VoIP Strategies in a Web 2.0 World

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

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VoIP Strategies in a Web 2.0 World

1. The VoIP Sector in Context
2. A Closer Look at the VoIP Arena
3. VoIP’s Evolving Role in a Web 2.0 World
4. VoIP Market Summary & Outlook
5. Question and Answer -- Along the Way
The Big Picture:
Putting the VoIP Sector in Context
The VoIP Sector In Context: What is VoIP?

- What does the Voice over IP sector look like today?
- What are the differences between IP-based telephony services (VoIP vs. IP PBX vs. IP Centrex vs. Hosted VoIP, etc.)?
- What will be the long term impact of VoIP on service providers?
- Is VoIP just a replacement for basic voice telecom service?
The VoIP Sector In Context: The Service Provider Universe

Source: New Paradigm Resources Group

Informed Direction Within a Changing Landscape

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The VoIP Sector In Context: The Communications Services Universe

Services Sector Market Size

- Special Access
- Frame Relay and ATM
- Consumer Video
- SaaS
- Video Conferencing
- Dial-Up Internet
- Broadband Internet
- VoIP
- Circuit-Switched Voice
- Cellular Voice

Source: New Paradigm Resources Group

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The VoIP Sector in Context: Who’s In and Who’s Not

VoIP Provider—or Not?

VoIP

- Vonage
- Packet 8
- Level(3)
- Global Crossing
- momentum
- comcast
- verizon

Not VoIP

- Granite Telecommunications
- AccessOne
- NEW EDGE NETWORKS
- American Fiber Systems
- towerstream
- cavalier
- Matrix
The VoIP Sector In Context: Who’s Eating the VoIP Pie

VoIP Service Market

ILECs
CLECs
ISPs
Cable
Pure Play
App Providers
VARs

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## The VoIP Sector in Context: Comparing Services

### Services Comparison

<table>
<thead>
<tr>
<th>Service Characteristics</th>
<th>VoIP</th>
<th>Voice (Circuit)</th>
<th>Data</th>
<th>Video</th>
</tr>
</thead>
<tbody>
<tr>
<td>Growth Potential</td>
<td>↑</td>
<td>↓</td>
<td>↑↑↑↑</td>
<td>↑↑↑↑</td>
</tr>
<tr>
<td>Traffic per User</td>
<td>Low</td>
<td>Low</td>
<td>High</td>
<td>Very High</td>
</tr>
<tr>
<td>Revenue per Bit</td>
<td>Moderate to High</td>
<td>High</td>
<td>Very Low to Moderate</td>
<td>Low to Moderate</td>
</tr>
<tr>
<td>Pricing Discipline</td>
<td>Moderate</td>
<td>Moderate to High</td>
<td>Low</td>
<td>Moderate</td>
</tr>
<tr>
<td>Customer Visibility</td>
<td>High</td>
<td>High</td>
<td>Low to High</td>
<td>Low to Moderate</td>
</tr>
<tr>
<td>QoS Level Required</td>
<td>High</td>
<td>High</td>
<td>Low to High</td>
<td>Moderate to Very High</td>
</tr>
<tr>
<td>Paradigmatic Equipment</td>
<td>Softswitch</td>
<td>Class 5 Switch</td>
<td>Router</td>
<td>Headend, ONT, dish or YouTube</td>
</tr>
<tr>
<td>Barriers to Entry</td>
<td>Low to Moderate</td>
<td>High (Fac-based) or Low (Resale)</td>
<td>Moderate to High</td>
<td>High</td>
</tr>
<tr>
<td>Web 2.0 Potential</td>
<td>↑</td>
<td>↓↓↓</td>
<td>↑</td>
<td>↑</td>
</tr>
</tbody>
</table>

*Source: New Paradigm Resources Group, Inc.*

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A Closer Look at the VoIP Arena
A Closer Look at the VoIP Arena: Reshuffling the Voice World

TDM Voice

RBOCs

CLECs

IOCs

Packet Voice

RBOCs

VoIP Pure Play

Voice IM

CLECs

VARs

IOCs

Cable MSOs

Small Cablecos

ISPs

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## A Closer Look at the VoIP Arena: Predominant VoIP Strategies

<table>
<thead>
<tr>
<th>Carrier Set</th>
<th>Strategic Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pure Play VoIP</td>
<td>• Aggressive: disrupt voice services pricing</td>
</tr>
<tr>
<td></td>
<td>• Business model built around VoIP services</td>
</tr>
<tr>
<td>ILEC</td>
<td>• Defensive: retain share</td>
</tr>
<tr>
<td></td>
<td>• VoIP just one tool in a broad portfolio</td>
</tr>
<tr>
<td>Cableco</td>
<td>• Round out residential triple-play bundle</td>
</tr>
<tr>
<td></td>
<td>• Capture business market share</td>
</tr>
<tr>
<td>CLEC</td>
<td>• Blend of both ILEC &amp; Cableco objectives: new opportunities,</td>
</tr>
<tr>
<td></td>
<td>but partly defensive vs. new entrants</td>
</tr>
<tr>
<td>Others (IM, etc.)</td>
<td>• Enable and drive other services: advertising, collaboration</td>
</tr>
<tr>
<td></td>
<td>tools, <em>etc.</em></td>
</tr>
</tbody>
</table>
## A Closer Look at the VoIP Arena: Providers & Target Customer Sets

