



Advisory Report

Will Demand for Housing or Video Determine the Fate of Fixed Broadband Access in 2009?



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■ Summary

Unlike previous recessions, including tech/telecom-centric recessions, the balance sheets of most telco operators around the globe are healthy today. Thus, a focus on reducing operating expenditures is not likely to be as great as improving revenue generating capabilities. Video is the most likely candidate to drive telco operator revenue growth into the foreseeable future, and improving the availability of broadband access will be the most likely way in which operators, around the globe, can expand the proliferation of media rich applications and services that will grow average revenue per user (ARPU).

■ Current Perspective

At the end of 2008, telecom network equipment vendors and service providers have two key indexes that they can look at to help predict economic trends for the coming year. The most recent Standard & Poor's/Case Shiller index of housing prices in 20 U.S. metropolitan areas showed that the price of single family homes fell 18 percent in October from a year earlier, an indication of the continued negative impact of the global financial crisis on potential broadband subscriber growth rates and subscriber purchasing power. Evidence of slowing in the broadband market can also be seen in the growth rate of U.S. broadband subscribers, which was roughly 10% from Q3 2007 to Q3 2008, as opposed to 16% growth in the prior year's comparable period.

On the other hand, Cisco's Visual Networking Index Study predicts that global IP traffic will have increased six-fold between 2007 and 2012, primarily driven by video, an indication that consumer demand for bandwidth intensive video applications continues unabated. Other studies also support the thesis of global IP traffic growth surpassing the zetabyte (i.e.,

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ten to the 21 bytes) mark early in the next decade. Given these two opposing prognoses, how should network equipment vendors proceed with the market positioning of their fixed broadband access solutions?

From 40,000 feet, it appears that most vendors ought to be “cautious” about their prospects for 2009 – not cautiously “optimistic” – given the lack of visibility into operator capex budgets across the board. However, at lower altitudes, selective optimism is warranted, particularly given the selective targeting by operators to focus on key areas that will generate revenue. From the perspective of fixed broadband access equipment vendors, video will be a key driver of revenue growth for operators, and thus a driver of related infrastructure equipment sales. To be clear, this does not imply that consumers will necessarily stay home and order more video-on-demand (VoD) in a down economy. In fact, the major cable service providers are already preparing to offer lower-priced/non-premium bundles to subscribers seeking payment relief, and have hinted at worrying trends such as slower digital video recorder (DVR) uptake rates.

Yet, taken in the context of an evolution in the way TV services are consumed, video is becoming a key driver of revenue growth. For example, consumers are clearly demanding more content from multiple sources; higher quality experiences, such as high definition (HD) video; and interactivity, such as Web 2.0 and social networking capabilities. Improving the loyalty of subscribers (if at all possible) through an enhanced video consumption experience will prove to be the most sustainable model for operators to generate revenue growth in 2009, and beyond. For example, in the U.S., while most top tier cable providers reported losses of basic cable subscribers, their remaining digital customers upgraded to more expensive digital packages, generating more ARPU.

Unlike previous tech/telecom recessions, the balance sheets of most telco operators around the globe are healthy. Thus, a focus on reducing operating expenditures is not likely to be as great as improving revenue generating capabilities. True, sensible operators will always look to keep their expenditures in-line with their expected revenues in order to preserve profit margins. However, the biggest bang that all are looking for is in top-line growth. Therefore, despite the overall decline in the housing market, telcos will selectively direct 2009 capex to improving access availability, arguably the largest continuing challenge to applications proliferation, which limits the capability of telco operators to deliver premium end-user services that will generate enhanced revenue.

From a broadband access infrastructure perspective, this entails ever more directed investment in FTTx technologies that can carry larger bandwidth loads, as well as copper plant upgrades to flavors such as ADSL2+, bonded ADSL2+ and VDSL2. For instance, in Europe, most telco carriers are selecting ADSL2+ as a migratory method to upgrade their DSL plants and meet customer demands for high bandwidth applications and services. Whereas VDSL2 deployments are getting under way in markets where there is a high penetration of DSL, such as with TDC in Denmark and DT in Germany. At the same time, FTTx adoption is growing in countries like France, the Netherlands, Switzerland, and even the United Kingdom, as a result of both competitive and regulatory drivers. And in the U.S., both AT&T and Verizon have greatly expanded their fiber footprints, respectively passing more than 14 million and 12 million homes.

