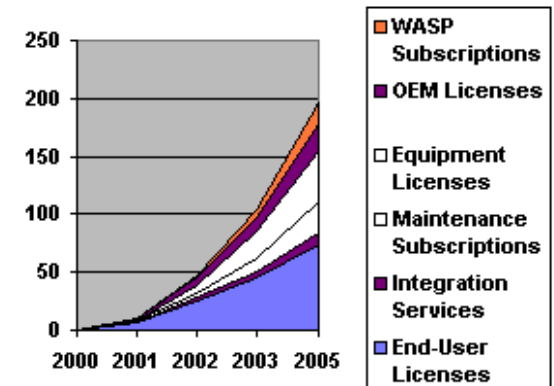
Competitive Analysis: Early Developing Market

- Y1999, Y2000 Startups: Corrigo, Meridex, Datalink

- Low Initial Customer Demand

  - e.g. WAP adoption stumbles in Europe

- Immature Development Tools

- Few Off-the-Shelf Applications

- Immature Infrastructure Technology

  - e.g. WAP, SMS, I-Mode, GPSR

- Fragmented Service Provider Deployment

  - e.g. GSM vs. CDMA vs. TDMA

Competitive Analysis: Competitive Advantages

- **Domain Expertise**
  - **Channel Business Knowledge**
  - **Industrial Service Knowledge**

- **Comprehensive Solution**
  - **Complete Commerce, Service, Re-supply Applications**
  - **Predefined Legacy Integration**
  - **Equipment Agent Generation Tools**

- **Equipment Lock-in**
  - **Forward Sales through OEM Manufacturer**
  - **Retrofit Sales through Component Partner**

- **Patentable Technology**
  - **Web Application Technology**
  - **Equipment Agent Technology**
  - **Wireless Application Technology**

Operations: Operating Status

- **First Customer: Caterpillar**
- **60 Qualified Sales Prospects**
- **$135,000 revenue to date**
- **$300,000 Q4 revenue projected**
- **V1.1 Products Delivered**
- **V2.0 Schedule Q4 2000**

Operations: Management Team

- **Brian D. Handspicker, President**
- **David Cruise, CFO (Consulting)**
- **Julia Tiernan, Controller**
- **TBH, VP Sales**
- **Robert Ferri, VP Marketing**
- **Jon Coleman, VP Engineering**
- **Bob Emery, Chief Engineer**

Investment: Opportunity

■ **Foundation for Sales: $500,000**

   ■ Hire VP Sales -> Land Caterpillar Supply Chain Prospects

   ■ 20%, $2MM pre-money valuation

■ **North American Rollout: $2.5MM**

   ■ NA Product and Company Launch

   ■ 33%, $5MM pre-money valuation

■ **Global Rollout: $10MM**

   ■ International Product and Company Launch

   ■ 40%, $15MM pre-money valuation

Investment: Compelling Reasons to Invest

■ **Large Global Market Opportunity**

■ **World-class Products and Services**

    ■ **Generic Re-targetable Solutions**

    ■ **Compelling Customer Value**

■ **Scalable Viral Business Model**

    ■ **Accessible Customers**

    ■ **Equipment License Annuity Stream**

■ **Sustainable Competitive Advantages**

    ■ **Early Competitive Landscape**

■ **Solid Operations**

    ■ **Experienced Management Team**

    ■ **Existing Customers and Revenue**

Wireless Commerce Automation

Type of Business: Software

Industry: Wireless Commerce

Markets: Global Industrial

Date Founded: 2000

Location: Massachusetts

Stage: REVENUE

Investment Round: Series A/B/C

Capital Required: $.5MM/2.5MM/10MM

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Wireless Commerce Automation

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Background Slides

Business Plan Overview

Business Opportunity: Solution

Wireless Commerce Automation exploits equipment intelligence to enable pro-active service and re-supply automation

▌ **Integrate intelligent capital equipment with wireless mobile e-business applications to speed exchange of:**

    ▌ Diagnostic Information from Machines

    ▌ Service Information to Repair Personnel

    ▌ Machine Consumables Re-supply Orders

▌ **Applications target Service, Re-supply Sales, Equipment Mgmt Personnel**

▌ **Servers Automate Re-supply and Service Business Processes Across Supply/Distribution Chain Trading Partners**

