Managerial Strategies for Recovery II
Progress Report Card and Agenda for the Future

Our purpose today: evaluate progress and take a fresh look
• To what extent were strategies implemented?
• If implemented, did they yield a positive impact?
• If not implemented, why?
• Are there new challenges going forward?
• Are there any new strategies to be considered a year later?

Management Strategies for Recovery Formulated Last Year
1. Industry consolidation and intra-industry collaboration to improve profitability
2. Increase revenues through customer value management and bundling
3. Reduce costs and redesign for flexibility
4. IP network emphasis
5. Enhance corporate governance, organization and processes

1. Industry Restructuring Strategies Recommended Last Year
• Horizontal consolidation in wireless, vertical integration across local/LD/wireless
• Industry collaboration aimed at reducing costs
• Develop intermediate markets for goods and services purchased by telecommunications service providers

Consolidation has started to take place
• Merger of two of the six national wireless players, combined with “free-rider” behavior of remaining carriers
• Probable acquisition of two major LD pure plays, accelerated by 8/20 UNE-P Triennial Review
• Potential RBOC consolidation (4 to 2) spilling over from wireless consolidation

However, one cannot see the full impact yet
• Largest wireless transaction (AWE/Cingular) not yet completed
• Six to five is not enough to yield wireless price discipline
• Wireless consolidation hampered by MVNO wave
• Intermodal broadband competition is still high (fostered by regulatory decisions)
1.b. Intra-Platform Collaboration Strategies Recommended Last Year

- Wireless and wireline collaboration to develop industry-wide IT operation solutions
- Coordinating technology development (Wireless JV for refurbishing of handsets)
  - Bulk discounts
  - Common specs
  - Reverse logistics

Competitive Dynamics have precluded collaboration

- Carriers’ reluctance to share source of competitive advantage
- Impairment of capital value
- Technical and executional complexity
- Difficulty in designing collaborative mechanisms given different maturity stages of companies

1.c. Industry Outsourcing Strategies Recommended Last Year

- Outsource (network engineering, RF design, network installation and integration, network operations and maintenance, field engineering)
- Information technology (systems development, data center operations)

Some evidence of value chain disintegration

- Outsourcing
  - Wireless reverse supply chain (Verizon, T-mobile, Nextel, Cingular)
  - Call Center operations (Sprint, Nextel)
  - Billing (Nextel, Sprint)
  - Payment Processing (Nextel)
  - Network installation and integration (Sprint, US Cellular)
2. Revenues Strategies recommended Last Year

- Improve management of customer base
  - Modeling of customer lifetime value
  - Growing share of wallet
- Emphasize product bundling and develop new integrated offerings
  - Cross platform residential offerings
  - Incremental functionality beyond bundled discounting
- Introduce commercial offerings of resilient, fault/tolerant network services

Wireless, local, toll and broadband have been bundled

- “Battle of the bundles” well underway between ILECs and Cablecos
- Successful household penetration

Bundling has increased opportunity to capture share of wallet

However, bundling has raised operational complexity and costs

- As predicted, bundle selling costs have eroded margins
- Customer care costs for bundle customers are on the rise
3. Cost Strategies Recommended Last Year

- Reduce carriers’ general and administrative costs
- Optimize the supply chain
- Reduce retailing costs
- Redesign the carrier organization for downward flexibility

Most carriers have tackled G&A costs and the supply chain

- Approach 1: reorganization/process reengineering (Sprint)
- Approach 2: pragmatic zero-based cost reduction (BellSouth, Qwest)
- Most carriers have streamlined the supply chain (Alltel, Cingular, BellSouth)

However, retailing costs remain high

- The cost of acquiring new customers is one of the largest cost items that wireless providers manage
- However, for all providers, significant reductions in CPGA have so far proved elusive
  - Indirect channels (dealers): commissions
  - National retailers: bottleneck effect
  - Company-owned stores: efficiency trade-offs

4. Governance and compliance strategies recommended last year

- Reorient the roles of corporate senior staff to serve the business units more effectively and efficiently
- Create executive leadership teams
- Implement red teams to monitor investment decisions
- Enhance role of corporate staff for review process and check/balance
- Put in place anonymous whistle-blower systems
- Ensure true independence of Board of Directors
- Build a new corporate culture that rewards openness and establishes primacy of corporate strategy and financial objectives

This focus has raised a “compliance paradox”

- While reforms are designed to enable corporate growth and protect shareholders, over-control and exclusive focus on compliance can stifle innovation
- New standards do little to address many of the critical risks to shareholder value – from cultural risk to changes in market dynamics
Both cable-provisioned and standalone VoIP are set to grow rapidly

- Stand-alone (Virgin, Packet, Voicete)
- Cable MSOs (Thomson, Comcast, Cable Vision, ...)
- Mobile (AT&T, MD)
- MVNOs

Average (Japan/Canada)

- Japan
  - Japan's 3G market has created opportunities, e.g. Yahoo.Japan
  - Japanese authorities assigned 6M numbers for VoIP purposes (SDP)

MVNOs appear set for continued expansion

- Sprint
- Tracfone
- Virgin

Estimated EOP Subscribers – Selected MVNOs (2001-2008)

Projected VoIP Subscriptions

- Sprint
- Tracfone
- Virgin

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Aggregate Financial Performance has Improved

- Telco RBOCs
- CLECs/IXCs (ATT, MCI)
- Low cost wireless carriers

Sources of Industry Disruption

- Frequent Service Failures
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- MVNOs (Virgin, Mobile)
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The most compelling disruptor could be the wireless low cost carrier

<table>
<thead>
<tr>
<th>Selected Types of Operators</th>
<th>Estimated Monthly Cost per Subscriber (including acquisition expenses)</th>
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<tbody>
<tr>
<td>ILEC</td>
<td>50 $/Month/Sub</td>
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<tr>
<td>Cable/VOIP</td>
<td>45 $/Month/Sub</td>
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<tr>
<td>Wireless</td>
<td>45 $/Month/Sub</td>
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<tr>
<td>LLEC Current</td>
<td>28 $/Month/Sub</td>
</tr>
<tr>
<td>LLEC Final state</td>
<td>27 $/Month/Sub</td>
</tr>
</tbody>
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Source: Various reports; Booz Allen Analysis

Agenda for the future - Consolidation -
- Capturing value from M&A (synergies/effective return to scale)
- Spotty track record
- Big challenges (consolidating networks, retaining customers, creating single product offering, retaining talent)
- Focus on central functions, transfer best practices, and convert share leadership into market leadership

Agenda for the future - Cost flexibility focus -
- Distribution channel productivity (store labor efficiency and staffing levels)
- Network operations (link service levels to customer expectations)

Agenda for the future - Governance -
- Strike the right balance to ensure governance risk management programs:
  - Meet compliance requirements
  - Create the confidence in taking the right business risks
  - Support the management of the risk-return tradeoffs that drive business performance
  - Extract maximum value from compliance efforts

In addition, we see two new challenges
- Slowing industry growth emphasizes the need to continue focusing on operational efficiencies through redefinition of production function
  - Network operations simplification
  - Handset supply chain
- How will the industry continue to innovate (e.g. NGN, FTTH) without letting capex dilute value and ROIC?