Cable MSOs & Business Market: A Quarterly Look At Strategies & Growth
Background

Draws from NPRG’s ongoing research and analysis on the Cable industry’s entry and growth into telecom markets:


– Ongoing geo-market level research

– Company-level coverage and profiles
Cable MSOs in Business Markets

1. The Business Market Defined
2. Cable MSOs and Business Customer Needs
3. Cable MSOs’ Business Products & Strategies
4. The Business Market Opportunity & Outlook

Informed Direction Within a Changing Landscape

© New Paradigm Resources Group, Inc.
## Telecommunications Customer Segments

### Customers

<table>
<thead>
<tr>
<th>Residential</th>
<th>Business</th>
<th>Wholesale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumers</td>
<td>Commercial businesses</td>
<td>Other telecom service providers</td>
</tr>
<tr>
<td>Living spaces: houses, apartments, mobile homes, etc.</td>
<td>Not-for-profit organization</td>
<td>Integrators and VARs</td>
</tr>
</tbody>
</table>

### Use of Telecommunications

<table>
<thead>
<tr>
<th>Residential</th>
<th>Business</th>
<th>Wholesale</th>
</tr>
</thead>
<tbody>
<tr>
<td>“At home”</td>
<td>“For work”</td>
<td>Resell the service</td>
</tr>
<tr>
<td>For personal use</td>
<td>Connect different offices/locations</td>
<td>Combine services (including IT) and hardware to “black box” solutions for businesses</td>
</tr>
<tr>
<td>For entertainment</td>
<td>Communicate with suppliers and clients</td>
<td></td>
</tr>
</tbody>
</table>

---

*Informed Direction Within a Changing Landscape*
Business Customer Segmentation

- **Large Enterprise**
  - 1,000+ employees
  - Publicly Traded: Large Majority
  - Locations per Company (Typical): Very Many (10+)

- **Small Enterprise**
  - 500-999 employees
  - Publicly Traded: Majority
  - Locations per Company (Typical): Many

- **Mid-Size**
  - 100-499 employees
  - Publicly Traded: Majority
  - Locations per Company (Typical): Multiple

- **Small**
  - 20-99 employees
  - Publicly Traded: Mixed
  - Locations per Company (Typical): One or Multiple

- **Micro**
  - 5-19 employees
  - Publicly Traded: Only as branch of larger co.
  - Locations per Company (Typical): One or Few

- **SOHO** *(Small office / Home office)*
  - 1-4 employees
  - Publicly Traded: Only as branch of larger co.
  - Locations per Company (Typical): One

Informed Direction Within a Changing Landscape

© New Paradigm Resources Group, Inc.
Distribution of Employed Persons by Establishment Size (2010)

- Small: 30%
- Mid: 25%
- Large Enterprise: 13%
- Micro: 19%
- SOHO: 6%
The SOHO sub-segment has been a natural entry point for Cable MSOs.

- Most numerous by raw business count
- Requirements are “basic”: 1-2 voice lines + broadband
- Crossover between residential portfolio and SOHO
- Increasingly desiring advanced calling features, faster Internet, options for backup and IT help
Cable MSOs’ first “test case” are Micro-size locations: 5 to 19 employees.

- Still very numerous by raw count
- More robust requirements:
  - attendant features, transfer and hold, rollover, extension dialing, IVR
  - T1-plus Internet access, or integrated voice/data (IAS)
- Portfolio can be souped-up SOHO package, or scaled down versions of larger solutions
- Increasingly want enterprise-grade SLAs and IT help
- NOTE: big hurdles for MSOs around 8-12 lines
Larger small businesses—our “Small” sub-segment (20-99 employees)—present many challenges for MSOs, but also big opportunities.

- Many businesses, each with many more employees
- Genuine complexity begins:
  - PBX or equivalent is baseline for voice
  - Minimally NxT1 for data: bigger pipes, WAN common
  - Wider array of applications, staff functions
- A different class of solutions: “jumbo SOHO” insufficient
- Price conscious, but services less commoditized
Major Trends Among Business Users:

- Bandwidth demands (small and large want more)
- Integrated services (dynamic allocation)
- Metro Ethernet services
- Flattened WAN topologies
- Mobility
- Unified Communications
- Video prevalent: telepresence, monitoring, sharing
- Service level agreements, performance monitoring
Cable networks have inherent technical and physical shortcomings relative to the business market.

**Generalized MSO Distribution Network & Addressable Areas**

- **Commercial**
  - Fiber ring pass-through; some fiber access

- **Industrial**
  - No legacy access

- **Residential**
  - Existing HFC throughout; ubiquitous access
Cable MSOs generally begin building their business product portfolios with prosumer-type services for SOHO customers and big pipes for enterprises and wholesale.
Technology has enabled MSOs to steadily boost bandwidth, delivering better top-line speeds to the business market.

