



U.S. Cable: New Strategies for a Competitive World

Strategies for U.S. cable companies to compete against satellite TV services and Telco IPTV as well as venture into mobile services and leverage their network by marketing to small and medium businesses.

The U.S. cable companies are facing increased competition for TV services. The satellite TV companies are continuing to grow and take video market share. The U.S. Telcos have started offering IPTV services that will make the Pay TV market even more competitive. Verizon's fiber based FiOS TV has now established itself and passed 1 million subscribers. AT&T VDSL based U-verse IPTV began to develop traction in late 2007. This report defines strategies that the U.S. cable companies can use to maintain their growth in this increasingly competitive environment



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Appendix A: Operator Overview¹²

Name	Type	Subscribers (M)	Employees (K)	Revenue	Strengths	Weaknesses
Comcast	MSO	21.9	90	30B	Size and good data/VoIP combination	Poor subscriber perception and lack wireless offering
TWC	MSO	13.5	43	16B	Size and good data/VoIP combination	Lack wireless offering
Cox	MSO	5.6	NA ¹³	NA ¹⁴	Privately held and low churn rate	Lack wireless offering
Charter	MSO	5.5	15.5	5.6B	Operates in rural areas with little wireline competition	Lack wireless offering and huge debt
Cablevision	MSO	3.3	14	6.4B	Advanced HFC architecture	Competes in NY area against FiOS
Bright House	MSO	2.4	NA ¹⁵	NA ¹⁶	Strong presence in the South East	Lack wireless offering
DirecTV	Satellite TV	16.6 ¹⁷ (U.S. only)	10	16.6B	Best HD offering	Video only play
Dish Network	Satellite TV	14	21	10.8B	Value player and low churn rate	Video only play
Verizon	Telco/MN O	42.4 (AL) ¹⁸ 63.7 (WL) ¹⁹	234	94B	Wireline and wireless combination (quadruple play opportunity)	High CAPEX FiOS and loss of primary line
AT&T	Telco/MN O	61.7 (AL) 70 (WL)	309	120B	Wireline and wireless combination (quadruple play opportunity)	Unclear video strategy and loss of primary line
Qwest	Telco	11.5 (AL)	37	13.8B	Presence in high growth states	Lack wireless infrastructure and financially weak
Sprint	MNO	52 (WL)	64.6	40.8B	Great spectrum position	Lack wireline infrastructure and weak execution team
T-Mobile USA	MNO	28.7 (WL)	36	17.2B	Best growth execution	Lack wireline infrastructure

¹² Best approximations as of Dec 31, 2007; Sources: Company websites, SEC filings and TelecomView Analysis, 2008.

¹³ As a private company COX doesn't release this information

¹⁴ As a private company COX doesn't release this information

¹⁵ Subsidiary of Advance/Newhouse – no breakdown of employee provided

¹⁶ Subsidiary of Advance/Newhouse – no revenue breakdown provided

¹⁷ U.S. only, about 4.6M subscriber in Latin America

¹⁸ AL stands for access line

¹⁹ WL stand for wireless

Appendix B: Glossary

The following terms and organizations have been referred to in the text.

Acronym	Definition
3GPP	3rd Generation Partnership Project
ADSL	Asymmetric Digital Subscriber Line
ARPU	Average Revenue per User (Usually monthly)
AWS	Advanced Wireless Services
BER	Bit Error Rate
Billion	1,000,000,000 (1,000 Million)
BPON	Broadband Passive Optical Network
BSS	Business Support System
BTS	Base Transceiver Station
CAPEX	Capital Expenditure
CATV	Community Antenna TeleVision
CDMA	Code Division Multiple Access
CM	Cable Modem
CMTS	Cable Modem Termination System
CNO	Cable Network Operator (See also MSO)
CPE	Customer Premise Equipment
CPGA	Cost per gross add
CRM	Customer Relationship Management
DAS	Distributed Antenna System
DBS	Direct Broadcast Satellite
DOCSIS	Data-Over-Cable Service Interface Specification
DS3	NA transmission standard for wideband communications
DSL	Digital Subscriber Line
eMTA	embedded Multimedia Terminal Adapter
EBIDTA	Earnings Before Interest Depreciation Taxes and Amortization
EPG	Electronic Program Guide
EV-DO	Evolution Data Only
FCC	Federal Communications Commission
FNO	Fixed Network Operator
GHz	Giga Hertz
GPON	Gigabit Passive Optical Network
GSM	Global System for Mobile (Communications)
HBO	Home Box Office
HD	High Definition
HFC	Hybrid Fiber Coax
HLR	Home Location Register
HW	Hardware
Hz	Hertz
INO	Integrated Network Operator



Acronym	Definition
IP	Internet Protocol
IPv6	IP version 6
IP/MPLS	IP/ Multi Protocol Label Switching
IPTV	Internet Protocol TeleVision
ISP	Internet Service Provider
ITU	International Telecommunications Union
kbps	Kilo bits per second
KDDI	Japanese Mobile Operator
kHz	Kilo Hertz
km	Kilometer
kW	Kilowatt
LLU	Local Loop Unbundling
LTE	Long Term Evolution
MAC	Media Access Control
Mbps	Mega bits per second
M-CMTS	Modular CMTS
MHz	Mega Hertz
Million	1,000,000
MNO	Mobile Network Operator
MPEG	Motion Picture Experts Group
MPLS	Multi Protocol Label Switching
MSO	Multiple Systems Operator
MTA	Major Trading Area
eMTA	Embedded Multimedia Terminal Adapter
MVNO	Mobile Virtual Network Operator
NGN	Next Generation Networks
NMS	Network Management System
NPV	Net Present Value
NPVR	Network Personal Video Recorder
NTSC	National Television System Company
NTT	Nippon Telegraph and Telephone Corporation
OFDM	Orthogonal Frequency Division Multiplexing
OPEX	Operational Expenditure
OSS/BSS	Operational Support System/Billing Support System
PBX	Private Branch Exchange
PCCW	Pacific Century CyberWorks Limited
PCS	Personal Communication Services
PON	Passive Optical Network
PSTN	Public Switched Telephone Network
PVR	Personal Video Recorder

Acronym	Definition
QAM	Quadrature Amplitude Modulation
QoE	Quality of Experience
QoS	Quality of Service
QPSK	Quadrature Phase-Shift Keying
RAN	Radio Access Network
RF	Radio Frequency
ROI	Return On Investment
SD	Standard Definition
SLA	Service Level Agreement
SMS	Short Messaging System
SOC	System On a Chip
STB	Set Top Box
TV	Television
UHF	Ultra High Frequency
U.S.	United States
VDSL	Very High Digital Subscriber Line
VoD	Video on Demand
VoIP	Voice over Internet Protocol
VPN	Virtual Private Network
Wi-Fi	Wireless Fidelity
WiMAX	Worldwide Interoperability for Microwave Access

ⁱ Communications Market in the USA, October 2007, Pyramid Research.

ⁱⁱ