In the U.S. broadband infrastructure builds may ultimately benefit from direct U.S. government investment and tax incentives from the incoming Obama administration's overall infrastructure spending plans, but the operator revenue benefits from the still undetermined federal government spending in this area will not likely become realized until 2010 and beyond.

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Recommended Actions

Recommended Vendor Actions

- Broadband access equipment vendors should continue to train their marketing focus on promoting how their solutions enable operators to manage, scale and monetize video applications. For example, by concentrating functionality at the network edge, integrated multi-service devices can improve network scalability and flexibility, critical elements for dealing with dynamic video-based applications.
- Vendors should maintain their promotion of service convergence and efforts towards architectural transformations in order to help operators eliminate network silos, such as between residential/enterprise, voice/data, and fixed/mobile. In particular, vendors can promote streamlined architectural approaches that comprise, for example, a network layer of intelligent architecture, a services layer for subscriber management and control, and an applications layer for the support of rich, interactive applications.
- Broadband access equipment vendors need to follow the lead of companies such as Alcatel-Lucent and Cisco, and promote their own efforts towards the provisioning of platforms that enable the delivery or revenue generating rich media services. For instance, similar to Alcatel-Lucent, Ericsson and Nokia Siemens Networks can promote their own SDP/IMS capabilities for application enablement. Meanwhile Juniper can promote its own IP-based capabilities in contrast to Cisco, in order to advance the capabilities of its platform to rapidly meet operator demands for new services and features.

Recommended User Actions

- Operators need to evolve from their telco “service” provider roots and embrace the challenges of becoming a video “experience” provider. By focusing on the experiential quality of video application delivery, operators can find new areas of competitive differentiation that will contribute to growth in market share, ARPU and customer loyalty.
- To meet their expectations and requirements for bandwidth and advanced services delivery for revenue generating applications, telco operators should continue evaluating the various next-generation fixed access technologies including fiber-fed DSL systems, and FTTP, alternative and supplementary solutions such as WiMAX, as well as evolutionary roadmaps such as 10G GPON, WDM-PON and LTE.





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Coverage areas include:

CMTS – Cable modem termination systems (CMTS) are cable access platforms that are deployed at the head-end or distribution hub of the cable operator network to perform termination of multiple subscriber cable modem connections, and can also perform additional networking functions such as aggregation and edge routing.

DSLAMs – Digital subscriber line access multiplexer (DSLAM) solutions include broadband access platforms designed for delivering DSL services of central office (CO)-based, remote terminal (RT), and outside plant (OSP) platforms that enable operators to deploy DSL broadband access to both business-class and residential customers over the existing copper infrastructure.

FTTP – Fiber-to-the-premise (FTTP) solutions include both passive optical networking (PON) and active or point-to-point Ethernet FTTP solutions and technologies, both of which leverage optical line terminal (OLT) platforms at the operator CO in conjunction with optical network terminal (ONT) solutions at the customer premise.

IP Services Platforms – IP services platforms complement carriers' existing access and backbone equipment by providing a single service delivery point to execute network functions such as broadband remote access server (BRAS), aggregation, subscriber management, and the provisioning and billing of IP-based services.

DLC/MSAP – Digital loop carrier/multi-service access platform (MSAP) solutions are purpose-built telco access platforms designed for OSP environments such as RTs to extend both voice and data access services to subscribers located beyond the serving area of an operator CO. The DLC/MSAP market segment includes next generation DLC (NG DLC) platforms that support legacy GR-303/V5.2 network interfaces for interworking with the PSTN and packet-based broadband loop carrier (BLC) solutions which support multiple broadband interfaces as well as traditional narrowband interfaces and capabilities.

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