



NEW PARADIGM RESOURCES

VoIP Strategies in a Web 2.0 World

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VoIP Strategies in a Web 2.0 World

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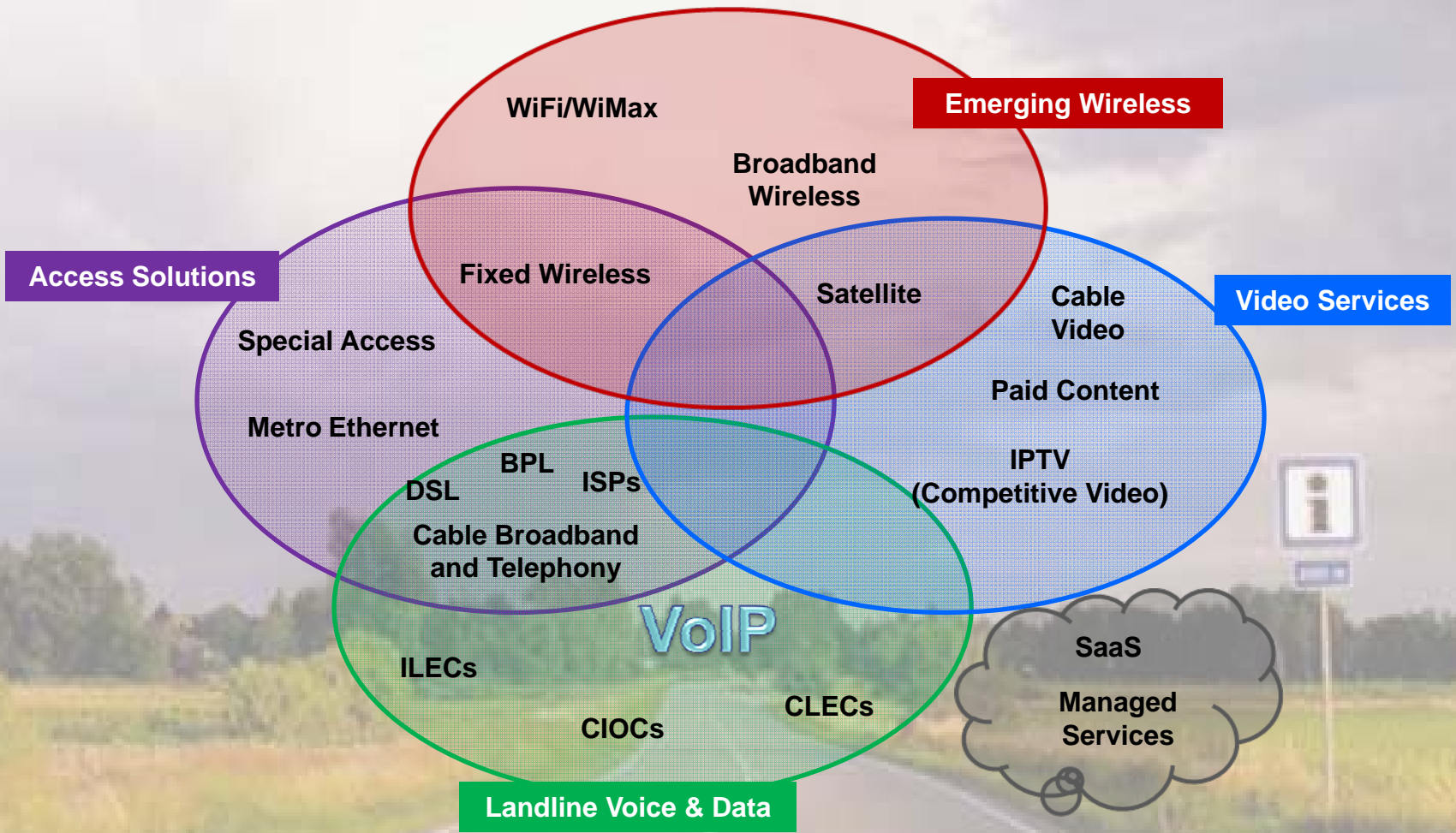
Question and Answer -- Along the Way

