Successful Strategies To Face The Future Challenges Of Various Stakeholders In WiMAX Services In India

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Agenda

- ❖ **WiMAX Stakeholders**

- ❖ **Challenges for WiMAX stakeholders**
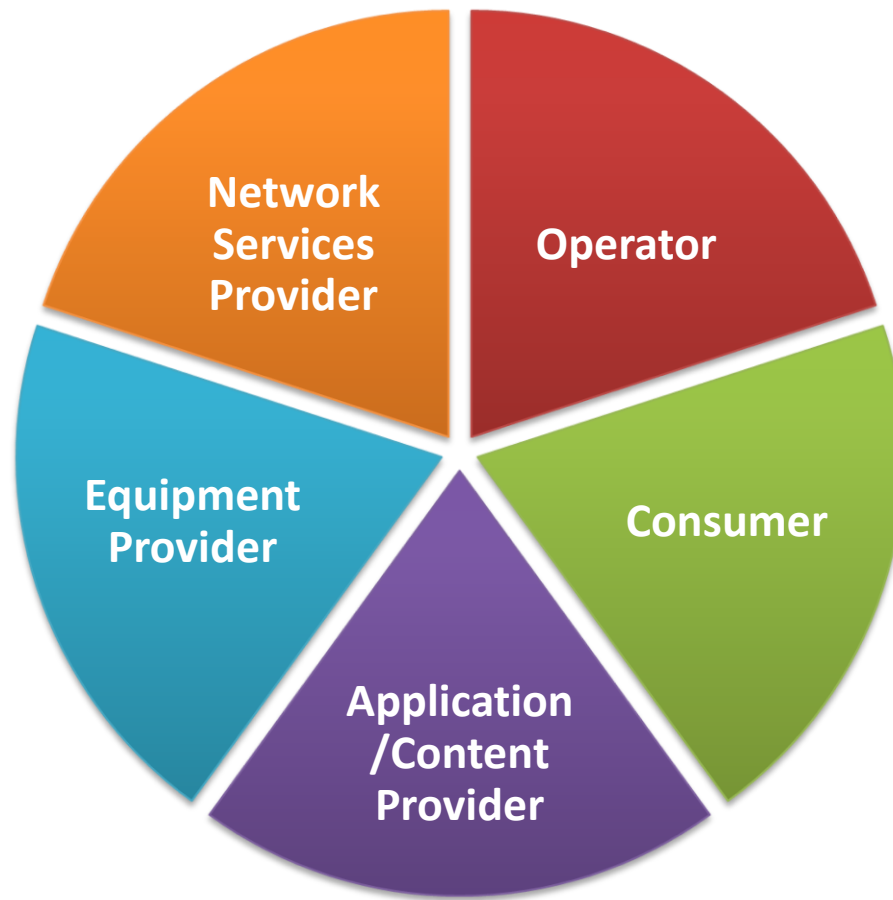
- ❖ **Successful Strategies**

- ❖ **GTL's offerings**

- ❖ **Conclusion**

WiMAX Stakeholders

Challenges for WiMAX stakeholders

Business Model

Network setup and operations

Ecosystem of the technology

Competition

Network Engineering Services

❑ Enterprise or retail or both?

❑ Fixed/Nomadic or Mobile or both?

❑ Operating Model?
  – Turnkey
  – Managed Services
  – Revenue Share

❑ Sustainable business case in light of high spectrum fees

❑ Services, Applications, Content

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Strategies to overcome these challenges

Business models for a WiMAX operator

New

Focused on customized set of services for fewer segments

Concentrating on high throughput pipes at select locations, built up of high capacity backbone

Retail

Enterprise

Utilization of its existing channel and network for optimal TCO and to achieve faster time to market

