Welcome to IM 2005 &
TeleManagement World
Co-Location

“The Place to be for OSS/BSS Issues”
**The Brave New World**

**TM Forum envisions a transformed telecom market**

<table>
<thead>
<tr>
<th>WHERE</th>
<th>VIA</th>
<th>BUILT ON</th>
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<tbody>
<tr>
<td>Operators have radically better:</td>
<td>High levels of business process:</td>
<td>Software technologies that are:</td>
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<tr>
<td>- Operational efficiency</td>
<td>- Flexibility</td>
<td>- Widely available</td>
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<tr>
<td>- Customer service</td>
<td>- Automation</td>
<td>- Open &amp; Flexible</td>
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<td>- Business agility</td>
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<td>- Scalable</td>
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<td>- Easily integrated</td>
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OSS/BSS Industry

- Total OSS/BSS: $50 B
  - Fulfillment: 100% / yr growth
  - Assurance: 5% / yr. growth
  - Customer Care & Billing: 10% / yr. growth
Industry Drivers

- Mobility
- Affordable, Ubiquitous Broadband
- Device & Application Convergence
- Internet Protocol (IP) Foundation
- Tailored, User-Focused Services and Content
- Outstanding Customer Experience
- Business Transformation
Revenues Falling Faster Than Costs for Most Services

Average revenue/ unit

Average cost/unit

1999  2000  2001  2003  2004  2005
Commodity voice / bandwidth services -

*Market being fought on price / quality*

**Success depends on:**
- Driving high volumes/high market share
- Ultra-low operational costs (zero-touch)
- Significant levels of customer service & quality

Advanced / information services -

*Market being fought on innovation, speed and brand*

**Success depends on:**
- Significant operational flexibility
- Fast reactions to changes in the market
- Rapid introduction or changes to products
Different Strategies for Stages of Service Life-cycle

**Tornado** Systems must scale & be flexible enough to handle significant volume. Market leader can set price. *Many operators stumble at this point*

**Main street** Volumes and revenue significant - need zero-touch, ultra low cost operations to maintain margins in commodity market.

**Early market** Systems must be capable of being quickly turned up to meet demand or turned off without a huge investment.

Based on Geoffrey A. Moore
The Death Spiral of Cutting Costs

- Declining profitability
- Market share declines
- Customer service and quality declines
- Across the board opex and capex cuts

Declining profitability
Must Transform the Business
Efficient - Flexible - Innovative - Responsive

Immediate:
- Plug revenue leakages
- Plug fraud leakages

Short-term:
- Reduce opex through improved asset management
- Reduce opex through bandwidth management

Medium term:
- Reduce churn through improved customer service
- Improve ‘wallet share’ through better targeting
- Drive more new services, with reduced time to revenue
- Reduce opex through highly automated processes

Tactical

Strategic
‘Lean’ Operator Goals

- Ultra low cost operations
  - High levels of automation & integration
  - Information integrity
  - Customer self management
  - Low cost of change
  - Commercially available, off-the-shelf, software

- Highly flexible infrastructure
  - Service development at Internet speed
  - Fast time-to-revenue
  - Rapid response to business changes and competition
  - Real-time flow-through service delivery
  - QoS guarantees
Today’s Back-office Reality

- **High manpower costs** because of a lack of automated process flow-through
- **Poor time-to-revenue** because of rigid and inflexible business processes
- **Weak customer service** because of poorly integrated systems with inaccurate data
- **Slow growth** because processes and systems can’t scale
- **Slow new service introduction** because of inflexible systems with high costs to make changes
- **Poor economies of scale** because of fragmented acquisitions and too many suppliers

No one owns the end-to-end process of delivering service
Organized around internal fiefdoms - not the customer
Telecom Must Learn From Other Lean Industries

Low-cost airlines –
- Heavy use of IT and customer self-service
- Demand based pricing
- High occupancy levels
- Heavy use of outsourcing

Banking –
- Highly automated capital flows
- Customer self-service
- Elimination of manual back-offices
- Fast-changing financial product life-cycles

Retailing –
- Highly automated flow-through
- Just-in time stock control
- Management of cost-base end-end
- Flexible product life-cycles
Today, around 50% of all OSS/BSS spending is not productive.

Around 12% CapEx or around 4% of revenues spent on OSS/BSS.

But up to 50% is spent on integrating dissimilar systems.

That ‘integration tax’ could be slashed if operators bought against common standards.
The Journey to Leanness

Understanding the need to get Lean

Making the case

Getting the necessary tools

Putting it into action

Where & When

What

How

Innovation in Services & Customer Experience
Decision Hierarchy for Operators/Providers

- Market Opportunities
- Business Goals
- Business Processes
- Technology Choices
3 things to get right

• What are the process steps and governing policies?
• Can each process & system understand the information?
• Can each set of activities interoperate?

Defining and developing each of these uniquely for your company is prohibitively expensive
NGOSS – New Generation Operations Systems & Software

- Industry-agreed, business & systems framework to guide the development and implementation of 21st Century Communications Management
  - Defines methodologies for evolving OSS and BSS infrastructure into a lean operations approach
  - Specifies the key characteristics of OSS/BSS that allow high degrees of process integration and automation
  - Developed by major operators and suppliers worldwide
  - Driven and managed by TM Forum
  - Implemented as a set of best practices captured as information models
eTOM Business Process Map

Customer

Strategy, Infrastructure & Product Lifecycle Management

- Strategy Commit
- Marketing & Offer Management
- Service Development
- Resource Development
- Supply Chain Management

Enterprise Management

- Strategic & Enterprise Planning
- Financial & Asset Management
- Brand Management, Market Research & Advertising
- Human Resources Management

Operations

- Support
- Fulfillment
- Assurance
- Billing

- Customer Relationship Management
- Service Management & Operations
- Resource Management & Operations (Application, Computing and Network)
- Supplier/Partner Relationship Management

- Disaster Recovery, Security & Fraud Management
- Stakeholder & External Relations Management
- Research & Development, Technology Acquisition
- Enterprise Quality Management, Process & Planning & Architecture
SID - Shared Information & Data Model

- Information is the *right* data getting to the right place at the right time to effect action.
Who's Backing NGOSS?

- Telstra®
- Cisco Systems
- NTT
- orange™
- TELECOM ITALIA
- Microsoft
- Agilent Technologies
- vodafone
- JacobsRimell™
- Telcordia Technologies
- MOTOROLA
- ORACLE
- AT&T
- Tivoli
- CONNEX
- TIBCO
- Lucent Technologies
- INTELLIDEN™
- BT
- IONA
- ADC
- MCI.
- "invent"
- verizon
- Your Network Management Partner
- NEC
- granite systems
- ALCATEL
- MetaSolv® SOFTWARE
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