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



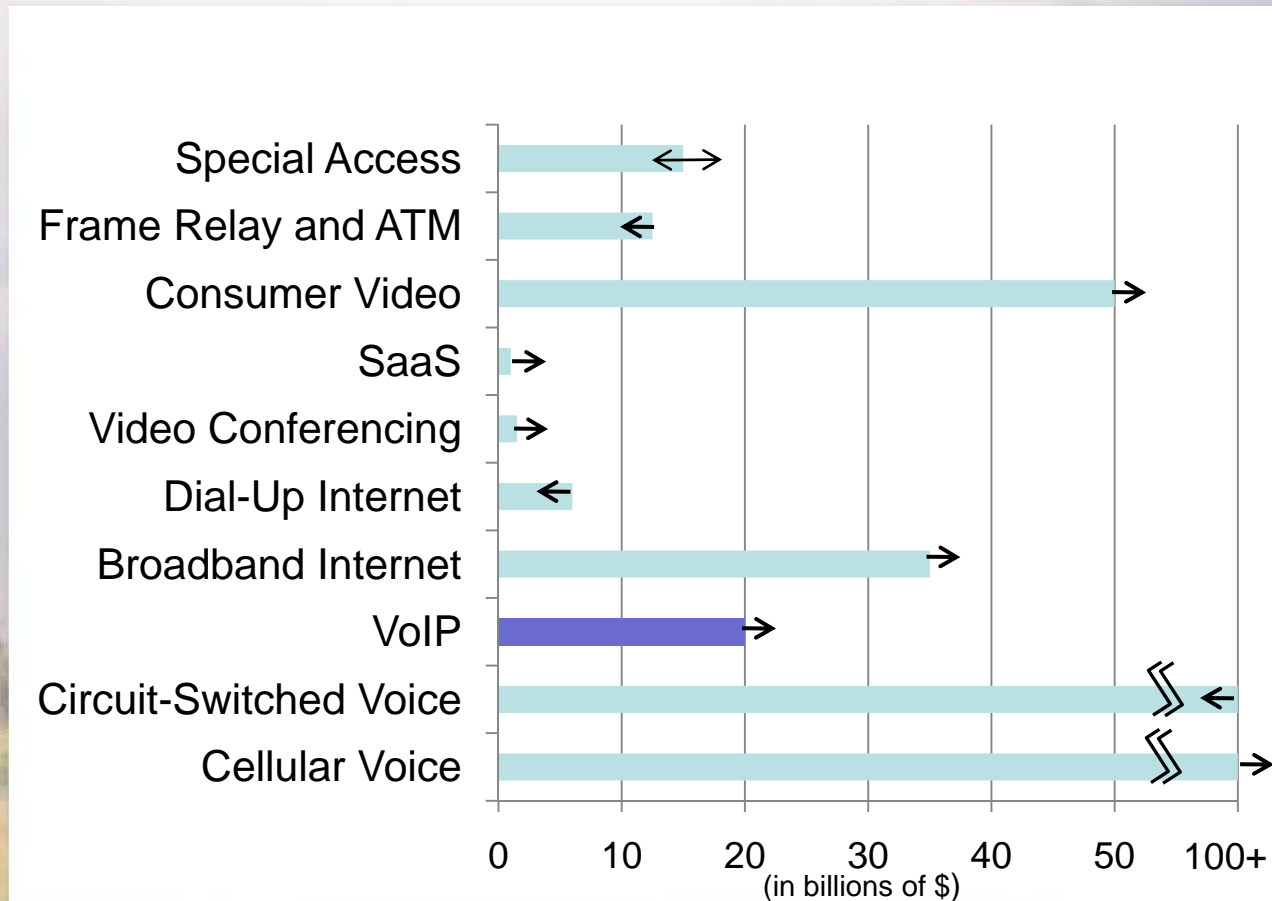
Source: New Paradigm Resources Group

*Informed Direction Within a
Changing Landscape*

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The VoIP Sector In Context: The Communications Services Universe

Services Sector Market Size



Source: New Paradigm Resources Group

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

VoIP Provider—or Not?

VoIP

Not VoIP

Vonage

Packet8
Internet Phone Service

Level(3)SM
COMMUNICATIONS



Global Crossing[®]

momentum)))

