

Targeted advertising moves beyond the fold of American cable

Inserting a targeted advertisement (called "ad-insertion") involves integrating either a "local" or – in extreme cases – a customized spot in the current TV program.

Cable's privileged position in the US

This principle began to spread to cable in the United States during the 1980s as cable operators were the only players to know their customers and able to group them by geographical sector. Analog programs are broadcast from a headend to a set of subscribers in a given geographical area. Today's technologies are fully digital and use standards set up under the auspices of the SCTE (Society of Cable Telecommunications Engineers) for defining formats, APIs, and system



PV1000 from Packet Vision, a targeted advertising device

interoperability between the various players. The all-broadcast model was transformed into a mixed model with an interactive portion following both the appearance of middleware (OpenTV, Mediahighway, MHP, HTML browsers, Flash, etc.), and the development of the reverse channel – initially via a telephone modem or proprietary cable modems from Scientific Atlanta (acquired by Cisco) or General Instrument (acquired by Motorola).

The IP takeover for Europe

This business was confined to North America for cultural reasons: European TV stations were government controlled for many years, and "intensive" advertising was less well accepted than in the United States. Moreover, networks were built by the national phone company (recall the disastrous "cable TV plan" in France). In the end, European cable operators never adopted the system.

Today the emergence of IP technologies has changed the situation with the convergence of services offered by various operators (triple play). Cable operators use the DOCSIS standard to provide personalized content and telephony to their customers, while telcos provide TV over IP (IPTV) along with their traditional telephone/Internet offer. If we remain on a broadcast model, ad-insertion technologies can also be used for IPTV. As IP operators know their customers at least as well as cable operators, models have totally converged. In the end, the pipe is of no importance: the telephone network or HFC (cable) today, fiber optic tomorrow.

A new market for satellite or all-digital operators

It is obvious that the cable-xDSL revolution represents a major challenge for satellite or all-digital TV operators. That being said, they do retain some important advantages. Cable and fiber optics are not ready to move out of the city, and xDSL technologies also have their limits (such as bandwidth limitations if you are not located near a DSLAM center).

Satellite or all-digital TV on the other hand cover large geographical regions, and over the past few years have revealed their secret weapon: the hard disk (also available in cable or ADSL decoders) and more importantly the DVR (tape recorder) function. In satellite TV (and to a lesser extent in all-digital TV which is often free), the disk provides a means for pushing disk contents in pay-per-view mode. And why not targeted advertising, by including triggers in the stream?

Fresh air on the horizon?

Facing traditional players such as Adtec, Seachange, or Terayon, more recent arrivals have tried to stake out a position in the ad-insertion market by targeting IPTV. This is the case of the British firm Packet Vision, created in 2004, which offers targeted advertising servers that IPTV operators can integrate in their networks, as well as administrative and data mining tools for coordinating campaigns and measuring their impact.

Finally, as is often the case, Microsoft is never far behind. It is offering Windows Media-based solutions targeting TV over the Internet. We will wait and see if, as for middleware TV, the Redmond giant will take the plunge and try to win out by combining the IPTV segment with its MSTV offer.

Today it appears the technical conditions are in place for targeted ad-insertion, driven by operators' search for new income streams. All that remains is for the industry to find the appropriate business models so that all the players can benefit from the situation.