▌ **Equipment monitoring agents collect and consolidate business information**

▌ **Secure wireless application framework supports wide variety of devices**

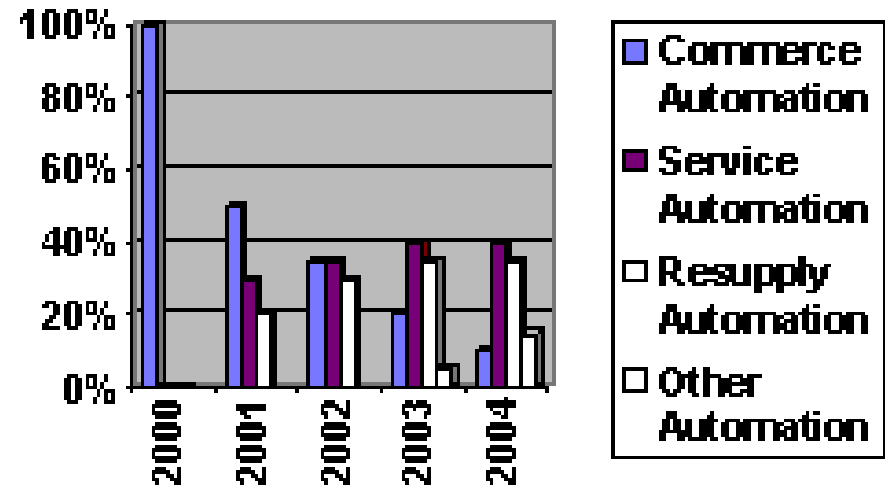▌ **Back-end commerce infrastructure and back-office integration**

Business Opportunity: Revenue Sources

Revenue Sources
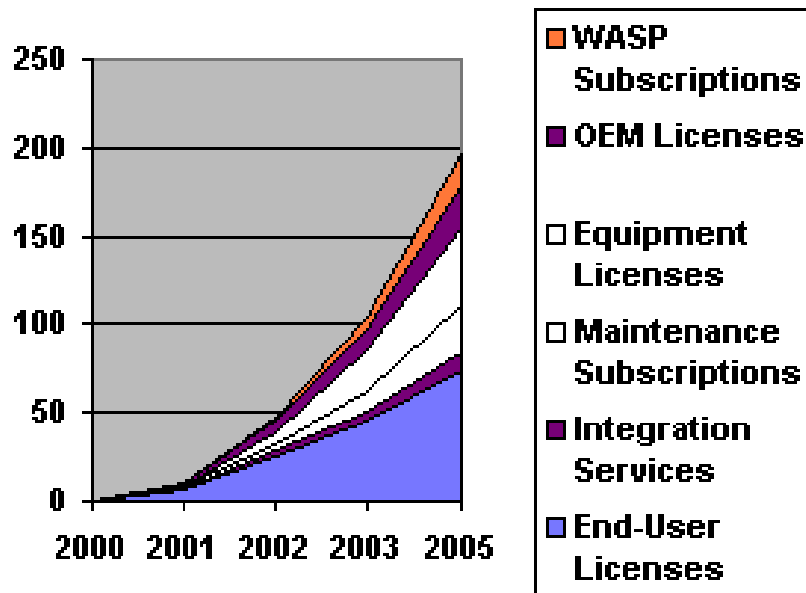
Revenue Mix

Products: Product Description

Wireless Commerce Automation's products are:

- Equipment-driven

- Cellular and Bluetooth™ Wireless Software Applications

- Wired Commerce Servers

- Automate Business Processes

- Mobile Commerce, Re-supply sales, Service

- Across multiple demand chain, supply chain and value chain trading partners.

Products: Applications, Servers and Agents

Applications:

- **Channel Commerce Automation**
- **Channel Sales Automation**
- **Channel Service Automation**
- *Wireless Commerce Automation*
- *Wireless Re-supply Sales Automation*
- *Wireless Service Automation*

Servers and Agents:

- **Secure Web Application Server**
- **Secure Synchronization Server**
- **SNMP Equipment Agents**
- **SNMP Monitoring Server**
- **EDI Commerce Server**
- *XML Commerce Server*
- *Secure Wireless Application Server*

Products: Application Suites

Wireless Commerce Automation

- Product Catalog
- Order Entry
- Order Fulfillment & Status
- Shipping Management
- Mis-ship Management
- Back Order Management
- Billing Management
- Invoice Management
- EDI
- *ebXML*
- *cXML*
- *BizTalk*
- *GCI*
- *Rosettanet*

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- Invoice Management
- Parts Management
- Warrantee Management
- Problem Management
- Training Management
- Maintenance Management
- Diagnostics Management
- Machine Management
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- *Service Team Management*

Wireless Re-supply Automation

- 1-to-1 Profiling
- Product Catalog
- Order Entry
- Order Fulfillment & Status
- Supplier Management
- Distributor Management
- Customer Management
- Contact Management
- Opportunity Management
- Shipping Management
- Mis-ship Management
- Back Order Management
- RMA Management
- Warrantee Management
- Billing Management
- Invoice Management
- *Sales History & Analysis*

Products: Product Technology

- Device-sensitive personalization
- Device-sensitive application interfaces
- Cellular Wireless Protocols

- Commerce Integration
- Policy-directed Business Processing
- Follow-Me
- SmartAgent
- MobileAgent
- AgentFactory