skype

Comcast

verizon

Granite
TELECOMMUNICATIONS

AccessOne

NEW EDGE
NETWORKS
AN EARTHLINK COMPANY

American
FIBER SYSTEMS

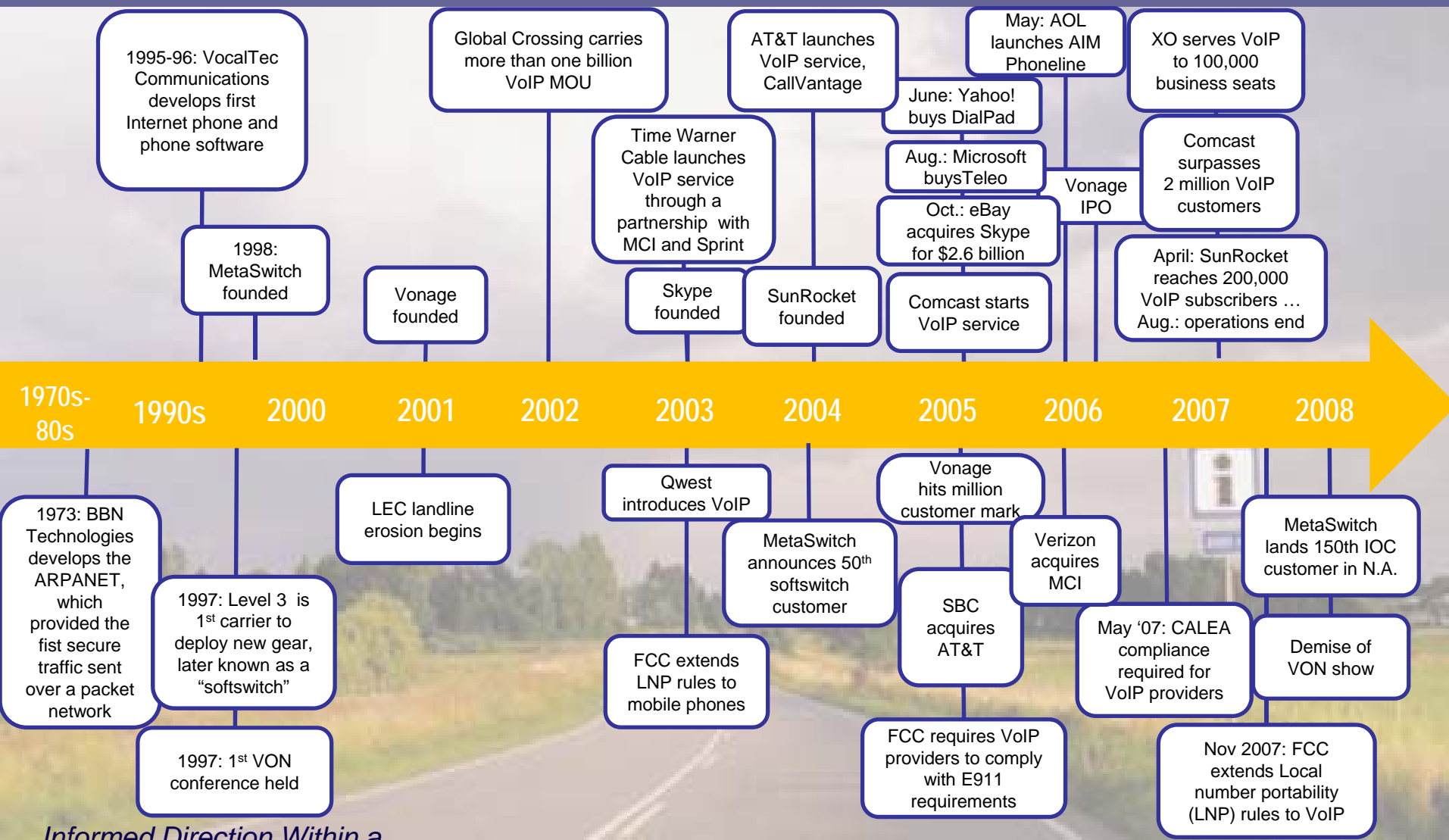
towerstream

Cavalier
TELEPHONE

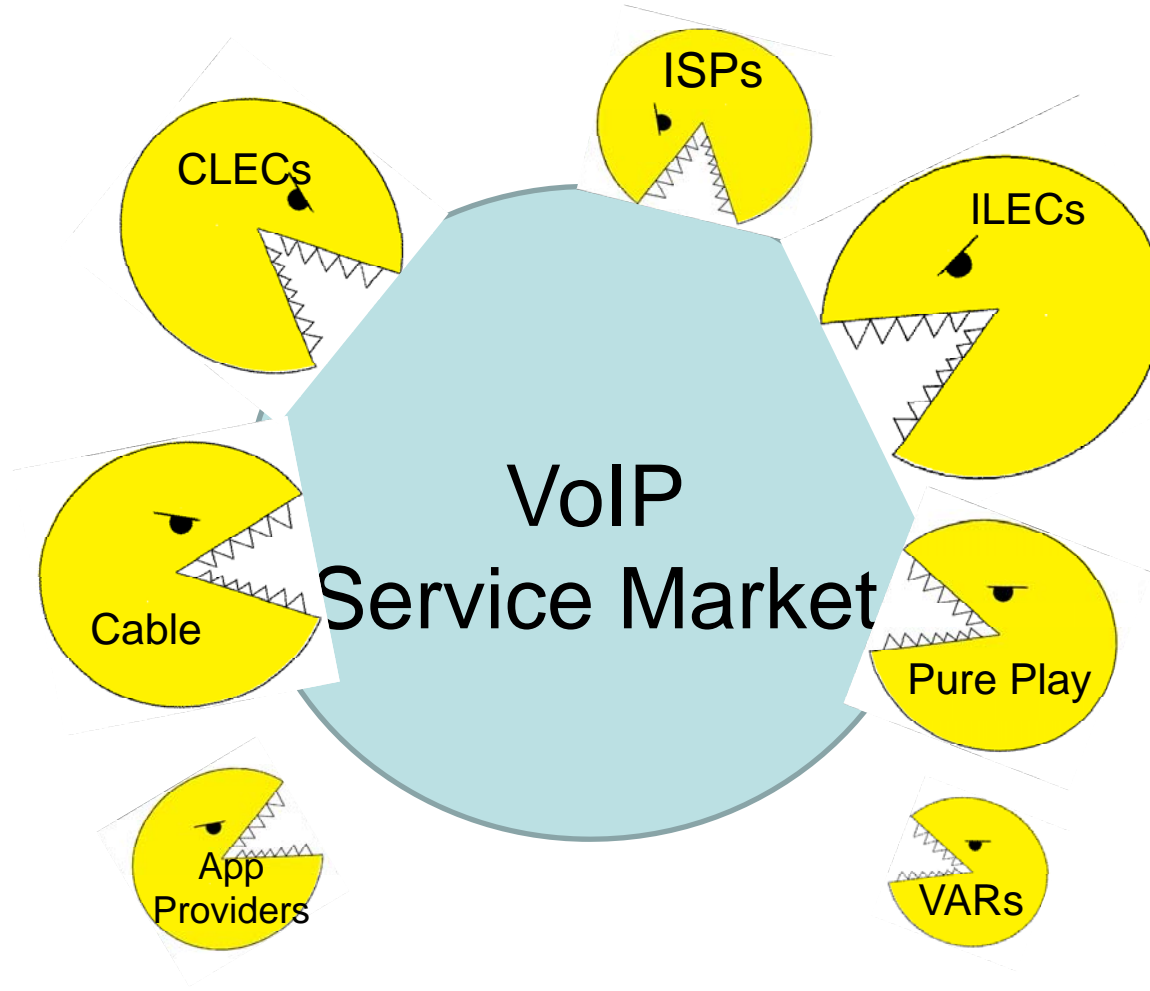
Matrix | BUSINESS
TECHNOLOGIES

The VoIP Sector In Context:

VoIP History 101



The VoIP Sector In Context: Who's Eating the VoIP Pie



The VoIP Sector in Context: Comparing Services

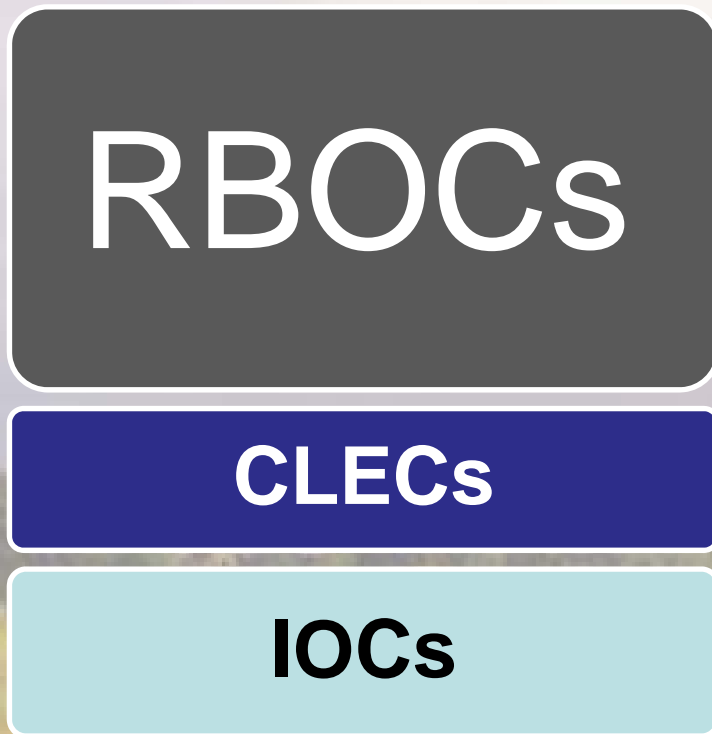
Services Comparison

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

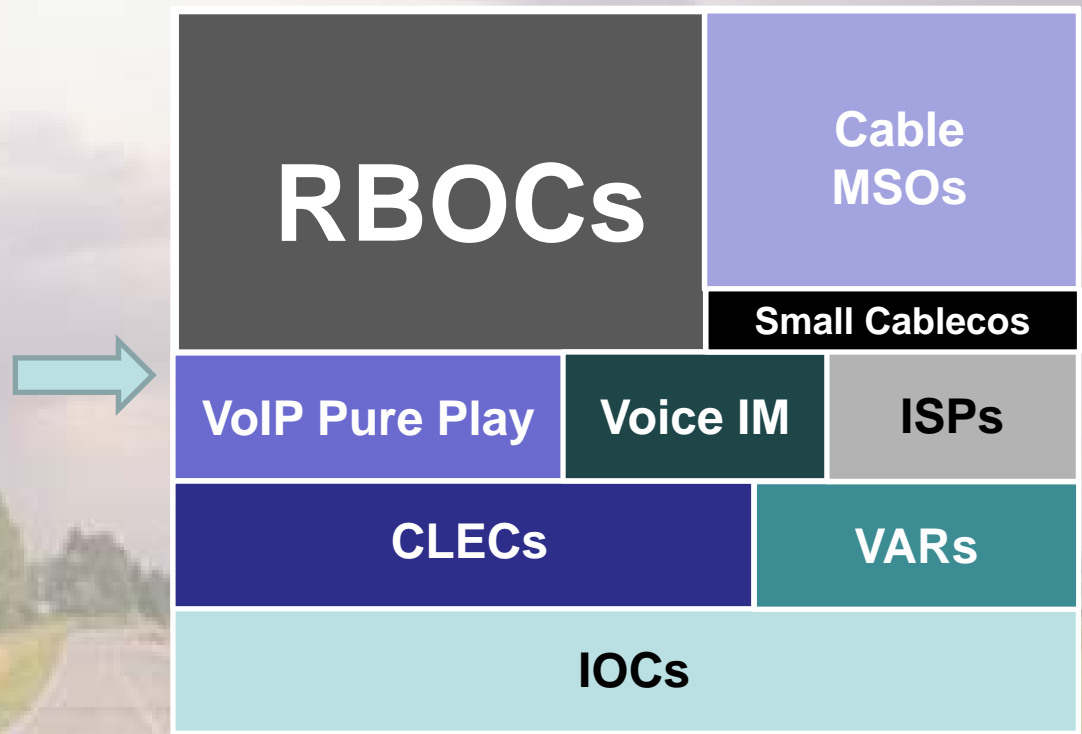
A Closer Look at the VoIP Arena

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

TDM Voice



Packet Voice



Source: New Paradigm Resources Group

A Closer Look at the VoIP Arena: Predominant VoIP Strategies

Carrier Set	Strategic Objective
Pure Play VoIP	<ul style="list-style-type: none"> • Aggressive: disrupt voice services pricing • Business model built around VoIP services
ILEC	<ul style="list-style-type: none"> • Defensive: retain share • VoIP just one tool in a broad portfolio
Cableco	<ul style="list-style-type: none"> • Round out residential triple-play bundle • Capture business market share
CLEC	<ul style="list-style-type: none"> • Blend of both ILEC & Cableco objectives: new opportunities, but partly defensive vs. new entrants
Others (IM, <i>etc.</i>)	<ul style="list-style-type: none"> • Enable and drive other services : advertising, collaboration tools, <i>etc.</i>

A Closer Look at the VoIP Arena: Providers & Target Customer Sets

Customer Segments

	Residential	Business	Wholesale
Pure Play VoIP	👍👍	👍	
ILEC	👍	👍👍	👍
CLEC		👍👍	👍
Cablecos	👍👍	👍	
PC-to-PC	👍👍	👍	
IM	👍👍		
VoIP Wholesaler			👍👍