### Customer Segments

<table>
<thead>
<tr>
<th>Provider Sector</th>
<th>Residential</th>
<th>Business</th>
<th>Wholesale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pure Play VoIP</td>
<td>🌟🌟</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ILEC</td>
<td>🌟</td>
<td>🌟🌟</td>
<td></td>
</tr>
<tr>
<td>CLEC</td>
<td>🌟🌟🌟</td>
<td>🌟🌟</td>
<td></td>
</tr>
<tr>
<td>Cablecos</td>
<td>🌟🌟</td>
<td>🌟</td>
<td></td>
</tr>
<tr>
<td>PC-to-PC</td>
<td>🌟🌟</td>
<td>🌟</td>
<td></td>
</tr>
<tr>
<td>IM</td>
<td>🌟🌟</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VoIP Wholesaler</td>
<td>🌟🌟🌟</td>
<td></td>
<td>🌟🌟</td>
</tr>
</tbody>
</table>

- 🌟🌟🌟 = Primary Target
- 🌟🌟 = Secondary Target

Source: New Paradigm Resources Group
A Closer Look at the VoIP Arena: Core VoIP Services

Single Line Replacement

SIP Trunks

Hosted VoIP

Over The Top (OTT)

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Source: New Paradigm Resources Group
A Closer Look at the VoIP Arena: Key Market Drivers

- End-User acceptance
- Lower service pricing: traffic is “just bits”
- Equipment quality and pricing
- OpEx savings
- Increasing Range of Features
- WAN expansion
- BVoIP needs in small markets
- Broad Wi-Fi availability
- Services integration / converged networks
A Closer Look at the VoIP Arena:
VoIP Market Size by Customer Segment

% of Market by Customer Segment
(2008)

Source: New Paradigm Resources Group
A Closer Look at the VoIP Arena: Sector Segmentation

% of the Market by Service Provider Set (2008)

Wholesale
CLEC
Cable
ILEC
IM
PC to PC
Pure Play

Source: New Paradigm Resources Group

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VoIP’s Evolving Role in a Web 2.0 World
VoIP’s Evolving Role: Where does it fit?

- Video
- Data
- SaaS
- Managed Services
- Bandwidth

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VoIP’s Evolving Role: Shifting the Paradigm

2005

2010

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VoIP’s Evolving Role:
Comparative Pricing Trends

Change in Average Price of Business
Services Relative to 1H 2005

Source: New Paradigm Resources Group
VoIP Evolving Role: Battling In the Marketplace

Decision: Pure Play VoIP

ILEC

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VoIP Evolving Role: Battling In the Marketplace

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Decision: ✔️ Cable MSO

Decision: ✔️ ILEC

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VoIP Evolving Role: Battling In the Marketplace

Using VoIP as a strategic wedge… jury is still out

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VoIP Market Summary & Outlook
Summary & Outlook: Future Direction

- Managed services
- Unified communications
- Evolution of strategic services
- Voice – Just one of many services

Siloed Services

Voice
Data
Video

Merging of Voice & Data

Voice + Data
Video

Convergence Realized

Voice
Data
Video + Managed Services + SaaS

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Summary & Outlook: VoIP Outlook

- Value-add on top of bandwidth
- Integration with other applications
- Hosted Services
- Unified Communications
- Emerging wholesale market (turnkey)
Summary & Outlook: Key Takeaways

- VoIP is an established service option
- Pace is ahead of expectations
- Pricing has stabilized, but disruptors still exist
- Trend toward hosted services and UC
- Facilitator of other products & network services
- Web 2.0 using VoIP features as a strategic wedge
- Growing wholesale market as smaller cablecos and ILECs eye BVoIP
Need to Know More about the VoIP Sector?

If you need it, we probably have it:

- **VoIP Track - Continuous Information & Advisory Service**
  - *Sector Analyses* (forecasts, market size, trends, emerging strategies, and outlook)
  - *Research Briefs* (strategic analysis of issues affecting the sector as they arise)
  - *Service Provider Coverage & Profiles* (detailed data, information & analysis of the providers)

- **VoIP Sector Analysis Report**

- **Service Provider Coverage, Analysis & Profiles**

Any of these can be ordered by calling (312) 980-4843
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Informed direction

...within a changing landscape

Thank You!