Products: Product Status

- **V1.1 Products Delivered**
- **V2.0 Schedule Q4 2000**
- **Three years in development**
- **Based on commerce and management standards**
- **Tested by Price/Waterhouse at HP Naperville Performance Center**

Market Analysis: Market Sizes

Industrial Equipment Market
- SIC Codes 3411 to 3873
- 22,000 companies >$100 million revenues
- 10% (2,675) are >$1 billion revenues

Wireless Data Subscription Markets
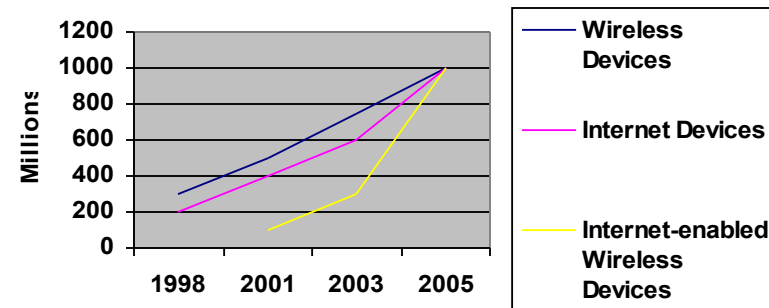- 1999: >7 million
- 2002: 21 million

m-Commerce Transaction Market
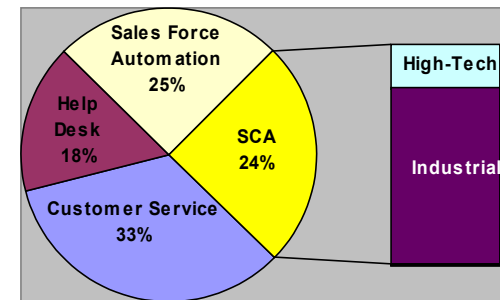- 2007: ~$800 million
- 2010: ~$8 billion

m-CRM Application Market
- 2002: ~$200 million
- 2010: ~$800 million

Convergence of Internet and Wireless

Millions
1200, 1000, 800, 600, 400, 200, 0
1998, 2001, 2003, 2005

- Wireless Devices
- Internet Devices
- Internet-enabled Wireless Devices

Customer Relationship Management Market

- Sales Force Automation 25%
- Help Desk 18%
- Customer Service 33%
- SCA 24%
- High-Tech
- Industrial

Customer Analysis: Acquisition Strategy

Anchor Accounts Open Up Vertical Markets

▪ Industry market makers/market leaders

▪ Identifiable and Accessible

▪ Fulcrum of industry supply/distribution chain

▪ Sell generic solution to up/downstream trading partners

▪ Leverage Anchor catalog investment, system integration

▪ Deliver more value to interconnected WCA customers

▪ Discount future licenses for successful reference

Example: Caterpillar CRSS 56-125 suppliers, 200+ dealers

Competitive Analysis: Key Competitors

- **Wireless Web Systems Integrators** [0-12 months]
  - LoudCloud

- **Wireless Web Portals** [6-12 months]
  - Oracle, Siebel, SAP, ect.

- **Wireless Application ISVs** [12-18 months]
  - Corigo, Meridex, Datalink

- **Web & IT Systems Integrators** [12-18 months]
  - Deloite&Touche, PwC, etc.

- **Internal IT** [24+ months]

Competitive Analysis: Barriers to Entry

■ **Account Control**

■ **Vertical Value-chain Control**

■ **Distribution Channels Control**

■ **Market Technology Control**

■ **Market Mover Control**

■ **Intellectual Property Control**

Operations: Risk Management

- ## Technology
  - Fallback to larger wireless devices, HTML, GSM, non-wireless
- ## Alternative Markets

  - High Tech, Financial Services, Real Estate, Food Services, Transportation
- ## Alternative Products
  - Marketing Automation, Equipment Management, Rental Store Automation, Training Delivery and Management
- ## Alternative Services
  - Trading Hubs, Commerce Brokers, ASPs
- ## Cash Cows
  - non-wireless commerce, PRM, networked systems management
- ## Patents

Operations: Hiring Plans

- Immediately: VP Business Development, VP Sales
- As revenue allows: Engineering

Heads Year-End	2000	2001	2002
Administration	4	10	13
Sales & Marketing	6	13	28
Services	7	10	15
Engineering	13	16	28
Total	30	49	84

Operations: Expansion Plans

- CY2000: North American Headquarters - Boston
- CY2001: NA Mid-west, West-coast Sales Offices
- CY2001/CY2002: European Headquarters
- CY2001/CY2002: Asian/Pacific Headquarters
- CY2002/CY2003: South American Headquarters

Investment Opportunity: Use of Proceeds

- **National Sales & Marketing Organization**
- **National Product Launch**
- **Wireless Product Development**
- **European Sales & Marketing**
- **Asian/Pacific Sales & Marketing**

Opportunity: Industrial Equipment Servicing

■ Heavy Equipment Manufacturer

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