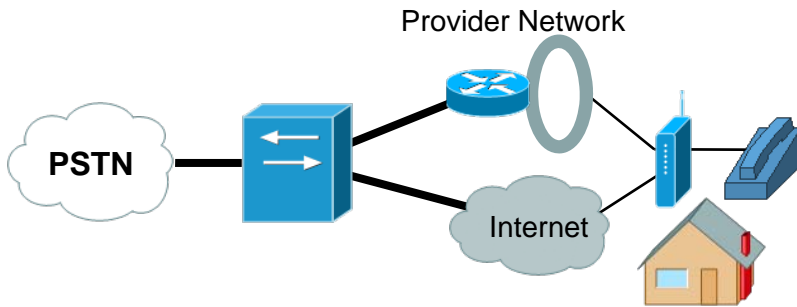
👍👍 = Primary Target

👍 = Secondary Target

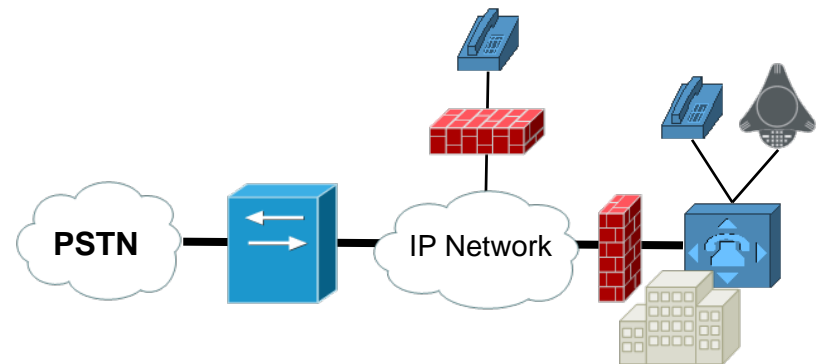
Source: New Paradigm Resources Group

A Closer Look at the VoIP Arena: Core VoIP Services

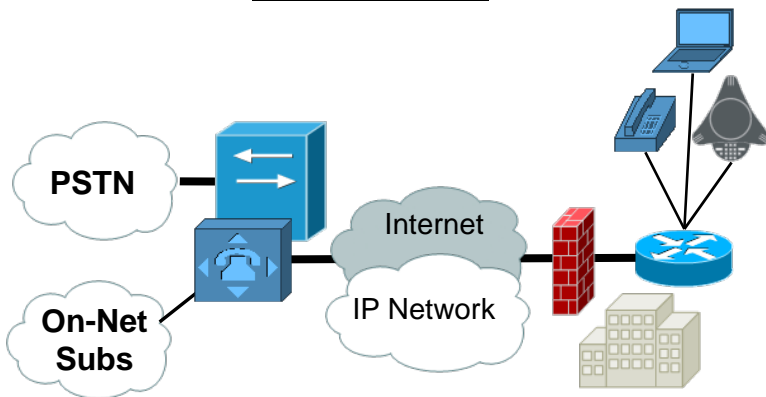
Single Line Replacement



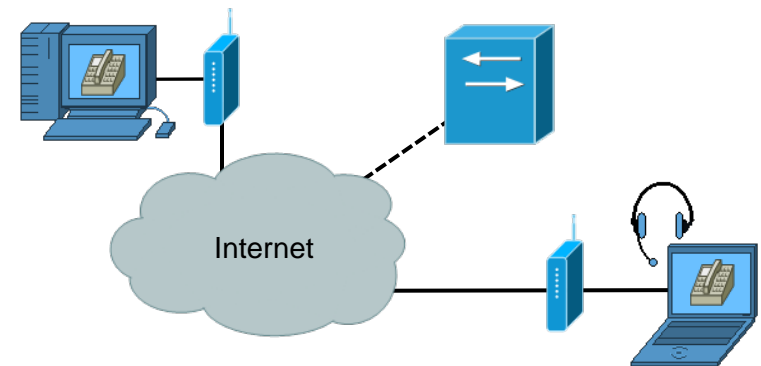
SIP Trunks



Hosted VoIP



Over The Top (OTT)

