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Verizon Telecom Overview

Verizon Telecom

• Operations in 25 states & D.C
• 71,400 employees (as of Jan. 2009)
• 99.9 percent in network reliability
• Average of 1 billion calls connected per day
• Nation’s largest all-fiber network connected directly to customers
• EOY 08 fiber network passes 12.7M premises which is equal to 40% of the total households in Verizon’s footprint
• Goal of 18M homes passed by 2010
Verizon Strategy

➢ To be a global leader in delivering innovation in communications, information and entertainment.

➢ Offer consumers, businesses, and government voice, data, and video services over superior wireless, broadband and global IP networks that meet customer demand for speed, mobility, security and control.

➢ To delivers the benefits of these advanced technologies and grow the company to drive the industry forward, which in turn creates value for shareowners, customers, and the communities they serve.

TV Picture that's "... RAZOR SHARP." — PC World, July 25 2007

Perfect for Cutting Cable.
Vision Statement

• Win customers by building wireless, broadband and global IP networks and delivering the innovative products, services, applications and content that transforms lives and empowers businesses and communities.
Strategic Imperatives

- Increase Revenue
  - Customer growth and retention
  - Bundle Services (voice, data, TV)
- Take Share from Competition
  - Exploit cable weaknesses
  - Outperform cable on customer service
- Provide the Best Customer Service
  - Installation flexibility
  - Same day trouble resolution
- Improve Profitability
  - Improve cost-to-connect
  - Volume reduction
- Increase Productivity
  - Improve installation efficiency
  - Systems Integration
- Create a Culture of Performance
  - Focus on personal accountability
  - Deliver strong results
FiOS Technology Strategy

**Bandwidth, Speed and Mobility**

FTTP and FiOS:
- Construction of the nation’s largest fiber-to-the-premises network
- Most advanced network being deployed in America today
- Delivering highest-quality Internet and video
- “future-proof” platform for innovative, next-generation services
- Bundling of Voice, Data, and Video
SHE (Super Head End) Dish Farms

- Bloomington, IL
- Temple Terrace, Fl.
  - Each consists of 20 stationary and 3 steerable satellite dishes

SHE Function

**Super Head End (SHE)**
- Obtain National Content via Satellite:
  - National Programs (i.e., ESPN, Lifetime, MTV, Weather channel, etc.)
- Content Consolidation and Grooming into the National Channel Lineup for Transport
- Conditional Access System (CAS)
  - Master customer database
  - Encryption keys creation/distribution
- VOD Content Ingestion/Encryption
FiOS Network Configuration

Video Hub Office (VHO)
- National Lineup Reception from the SHE
- Local Content Obtainment:
  - Local Channels (ABC, NBC, CBS, Fox, etc.)
  - Public, Education, and Government (PEG)
  - Local Ad Insertion
  - Local Data (Local Weather on the 8’s, TV Guide)
  - Emergency Alert System
- Local and National Content Consolidation, Grooming, Encryption into Broadcast Video for Transport
- Video On Demand (VOD) Content Storage and Distribution
- Interactive Programming Guide (IPG) Origination and Distribution
- Sports Program Blackout Management

Video Serving Office (VSO)
- Video (Broadcast and IP) is combined with FiOS Data and Voice for distribution
- Major Components:
  - Erbium Doped Fiber Amplifiers (EDFA)
    - Optical amplifiers to drive signals through FTTP Passive Optical Network (PON)
  - Wave Division Mux (WDM)
    - Combines voice, data, and video
Benefits of a Fiber Network

- Cable & Satellite Company are Threatened
- Verizon can Bundle FiOS with Wireless & LD
- Reduced Churn (voice line loss)
- Fiber Capacity is unlimited large bandwidth
  - Fiber connection delivers speeds of up to 50 Mbps
  - 500 all-digital channels and 14,000 video-on-demand titles
  - 100+ HD channels, and 1,200 HD video-on-demand titles each month
  - Compression of signal doesn’t take place with fiber
- Regulatory Advantages
- Pricing of FTTP and FiOS Components has dropped
Porter’s Five Forces

**New Entrants**
New threats low but Web TV is emerging

**Rivalries**
AT&T, Time Warner, Cable Vision, Comcast, Charter

**Supplier Power**
Verizon sets the standard on equipment needed, RFP’s sent from Verizon to vendor list

**Substitutes**
Customer not switching providers, Web TV

**Buyer Power**
Customer has option of choosing service provider
Performance Factors

- Premises marketed to as of Dec. 31, 2008
  - FiOS Internet 10M
  - FiOS TV 9.2M

- Customers as of Dec. 31, 2008
  - FiOS Internet 2.5M
  - FiOS TV 1.9M

- Net adds in Q4 2008
  - FiOS Internet 282K
  - FiOS TV 303K
Market Penetration because Verizon is offering bundled services to current legacy customers and giving customers a choice in switching from their traditional cable TV provider.
Verizon FiOS in moving into the STAR category…FiOS is forcing an existence into the traditional cable TV market.

