

Case Study

Enabling a Competitive IPTV Rollout

How British Telecom is using the DVR as a fundamental component of winning in broadcast TV

Telephone Companies Emerge as Broadcast TV Operators

The telephone business is not what it used to be. Telephone companies' traditional wireline business continues to suffer intense competition from wireless and VoIP services. In-Stat forecasts that consumer voice service revenues for the U.S. will have a CAGR of -8.5 percent between 2004 and 2009.¹ The worldwide market for wireline voice services is experiencing similar declines.

It's no wonder that telephone companies worldwide have announced plans, or are evaluating the opportunity, to enter the broadcast TV market with an IPTV (Internet protocol television) strategy. For many, making the transition from basic telephone service provider to triple-play service provider is a fundamental matter of long-term survival. Survival or not, competing head to head with established cable, satellite and free-to-air service providers is not for the faint of heart. The investment required to build the network, acquire the content and develop services to deliver a compelling, competitive product is a massive undertaking. The potential reward is seductively lucrative.

One company that seems up to the challenge is British Telecom (BT). With a customer base and a brand that has opened the doors to content acquisition, BT is now developing a strategy to win customers with attractive price points, competitive content and differentiated features.

How Do Key Customer Needs Impact Strategy?

In order to offer customers a robust choice to the status quo, British Telecom's BT Vision group has focused on developing a clear understanding of what customers want and then moving to meet these needs better than incumbent providers. BT's fundamental findings of what customers are looking for are summarized by these key needs:

- Convenience
- Choice
- Control
- An alternative to established platforms
- No compulsory subscription²

To Learn More:

BT Vision from British Telecom

Visit the company's Web site at www.btvision.bt.com/.

Seagate DB35 Series drives

For more information on Seagate® DB35 Series drives for DVRs, with capacities up to 750 GB, visit www.seagate.com or email dvrinfo@seagate.com.

¹ Wireline Remains in Decline: US Wireline Service in 2005, *In-Stat*, 2005

² "Developing a hybrid STB, what will BT's product look like?", James Soames - BT Vision, May 8, 2006, 2nd Annual IPTV and Telco Triple Play Forum

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Of these five key customer needs, three of them are addressed, at least in part, by the inclusion of a DVR in the BT set-top box. BT is so focused on meeting customer needs and driving customer satisfaction that they are including a DVR equipped with a 160-GB hard drive in every BT Vision set-top box installed. What's even more remarkable is that BT Vision customers do not have to agree to monthly service fees to sign up for the service!

How does BT justify what to some may seem like a reckless and expensive customer acquisition strategy? BT is betting their strategy will pay off. By building a strong base of happy, triple-play customers, driving customer satisfaction, and reducing churn, BT expects a handsome return on the investment. The DVR component of their strategy is a perfect example.

The Love Affair With the DVR

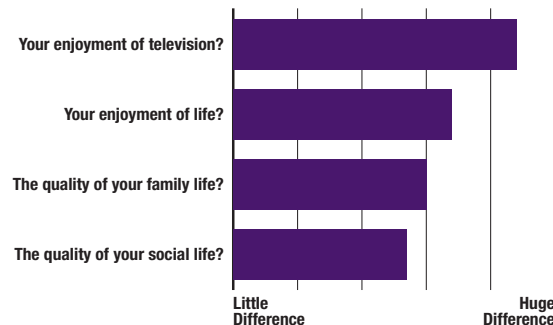
A 2004 Forrester Research study of 588 DVR users provides dramatic data showing that the DVR is one of the best-loved consumer electronic devices in history—emphasis on the word *love*. According to Forrester, when DVR users were asked to provide free-form statements of how they felt about their DVR, one user in five used the word *love* in their description. This finding was so surprising to Forrester researchers, they commented as follows:

“In seven years of consumer surveys at Forrester, we’ve never seen a device that engenders such strong, committed feelings as the DVR.”³

Consumers’ love of their DVRs shows up in other key statistics in the Forrester research. DVR users report a dramatically improved level of satisfaction with watching TV compared to non-DVR users, averaging a rating of 4.4 on a scale of 5. But wait! These same users rate the difference the DVR makes in the *overall enjoyment of life* a 3.4 out of 5!

These incredible levels of customer satisfaction are exactly what BT Vision is seeking to tap in to. The DVR provides a powerful tool to impact three of the top customer needs identified by BT: convenience, choice and control.

How much difference does the DVR make?



The DVR provides convenience in the TV watching experience like no other device in television viewing history. Users report almost universal happiness with the ease of choosing and then programming their DVR to record their favorite shows. In Forrester’s research, 91 percent of all DVR users say the main reason they use the DVR is “it makes recording shows easier.” Ease of recording shows allows DVR users to watch the shows they want on their schedules, without being chained to a broadcast schedule.

So what about choice? Once the challenge of allowing the average TV viewer to easily record their favorite shows is overcome, consumer choice expands dramatically. Advanced algorithms in today’s DVR set-top boxes that learn users viewing preferences and then record similar programs add an exciting element and even more choice to DVR users’ menus. Expanded choice among DVR users is again underscored in the Forrester research, which shows that real-time TV viewing typically drops by 60 percent.

Added control over viewing content is the pinnacle of what the DVR delivers to TV viewers. With simple programming comes added content on demand, providing customers more choice. However, that does not capture some of the DVR’s most popular features, commonly referred to in the business as *trick plays*. The DVR provides users with the same basic features initially introduced with the VCR: the ability to pause, fast-forward and rewind the video. As the fundamental enabling technology of the DVR, the hard drive takes trick-play features to a whole new level. Pausing live TV and skipping commercials are two advanced trick-play functions that absolutely delight customers and provide them previously unknown levels of TV viewing control.