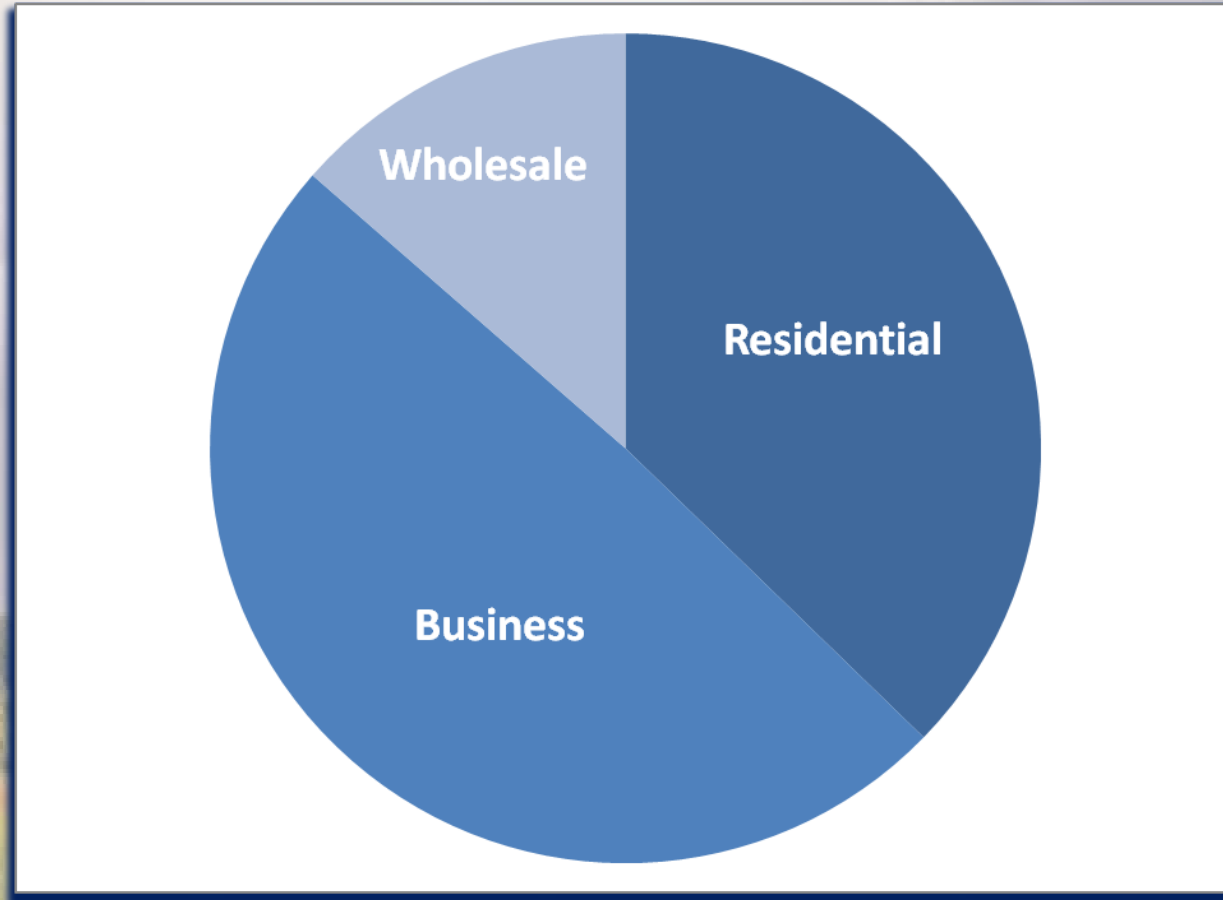


A Closer Look at the VoIP Arena: Key Market Drivers

- 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

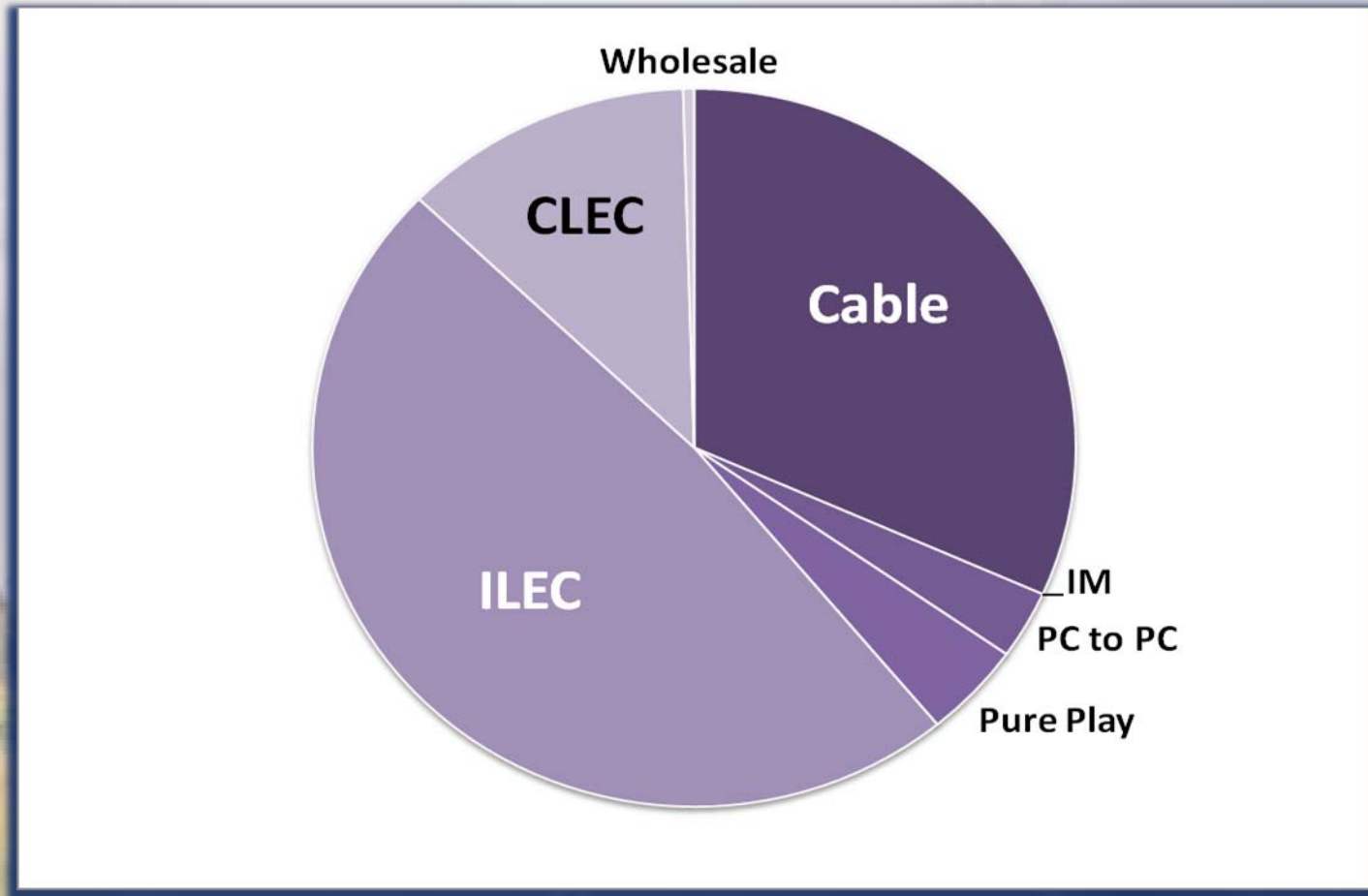
% of Market by Customer Segment
(2008)