- Total FiOS Net Add results for 1Q ’09: 596,869
- 1Q ’09 vs. 1Q ’08: up 13.5%
- Set historic high in March with 229,321 Net Adds. This is up 30.4% over February and 14.3% higher than our previous best month
The Technology S-Curve

- As new technologies are engineered network performance increases.
- Initial investment in new technologies are high but the ROI is planned during the strategic analysis of going forward with new network projects.
- As newer technologies product cycle matures, material, equipment, maintenance cost are reduced.
- FACTS: Fiber is limitless, enhance up/down speeds, Verizon forces vendors to keep prices low, fiber can withstand weather conditions better than previous copper networks.
The Product Life Cycle

- Verizon FiOS is in the Growth Stage
- FiOS making a strong presence in the video market
Timing of Entry

- Early to mid 90's an early version of FiOS called Fiber to the Curb was engineered but later failed.
  - Only successful in some area's
  - Equipment was bulky and expensive
  - Not enough knowledge around the technology at the time
  - Expensive for the customer, not enough demand for the technology

- FiOS Success
  - The long and short haul fiber networks were already in place
  - Customer's were tired of traditional cable providers needed a change
  - Technology more enhanced allowing vendors to build equipment smaller and cheaper
  - Fiber network build constructed to handle future technologies
  - Verizon already had the employee base to build and install FiOS
  - Verizon deciding to transition from a telecom company to a entertainment provider
First Mover Advantages/Disadvantages

**Advantages:** What Separates Verizon from Competition
- First company to connect fiber directly to homes
- Fastest broadband service provider
- First company to provide fiber-based digital TV to homes and businesses
- Highest bandwidth; superior picture and sound
- VZ honored for deploying new technology “on a scale unmatched in North America and elsewhere
- Unregulated services

**Disadvantages:**
- Large investment of building an all fiber network
- Convincing customers that Verizon is not only a telecom company anymore
- Getting into a well established market monopolized by cable TV providers
- Entering a market where monthly costs are already established and Verizon has the challenge of integrating service and driving efficiencies to offer a competitive pricing model to win over customers
Built or Buy? Decision Making

- Verizon’s choice to Built and Buy to extend their network
  - Merged with GTE to further extend network out West
  - Verizon already had backbone network in place
  - Verizon had the employee base and training on building a fiber network. They have been doing it for big business since early 90’s
  - This would be the first of its kind, fiber to the premise (home). Solely owned and monitored by Verizon
  - The new technology is not regulated as traditional copper telephony
- Verizon however outsources some of the function involving FiOS to cut cost and because they are not close to the core of Verizon’s strategy
  - Vendors supply equipment, cable, and material
  - Contractors are used to install cable underground and in high rises depending on the area contracts
  - Some IT functions, and computer support are in India
  - Quality audits are performed by contractors
• **Brand Selection:**
  - Customer compares Verizon’s triple play service to Cable TV providers (Comcast, TimeWarner, CableVision) triple play service. (Triple Play Voice, Data, Video)

• **Sampling:**
  - Customer can review details on company web sites, for Verizon they can visit Kiosks in Malls to try data speeds and view TV picture quality, and 15 day trial period to cancel without penalty.

• **Entrenchment:**
  - Customer places service order via phone, or online ordering, through D2D sales force and schedules installation date.

• **Lock-in:**
  - Installation is complete, a 2-yr contract is signed, and after the 15 day grace period early disconnect charges apply (TP $179 DP $119).
Lock-in and Complementary Products

FiOS Service Contract
Signed by customer

Customer is locked into a 2yrs service agreement

Customer must decide what complimentary products or services to buy or rent

**TV Products:**
- Set top box (standard, HD, HD DVR)
- Router type
- Data Speeds
- Video Packages

**Internet Product:**
- Internet Security Suite
- Online Backup & Sharing
- Premium Tech Support
- Expert Care Protection Plans
- Games

**Voice Products:**
- Voice Mail
- Caller ID
- Call Waiting
- Inside wire MTCE Plans
“To move an industry forward, technology has to address the things that people care about, deliver real benefits and solve real problems. If we can use our technology to make their lives better, the potential – for us and for our society is unlimited.”

Dennis F. Strigl, President and COO, Verizon
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