

IPTV: Securing Tomorrow

Traditional television platforms are designed for unidirectional (one-way) and shared broadcast programs. This traditional programming limits interactivity and personalized television services. Therefore, in the last 30 years, excluding enhancements in audio and video quality, television viewers have experienced very few improvements.

On the contrary, the Internet is designed for bidirectional (two-way) interactivity. Because the Internet introduces a new medium for content creation and delivery, the amount of content has exploded, providing viewers with an almost limitless amount of content "choice." In addition, the web, which provides "on demand" access, has created more "convenience" for viewers. As a result, the Internet has formed a "content on demand" mind-set.

According to the Consumer Electronics Association - in 1975, the average US home had 1.3 consumer electronic devices. In 2006, the average US home had increased to 25 consumer electronic devices - most of which had video capabilities.*

To keep up with the "content on demand" mind-set and to provide video services to growing consumer electronic devices, next-generation television providers have created IPTV (Internet Protocol Television). By following the path of the Internet [a medium for interactive content delivery], they can provide web capabilities to their television viewers. IPTV is intended to meet the expectations of Internet Era consumers.

IPTV provides interactive digital television and video services over a secure and improved IP (Internet Protocol) network. It utilizes existing Internet broadband architecture to provide personalized television and entertainment services to each consumer.

IPTV not only provides consumer benefits but also provides business benefits to television service providers. Its scalability offers the capacity for future growth. Its flexibility and interoperability provide the ability to implement more revenue generating features. Most importantly, its simplified architecture increases the speed of time-to-market and reduces the deployment cost of new television services. However, in the long run, all of the business benefits of IPTV trickle back down to the consumer in the forms of interactivity, richness in features and cost-effectiveness.

Advantage of IPTV

IPTV delivers a range of television and entertainment services when consumers want them with end-to-end quality assurance. Some of the key IPTV features are:

- Interactive services and search capabilities similar to the Internet
- On Demand content with Trick Play (video player functionality - start, stop, pause, fast-forward, rewind)
- Personalized television (customized channels, user interfaces, and controls)
- Blended television, phone and web services (multiplayer gaming, video phone, caller ID, voice mail, personal content viewing and more)
- Easy "Three-Screen" integration and migration (television, personal computer and mobile devices)
- Localization (local and addressable messages and advertisements)
- Remote education (video lectures-on-demand, video focus groups and discussion panels)
- Remote healthcare visits (video conferencing and transfer of data)
- Online voting, online shopping, advertising models
- Simple and cost effective deployments relative to traditional video service platforms
- More efficient network use

Video on Demand (VOD): Convenience

The capability to view content on-demand is rising. Because household schedules are becoming busier, consumers expect to control what they watch, when they watch it. As a result of these expectations, one of the most popular applications enabled by IPTV is Video on Demand (VOD).

Video on Demand

(VOD) provides individual subscribers with access to over 1,000 hours of television programs and new release movies. Subscribers can select from a broad range of premium programming (like HBO) and movies (without leaving the house or incurring a late fee) at their convenience. VOD also offers the ability to start, stop, pause, fast-forward and rewind these programs and movies with a remote control. It comes in several different forms:

- **Basic Video on Demand (VOD):** Consumers can select movies and television programs and begin viewing them at any time with start, stop, pause, fast-forward and rewind functionality as part of the service.
- **Subscription Video on Demand (SVOD):** Consumers can subscribe and watch a selection of movie and/or television program with VOD functionality over a set period of time.
- **Free on Demand (FOD):** Consumers can choose their favorite shows, sports and music events on their schedule for free.

In response to the growing on-demand environment, television service providers must offer VOD to enhance their consumers' experiences. By offering VOD, consumers will be able to watch what they want, when they want, and advertisers will be able to provide more personalized advertisements. The VOD platform also will create new business models for providers and advertisers. For example, consumers will be able to select advertisements, watch a detailed version later, answer a few questions and receive credit for that product or for more on demand services.

Connexion Technologies' Impact

In an attempt to enhance its video offerings, Connexion is shifting from digital TV to the IP network. This will enable Connexion to offer its customers all of the benefits that IPTV and VOD can provide. By combining IPTV with its powerful, high- bandwidth Fiber to the Home (FTTH) infrastructures, Connexion Technologies not only will offer its customers remarkable quality, convenience and choice but also will continue to lead the industry.

[*Kanellos, Michael. "Home Electronics for the Holidays." CNET News. 15 Nov 2006. 07 Jul 2007](http://news.com.com/Home+electronics+for+the+holidays/2100-1041_3-6135955.html)
http://news.com.com/Home+electronics+for+the+holidays/2100-1041_3-6135955.html