Source: New Paradigm Resources Group

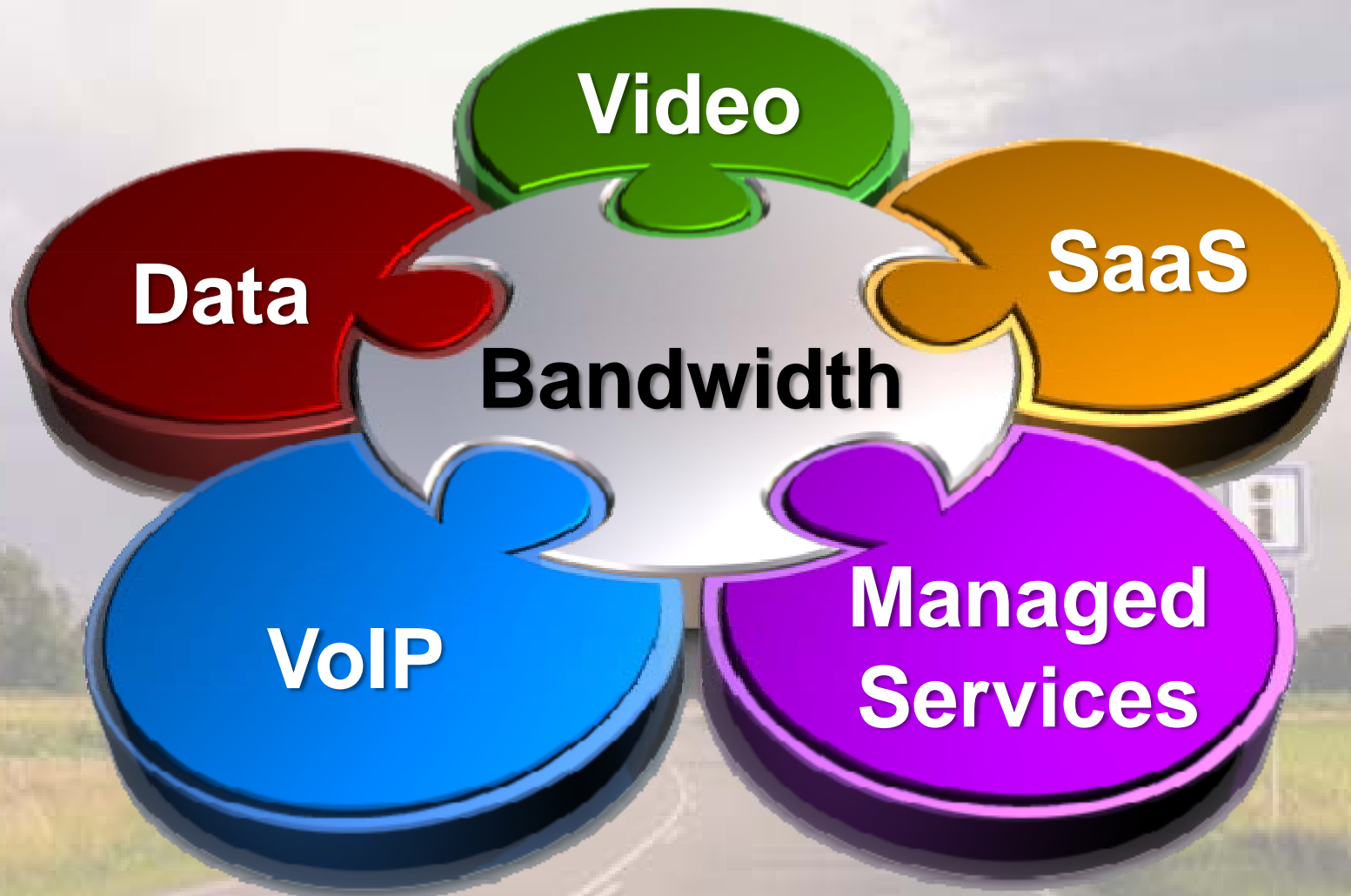
A Closer Look at the VoIP Arena: Sector Segmentation

% of the Market by Service Provider Set
(2008)



VoIP's Evolving Role in a Web 2.0 World

VoIP's Evolving Role: Where does it fit?



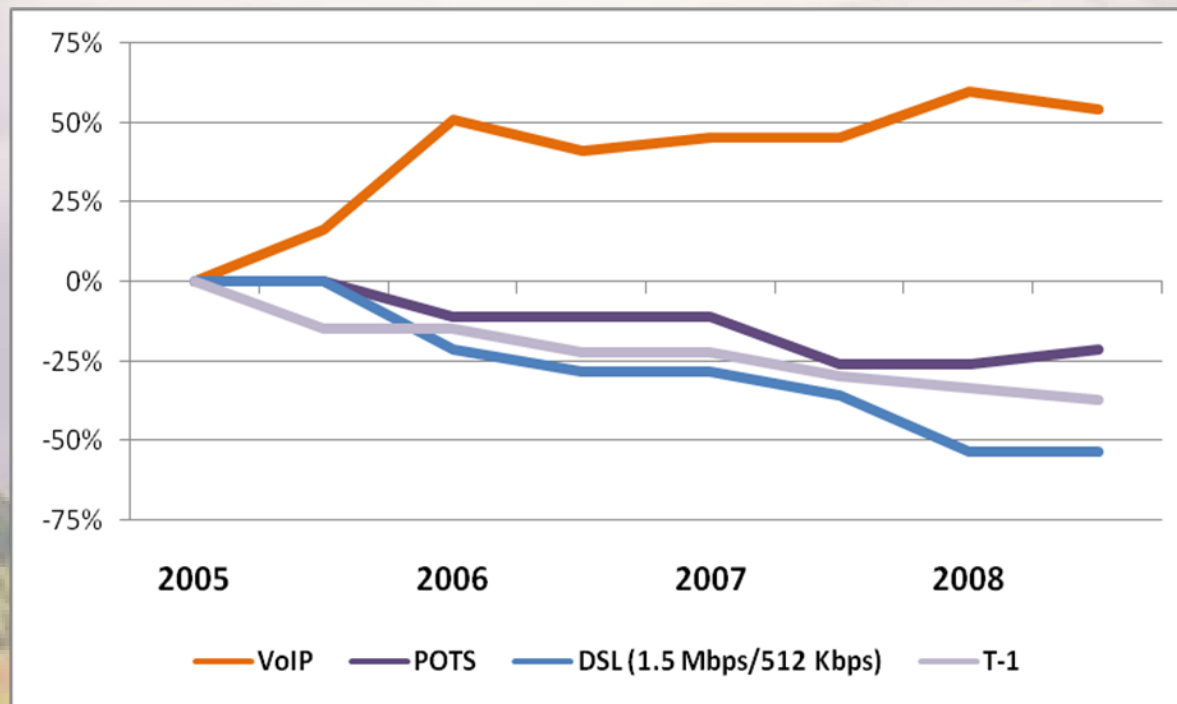
VoIP's Evolving Role: Shifting the Paradigm



