



Virgin Media Next-Generation Access Strategy

Residential Connected Life Experiences



EXECUTIVE SUMMARY

COMPANY PROFILE

Virgin Media is one of United Kingdom's leading entertainment and communications cable services providers with almost 10 million customers. The company provides television, telephone, and broadband services to domestic as well as business customers.

COMPANY HISTORY

The company was formerly known as ntl Telewest following the merger of NTL Inc. with Telewest Global, Inc. in March 2006. In July 2006, ntl Telewest completed its acquisition of Virgin Mobile. The combined company relaunched as Virgin Media in February 2007.

Challenge/Opportunity

Virgin Media needed to transform its network to provide highspeed broadband, prepare for the long-term development of video/consumer services, and gain further differentiation from its telco competitors. It had the following reasons to develop a long-term strategy for its network:

- To deliver increasing volumes of video traffic effectively. Over the course of 2009, it experienced around 750 million Video on Demand (VoD) views. This volume is expected to continue to grow exponentially.
- To manage the consequent increasing operating expense (opex) costs and, if possible, reduce them. This was

particularly important, because the company could not pass on the costs of serving VoD to consumers.

• To deliver higher speeds compared to the competition (British Telecom (BT) and other telcos on BT's Openreach network).

Counter to these challenges were the significant opportunities available to Virgin Media that it has quickly moved to capture by upgrading to DOCSIS 3.0:

Opportunity to gain a significant lead over its telco rivals to deliver high-speed broadband of 50 Mbit/s.
 Combined with more aggressive marketing of speeds to the right segments, this could result in an increase in broadband market share. By the end of 2009, the company had upgraded its network to 12.5 million homes (about half of U.K. households) and is offering a choice of 10/20/50 Mbit/s to customers. The 50 Mbit/s offer places it well ahead of many competitors in terms of broadband speeds (the advertised U.K. average is about 20 Mbit/s). Although BT offers 40 Mbit/s (BT Infinity), this is currently available to a much smaller customer base.

- Cost and speed advantage over Fiber to the Home (FTTH) deployment by competitors. Virgin is looking to pre-empt BT by launching higher speed broadband speeds of 100 Mbit/s or more in the next 18 months. It has already launched a trial of 200 Mbit/s downstream/20 Mbit/s upstream in Kent in May 2009.
- Virgin also regards the shift to NGA as an opportunity to increase network reach to new green and brown field sites with high revenue potential. By 2011, it hopes to have reached 13 million households.

Alliances/Partnerships

- Virgin Media has worked with the Cisco Advanced Video Services group to develop its video delivery
 platform. It has deployed the Cisco IP Next-Generation Network core and edge routing and switching,
 digital video head end solutions, and system management and monitoring.
- Virgin has partnered with TiVo for its user interface software and set-top boxes. Virgin has exclusive distribution rights for TiVo services and technology in the United Kingdom.

"Two years ago, when we were testing 50 Mbps, you would have asked what that was needed for. In two years' time, where people are now asking about how many people are taking up 50 Mbps, they will be asking what is the take-up of 200 Mbps."

- Neil Berkett, CEO, Virgin Media

See quote source

Strategy

Virgin Media has moved quickly to upgrade its whole network to DOCSIS 3.0, implement a new video delivery network, and ready itself for video growth and convergence. Its network was fully upgraded by the end of 2009. It has been driven by the following factors:

- Virgin Media is taking a holistic and long-term view of how it delivers video and helps ensure quality for its
 increasing number of triple-play (and eventually quad-play) customers. It is building on a key differentiator,
 the fact that it can guarantee quality of service (QoS) for multiple video channels due to its ability to provide
 dedicated channels by using both broadband and TV spectrum. It can engineer its network even better by
 adding channels and spectrum and removing splits.
- It is seeking to both engineer its network for increased on-demand and interactive video content and to differentiate from BT by helping ensure a faster deployment and a better quality consumer experience.
- It believes that "separation of services is hugely important." The emphasis here is on separation in the
 back-end for dedicated bandwidth; for example, by delivering four separate channels to the set-top box
 (STB): one for live video, two for recording, and one for interactivity, the speed of broadband access does
 not degrade when high levels of video are being consumed, which is particularly important because its
 customers consume about 2.5 times more bandwidth than DSL customers.
- As far as the consumer experience, the "front end," is concerned, the company's approach is to utilize a
 converged multiaccess platform (Connection Management Access Protocol [CMAP]) to deliver video to
 STB developed in partnership with TiVO.
- Virgin heavily markets the fact it actually delivers higher-speed broadband than its competitors: a
 differentiator at a time when there has been heavy criticism from the press, user forums, and the

Advertising Standards Authority for the large discrepancy between advertised and actual broadband speeds.

Success Factors/Metrics/Monetization

We can gauge Virgin Media's success in deploying its next-generation access strategy from the following results:

- Virgin Media is experiencing significant growth in on-demand video traffic. Monthly VoD views grew by 35 percent between Q1'09 (55 million) and Q4'09 (74 million). By December 2009, 59 percent of customers (2.3 million) were regularly viewing content on demand; the majority of views was for catch-up services such as i-Player, and 11 million movies on demand were viewed during the year.
- Virgin has been successful in migrating customers to higher-speed broadband, which has contributed to an uplift in ARPU due to its tiered broadband pricing approach. 43 percent of Virgin's customers are now on 2-10 Mbit/s with an average real-time speed of nearly 8 Mbit/s. 40 percent of customers are on 10 Mbit/s, and 15 percent on 20/50 Mbit/s.
- Virgin is gradually growing its consumer revenues. In Q4'09, revenues totaled £796 million; a 4.9 percent increase on Q4'08 revenues of £759 million with a growth of 9.5 percent in overall gross margin to £566 million.

Company Background

• Read Virgin Media overview



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Printed in USA FLGD 10307 03/12