



**- a thinkpiece from pjb Associates**

## Towards Personal Digital Aggregators on TV

People started to be able to personalise their viewing habits on the TV when digital video recorders (DVRs) or personal video recorders (PVRs) started to become available around six years ago. TiVo took the lead in the USA and the UK with a device that not only recorded TV programmes onto a hard disc but could “learn” a viewer’s preferences and automatically record programmes that it thought were going to be of interest. It is also possible to add keywords like the names of a film star or a country you plan to visit and the device will have a go at finding what you want and recording programmes that it thinks may be of interest for you. Other satellite TV providers like Sky in the UK and Italy and a few cable TV providers are also now providing similar devices.

However, this is only the start of personalisation. The very rapid roll out of high speed broadband to homes across the world is creating new possibilities for the development of IPTV or Broadband TV that could enable the TV to become a truly personalised device – enabling the viewer to watch and interact with a wide variety of video-rich content services that are customised for each user’s needs.

Currently, TV viewers can only access content that is offered to them by the cable or satellite operator. However, broadband TV could change this. Using some sort of search engine it will be possible to find video-rich content from thousands or millions of special interest niche programmes from all over the world and in different languages. This would not only be professionally produced content, but it could be produced by amateurs – so-called user generated content. It will also be possible to store home-produced videos and other pictures remotely and show them to your friends on their TV in their own homes. The TV will be used to video-conference to friends and relations – perhaps across the world and also show them the holiday video you have taken. Solutions already exist to find out which of your friends are also watching the same TV programme and then voice chat to them over the TV.

The TV could also be used as a personal organiser enabling you to view your calendar for the day plus details of any travel problems that you might encounter as well as video news headlines covering any topic of interest. Targeting advertising is also possible and eBay is already accessible on TV and the user to place bids on items on their wishlist and get notified on the TV if they have been outbid.

How you use the TV will depend on your personal lifestyle. For some people it may be the only digital communication device that they may have – but these developments will create a richer information, entertainment and learning environment including accessing public sector information. For many using the TV will be seamlessly integrated with using their computer and mobile phone. However, to make this happen will require “personal digital aggregation” software tools that will create the interface for users to personalise their requirements. These will need to be different for each device - the TV, computer and the mobile phone, but integrated together at a remote server so that preferences can always remain updated –

whatever device is used – whether it is in the home, on the move, at work or in a TV in a hotel room.

The software tools to make this possible are already emerging for use on the web. Marc Canter co-founder of Macromedia and now CEO of Broadband Mechanics conceived the concept of "digital lifestyle aggregators" about two years. He considers that digital lifestyle aggregators (DLAs) combine five basic elements - social networking, personal publishing, media and device management, personal communications and mobility. This would allow for the easy recording, management and access to personal image libraries, music, clips, preferred news and other information feeds and many more ways of accessing, manipulating and distributing content. Microsoft's Media Center is already offering this facility to a certain extent on the TV and web-based aggregation tools are also starting to emerge from small and big players like Google and Yahoo. Low cost or even free video streaming hosting services are also emerging on the web for both commercial as well as for personal use.

Another perspective is the development of personal media aggregators (PMAs) that are focused around a product, a service, a company or a celebrity. A personal media aggregator brings together the different communication and interaction modes allowing instant vertical communities to be rapidly created around them rather like the swarming of bees around the queen – once the workers have chosen who should be the queen. This would involve the utilization of tools to enhance the opportunities for the community to bond together - like bulletin boards, profile creation and sharing for members, one-to-one text, audio and video chat an extension of text-based chat-rooms or blogging plus the sharing of user generated video-content.

All this presents interesting opportunities for value-added services that telcos could offer through IPTV but it also creates new opportunities for new players who could source an IPTV set-top box and set-up and market their own service independent of the telecom operators – perhaps around a specific interest group of community of interest. People already have the TV and certainly in many parts of the world like Europe it is easy to get a broadband connection independent of content services.

So the opportunities exist for telcos, but also for other new smaller independent and possibly more agile players.

This paper - a thinkpiece - has been produced by Peter J. Bates, Senior Partner of pjb Associates. The aim of this thinkpiece is to stimulate discussion and thinking around these emerging issues.

If you think that pjb Associates can further help your company or organisation better understand these issues please contact us.

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