

IPTV Technologies and Deployment Challenges



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Outline

What is IPTV?

Market Drivers

Triple Play/IPTV – A Quick Introduction

Technology Enablers

Network Transport Architectures

Challenges

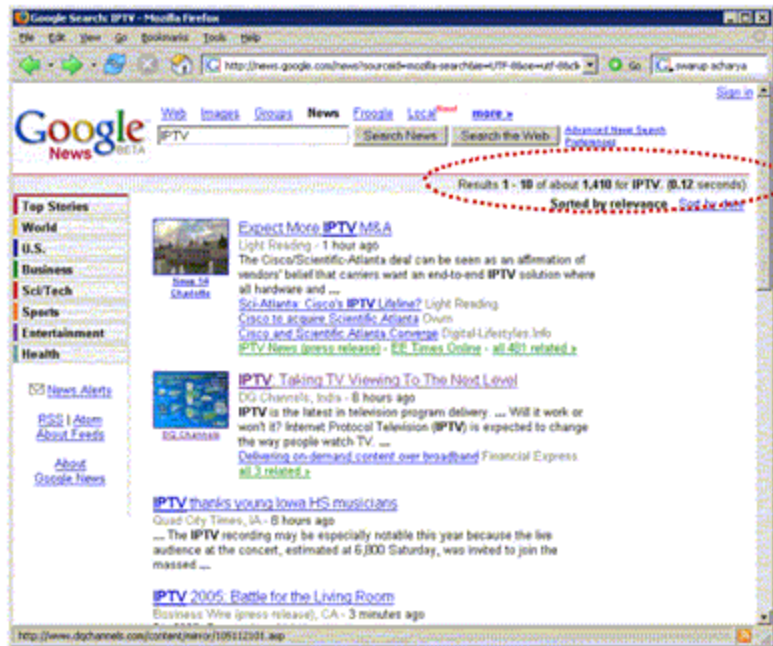
Competitive Threat

IPTV Vendors and Service Provider Strategies

Conclusion

IPTV Buzz

Its pouring IPTV in the press..



Unmanaged IPTV

Video over Broadband data network, or, Internet

- “Broadband Television”, Or, “TV over Internet”

Two options:

- Video over PC
 - E.g., AOL TV service In2TV
- Video on TV (requires special set-top box)
 - E.g., Akimbo, DaveTV

Best-effort service for streaming/live broadcasts

- Providers have no control over the access network

Available since the early Internet days

Managed IPTV

The IPTV buzz is really around **Managed IPTV**

- TV service from Telcos (or, Cable Cos)

Service over “managed” access network

- Service provider controls access equipment outside or, even, inside the home
- Multiple access technologies --- DSL, Cable, FTTx

Service, quality guarantees from provider

TV on PC may also be offered

- e.g., Time Warner trials

Telco IPTV: TV from Telecom Providers

Traditional telecom providers starting video services

- Well publicized trials, M&As
 - E.g., Siemens-Myrio, Cisco-Scientific Atlanta

In US, two very different approaches:

- RF over Fiber (similar to Cable network)
 - Verizon's FiOS
- IPTV over hybrid fiber, DSL
 - SBC, Bell South

Even greater activity in the international market

- Asia Telcos undisputed IPTV leaders, Europe follows
- Bell Canada, FastWeb, PCCW (Hong Kong)

More details on specific deployments later in tutorial

Market Sizes

Market analysis points to significant revenue and customer growth over next 5 years

Global growth prediction (MRG., Inc, Aug 2004)

Year	Subscription Forecast (Millions)	Revenues
2004	2.1	\$685M (Europe + Asia: 56%)
2008	27	\$15B (Europe + Asia: 80%)

Lightreading.com 2010 forecast: 65M customers, \$21B Telco equipment investment.