*Informed Direction Within a
Changing Landscape*

VoIP's Evolving Role: Comparative Pricing Trends

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

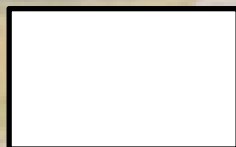


Source: New Paradigm Resources Group

VoIP Evolving Role: Battling In the Marketplace



Decision:



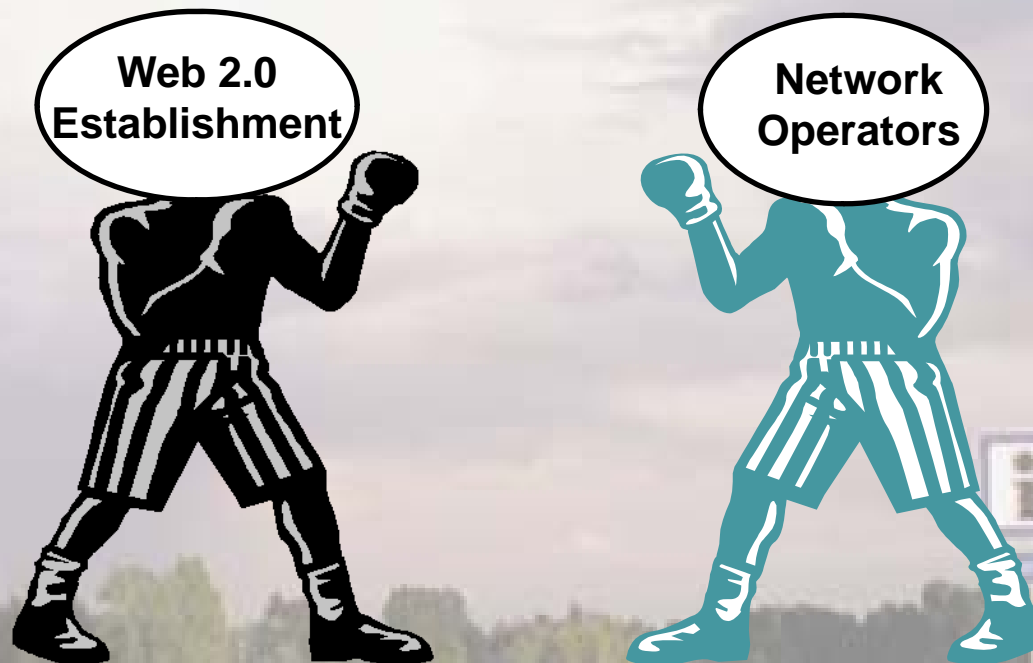
VoIP Evolving Role: Battling In the Marketplace



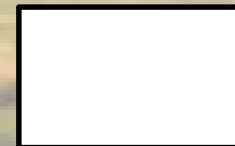
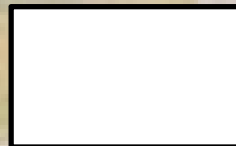
Decision:



VoIP Evolving Role: Battling In the Marketplace



Decision:

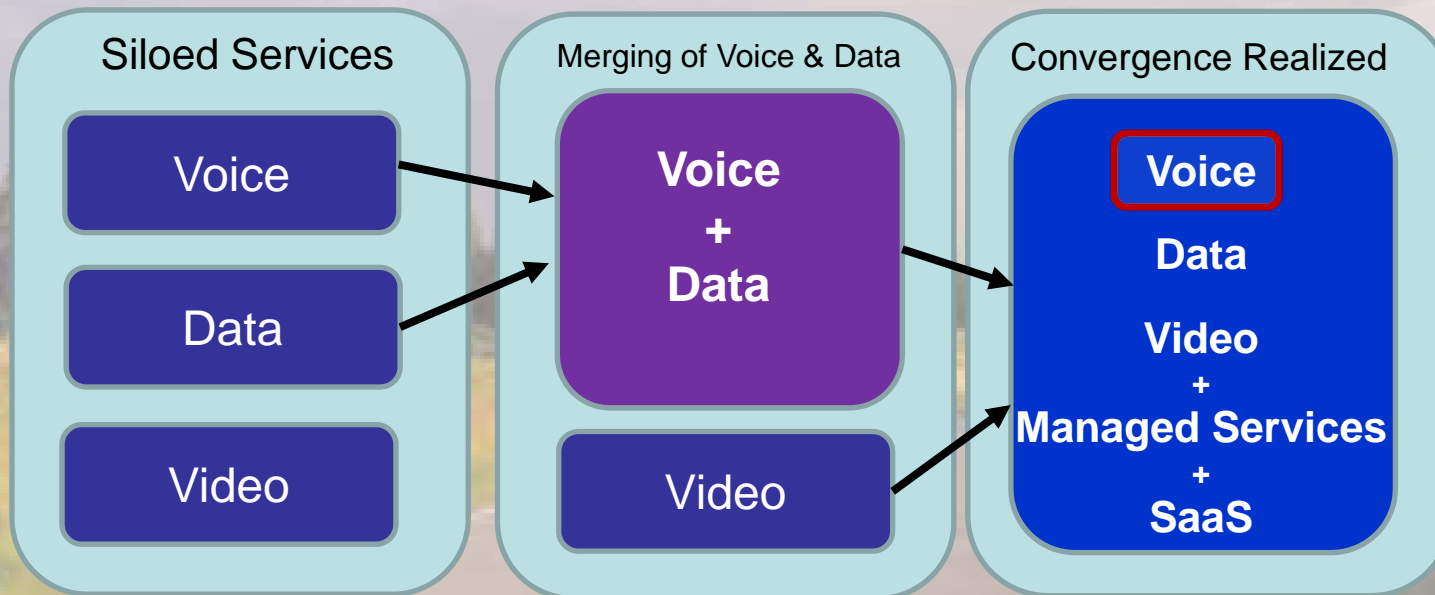


Using VoIP as a strategic wedge... jury is still out

VoIP Market Summary & Outlook

Summary & Outlook: Future Direction

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



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



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- 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!

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