³ The Mind of the DVR User: Acquisition And Features - Forrester Research Inc, 2004

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Pausing live TV simply involves freezing the current live TV broadcast on the screen, while the hard drive continues to record the live content. When users are ready to watch again, they simply pick up the remote, press play and the broadcast continues right where they left off. With a DVR, a phone call, unexpected visitor or other interruption does not have to mean that viewers miss their favorite shows. It's pretty clear why users consider this feature a clear winner in the category of increased viewing control.

Although controversial with advertisers (and therefore sensitive for service providers), skipping commercials in pre-recorded content is another feature that scores high with DVR users. In Forrester's research, 46 percent of DVR users rate skipping commercials as the main reason for using the DVR, again highlighting the desire for users to have added control in the TV viewing experience.

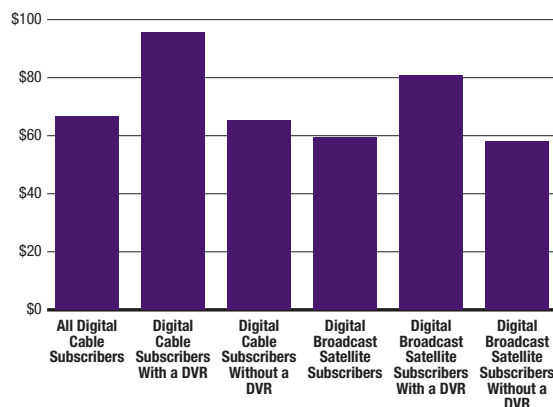
Beyond Customer Satisfaction to the Bottom Line

While the DVR adds value to the top three BT customer needs of convenience, choice and control, there are other benefits to making every customer a DVR customer. For BT, they are using the DVR to bolster the bottom line.

DVR users are not only more satisfied customers, they tend to be higher revenue customers as well. In a survey of 3400 U.S. home Internet users, DVR customers paid an average of \$11 to \$15 more than their non-DVR counterparts.⁴

What Do TV Subscribers Pay Per Month?

(U.S. Home Internet Users)



⁴ Managing the Digital Home, a survey of 3400 U.S. home Internet users 2006 Parks Associates

Furthermore, these DVR customers tend to be very *sticky*, seldom changing services and almost never choosing to stop using a DVR altogether. Once again data from Forrester Research demonstrates this loyalty to the DVR, showing that only 2 percent of the respondents in their research no longer use a DVR.

Highly satisfied customers that generate more revenue and churn less—BT's strategy is starting to make some sense. However, when you make an investment like giving a DVR to each and every customer, you really should try to squeeze every bit of value out of those boxes.

BT is leveraging the investment in the DVR for a variety of other revenue-generating features. One example is downloadable content to the BT Vision set-top box and the PC. This will provide users, in addition to their standard VOD service, more choice to acquire and view content in either a rental or ownership model. This service leverages the "IP" component of the IPTV system by making this content available through a standard web service and accessible through a BT Vision set-top box using a walled garden strategy. A news release on the BT Vision web site describes the service as follows:

"Content will be available for purchase and viewing on PC from the BT Vision store, a new film and television download service to be launched on 31st July and located at www.bt.com/btvision and for purchase or rental on the BT Vision TV platform when BT launches its next-generation TV services in the autumn."⁵

Enabling download services to BT Vision customers not only provides more choice and drives revenue, but it also provides a great opportunity to market to PC-only customers coming to the BT service for content intended for PC viewing only.

Beyond Revenue to Operational Efficiency

Finally, BT has recognized the benefits the DVR provides to help them more efficiently deliver content and manage customer bandwidth effectively. For example, many BT Vision customers will be somewhat bandwidth-

⁵ "New independent video-on-demand deals for BT Vision": <http://www.btvision.bt.com/newsarticle-150806.aspx>

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constrained, having only about 2-Mb/s downstream speeds. This bandwidth will support only two or three simultaneous broadcast channels, so BT is enabling multi-room DVR viewing using non-DVR set-top boxes. This allows users in other rooms of the home to access the content on the DVR, providing them with a huge selection of *virtual channels*.

Video-on-demand (VOD) services is another area where the DVR helps with efficiency. While VOD is another must-have feature offering customers choice and convenience, a pure VOD implementation forces operators to provision a dedicated stream for each viewing instance. Using the DVR to facilitate a near-VOD implementation allows operators to multi-cast VOD content to a block of customers. The DVR buffers the content on the hard drive where the consumers view it at their convenience with all of the standard trick-play features of the DVR. Downloaded content can time out after the prescribed viewing period or the consumer could be provided the opportunity to purchase the content, providing yet another revenue source.

What Might the Future Hold?

While the research clearly points out the love affair users have with their DVRs, there remains other, untapped potential for operators to exploit the storage investment in their DVRs. The user community has long wanted to see the gap closed between video-focused entertainment devices and other multi-media devices. The storage which enables the DVR could easily be utilized to enable music jukeboxes, serve as a platform to share and organize digital photos and home movies, and even provide basic functions traditionally reserved for the PC, like email, gaming and web surfing.

As competition for customers becomes more intense and choices to customers broaden, expect broadcast service operators to become more focused on customer wants and to push the envelope on innovation. It seems likely that the love affair with the DVR will continue and become more passionate than ever.

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