Enhancement of existing user experience

Established

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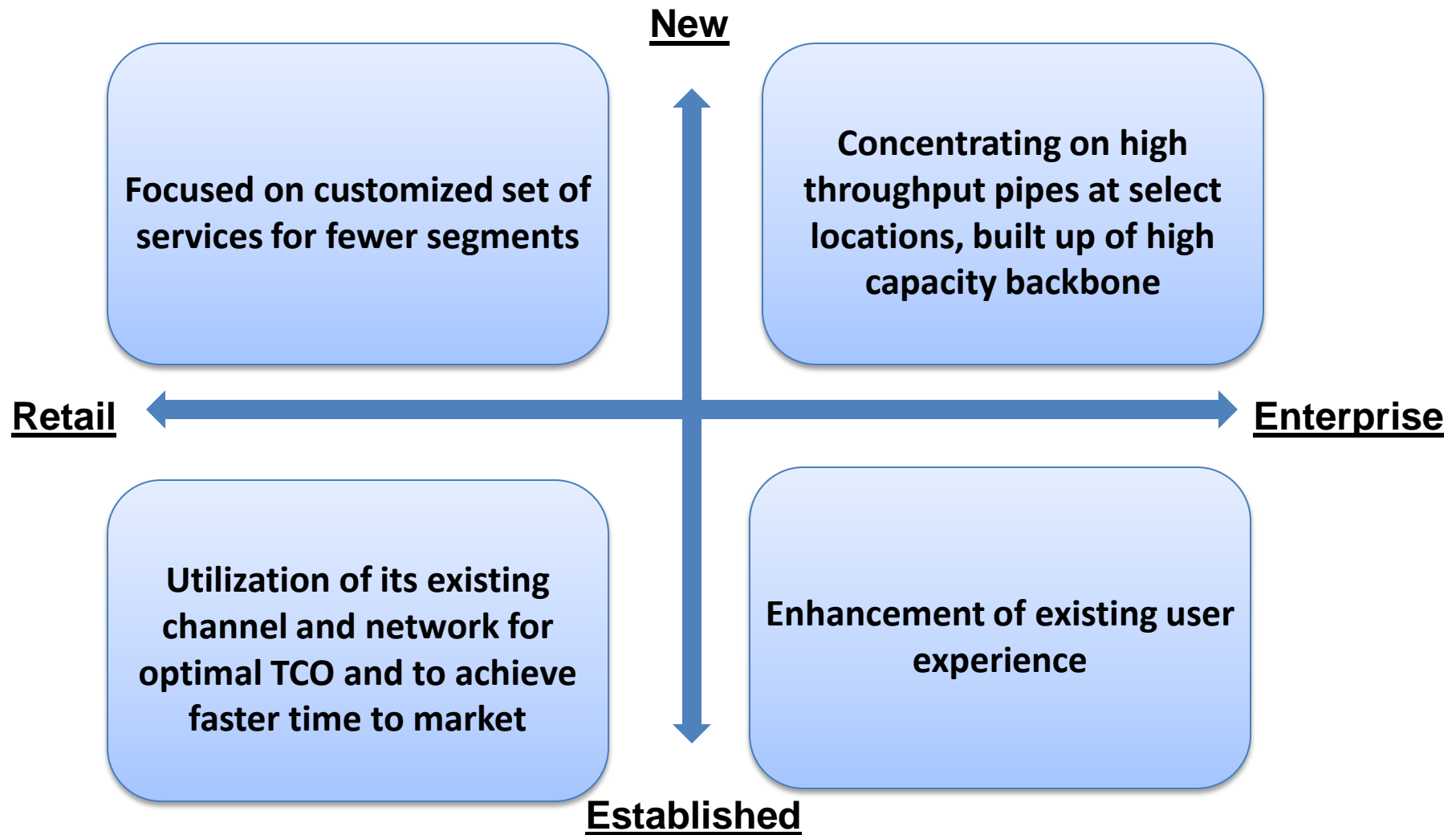
WiMAX – Enabler for new business models

- Commercially available NOW
- Existing Ecosystem
- An All-IP Solution
- Open Standard for Service Innovation
- Last Mile as well as Backhaul
- Fixed, Nomadic, Mobile

593 deployments

149 countries

621 million consumers

219 certified products

75 certified product vendors

With 802.16m:

- Increased Coverage & Spectral Efficiency
- Increased Capacity for Data and VoIP
- Lower Latency and QoS Enhancements
- Interworking with other Wireless Networks
- Power Conservation

Source: WiMAX Forum, www.wimaxmaps.org

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Solutions on the network side

Network setup

❑ Backhaul – MW radios with Gigabit data rates available

❑ Hybrid Radio Systems

❑ Dark fibre or copper and partnership with Utilities

Reduce costs

❑ Share RAN and Backhaul with operator/independent infra co

❑ Create synergies with existing passive infrastructure

❑ Transfer operating risks by way of Managed Services

❑ Consider Energy Management – to reduce OPEX

WiMAX Technology Ecosystem

Taking cues from the Wi-Fi success story

- ➢ Chipset level integration in desktops, laptops and handsets **by default**
- ➢ OS itself includes device drivers and connectivity application
- ➢ Plug and play

Need for more WiMAX enabled devices

- ➢ Handheld devices
- ➢ WiMAX cards in T.V.
- ➢ Single device that works on multiple networks using quad band radios

Demonstrate interoperability between devices (type & make)

Demonstrate applications - Mobile TV, VoIP, VOD

Strategies to overcome competition

Broadband in India still an underserved market

- Broadband connections – only 8.75 mil
- Broadband - 0.2 million/month versus Mobile growth - 18 million/month
- Broadband penetration - just 0.74% versus Teledensity - 52.74%

- TRAI

Carve out specific market segments

- Fixed/nomadic broadband
- Class B & C cities
- Minimum 256 kbps on the downlink
- Retail & Enterprise both
- Data

Future roadmap

- Take best of both worlds – Data & Voice
- Build in flexibility at minimal upward costs for migration to 16m

Service differentiation with applications – not just a bit pipe

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Network Engineering Services in WiMAX

Focused groups – Centres of Excellence

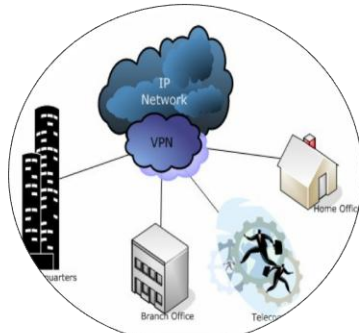**Training in WiMAX technology, tools and services**

Use experience from global operations

Train and maintain multi-skilled resources

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WiMAX – A Service Enabler

INTERNET

VPN

VIDEO

BUSINESS CONNECTIVITY

VOICE

GAMING

BACKHAUL

E-EDUCATION

E-GOVERNANCE

MOBILITY

TELE-MEDICINE

IP TV

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GTL's offerings

Retail or Enterprise: GTL's presence in all circles in India

Experience of Planning, deploying & servicing more than 15 WiMAX networks across the globe

KPI/SLA linked Managed Services to share operating risks

Existing ready-to-share telecom infrastructure, business models for active & passive sharing

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Conclusion

Positioning of WiMAX has to be different from cellular

Focus on segments needing:
- **High**
- **Stable**
- **Nomadic throughput**

Technology choice based on consumer demand & requirements rather than only perceived technical benefits

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Making a Better World