**Average Top Speed of MSOs’ Coax-based Broadband (1998-2014)**

- **DOCSIS 1.X**
- **DOCSIS 2.X**
- **DOCSIS 3.0**

The diagram illustrates the increase in maximum downstream customer bandwidth from 1998 to 2014, showing a steady rise in speeds.
The disruptive impact of Ethernet has been a boon to MSOs’ business segment aspirations.

- Emerging technology: level playing field
- Enable convergence onto IP network
- Leverage fiber assets already capitalized
- Serve as “tools in the toolbox” for variety of solutions
  - EPL, EVPL, ELAN, E-Tree, vertical-specific apps
- More still to come!
  - SLA improvements
  - VPLS/WAN, both intra-carrier and national
In an increasingly mobile world, wireless is a *must-have*. MSOs are trying different strategies to round out *quad-play* portfolios for the business market.
Though differing from Telcos’ in important respects, MSOs portfolios now include a similar range of services:

- DTV → video transport and CDN
- Cable modem → D3 → scalable Ethernet
- VoCoax → multi-line VoIP → hosted VoIP
- Wireless via resale/partner → BBW 4G/Wi-Fi
### Market Segmentation Strategies

<table>
<thead>
<tr>
<th>Customer Vertical</th>
<th>Broad</th>
<th>Focused</th>
</tr>
</thead>
</table>
| **Large**         | • Central business districts (CBDs)  
|                   | • Corporate headquarters  
|                   | • Manufacturing facilities  
|                   | • Call centers | • Financial exchanges & Traders  
|                   |                   | • Banks & Insurance companies  
|                   |                   | • Hospitals & Medical campuses  
|                   |                   | • School districts & Universities  
|                   |                   | • Governments  
|                   |                   | • Media & Content providers |
| **Small**         | • Telecommuters  
|                   | • Home-based businesses  
|                   | • Small offices  
|                   | • General retail outlets  
|                   | • Strip malls | • Branch offices: banks, insurance, investments, etc.  
|                   |                   | • Doctors’ offices & Outpatient centers  
|                   |                   | • Small schools |
Informed Direction Within a Changing Landscape

MSOs’ Offering Business Services

- **CLEC era**
  - COX Business
  - CABLEVISION
  - BRESNAN
  - TIME WARNER CABLE

- **VoIP era**
  - Comcast Business Class
  - Charter Business
  - bright house networks
  - KNOLOGY

- **Emerging**
  - RCN
  - WOW! Business

**Other mid-tier MSOs**
- Optimum Lightpath

**Small cable systems**
MSOs’ Probable Market Share Gains

With some large and many smaller MSOs just entering the business market, the sector stands to make broad share gains.

Cable MSOs’ Market Share by Customer Size

Business Establishment Size

Cablecos Share of Market

2010

ca. 2013 (Baseline)

ca. 2013 (Midmarket focus)

SOHO

Large Enterprise

© New Paradigm Resources Group, Inc.
Cable MSO Market Share (SMB Voice): By Incumbent

- T
- VZ
- Q
- CTL
- WIN
- FTR
- Other
- Nationwide
Informed Direction Within a Changing Landscape

MSOs’ Competition in the Business Space

Emerging Wireless
- Broadband Wireless (3G / 4G, incl. WiMAX and LTE)
- Cellular

Access Solutions
- Fixed Wireless (Microwave, etc.)

Video Services
- Satellite
- Paid Content
- IPTV (Competitive Video)
- Cable Video

Wireline Voice & Data
- FTTH
- VoIP
- RBOCs
- Facilities-Based CLECs
- Non-Facilities CLECs / Resellers
- CIOCs

Internet Service Providers (ISPs)
- Cable Broadband & Telephony
- BPL

Cloud Computing
- Software as a Service
- Managed Services

Fiber Network Operators
- Metro Ethernet

© New Paradigm Resources Group, Inc.
• MSOs are playing in the biz space *to win*
• Increasing ARPU across the board: shedding low-margin customers, going up-market
• As they get bigger in business, MSOs’ products, sales and operations will get more sophisticated
• Acquisitions to accelerate mid-market gains
Upcoming Cable sector research:

– Cable’s Growth in Business Services (1Q 2011)
– Cable MSO Strategy Shifts & Emerging Initiatives:
  • Wireless
  • Advanced Data
– Geo-Market Analysis
  • Market Potential for Cable = Market Exposure for Telcos
  • Market Share Analysis
– Company-level Research & Coverage
  • Service launches
  • Market Entry
– Client-specific research
New Paradigm Resources Group, Inc.

Informed direction

…within a changing landscape

Thank You!

New Paradigm Resources Group, Inc.
30 S. Michigan, Suite 700
Chicago, IL 60603
(312) 980-7848
www.nprg.com