

Innovative Services within the Home Sphere

New opportunities for operators

ABSTRACT

- Addressing the home networking segment remains a tricky issue, the explosion of applications and functionalities entails a growing complexity
- Home Sphere applications are not always related to traditional telecom and broadband business. A new approach of the related business plan and another level of simplicity, flexibility and compelling applications is needed
- An open & pervasive network starting at inbuilding promises will be the key to this market

In spite of strong interest, operators' involvement in the home networking market has not led to a major success in commercialisation. Most of the attempts have failed to develop a viable business model.

Might it be that service providers are implementing too restricted and isolated applications on their own? Do they lack a more comprehensive approach of the issue? They obviously suffer from not being familiar with a market presenting a wide range of applications not always related to the telecom world.

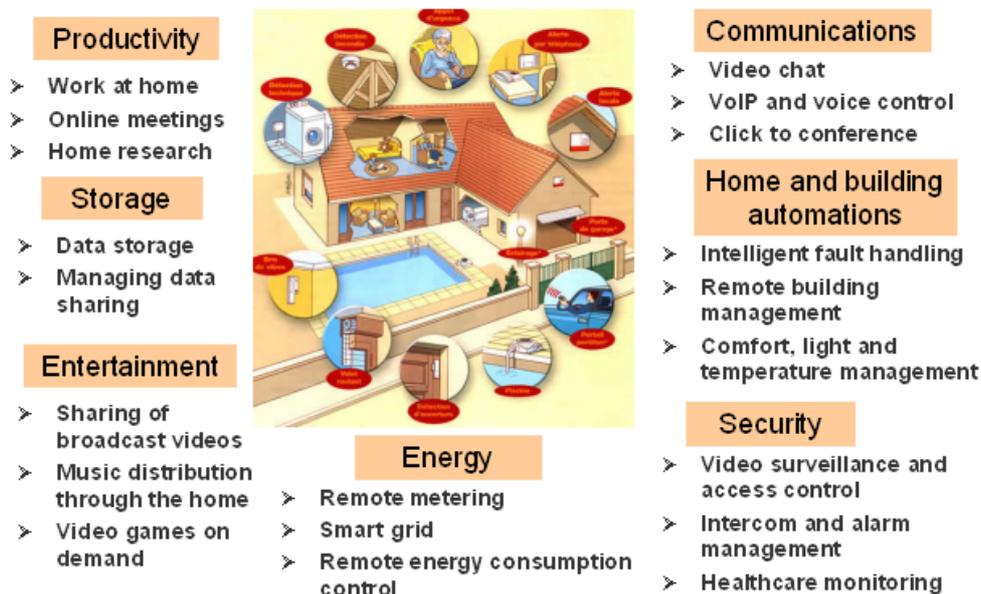
The field of home networking is attracting various types of players: utilities, ASPs, housing estate companies, etc. Current models both fail to offer a user-friendly, flexible and comprehensive solution to customers and to bring significant revenues while initial investments' levels are still considerable.

However, home networking remains a crucial issue within the broadband market, not the least because of the growing competition and of the advent of very high broadband access. In this context, telcos have started introducing services such as IPTV or FMC services, which can be today considered as entry points for home networking.

Main issues within the business model

Broadband operators long for an adequate "Home Sphere" business model, which is future proof, viable and universal. In a drastically different approach from usual, compelling services/applications have to be defined, enabling generate immediate return on investments. End user in-home services have here to be considered as pure add-ons.

The seven Digital Home application Families



Telcos should also enable non discriminatory access to the IP platform deployed for all interested parties. To reach this target, partnerships can be set up with players such as utilities or ASPs to benefit from their expertise as well. To ease the gathering of various players, there is the need of an infrastructure that can be deployed throughout the building/home. To meet all these expectations, one clear path for operators is to base their business model on a pervasive open IP platform which targets costs savings in the inbuilding (and building management) arena.

Key elements for a successful IP platform

The platform has to be no new wire to enable the use of multiple existing grids within the building. It should also permit an easy, (nearly) plug and play installation. High flexibility regarding applications and end users' devices is a critical issue, driven by the customers' dynamics concerning communication and electronics. It should be achieved through the integration of interfaces and embedding multiple devices. The platform should also be user-friendly, in order to be more easily adopted by customers, with a usual "hub" enabling commands and communications.

Regarding return on investments, the platform should allow better building management and new energy, control, monitoring applications for industrial and commercial partners. This way, it will enable initial investment reduction and immediate cost efficiency.

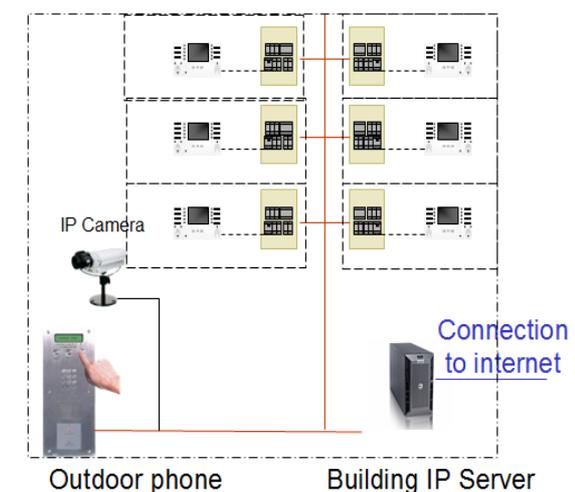


Implementing an intelligent hub: a relevant solution for operators

As the diverse home networking technologies have strongly improved, the difficulties do not lie any more on technological issues. One technology seems to be today mostly used in first projects related to a pervasive Smart Building and Smart Home platform: PLC (also called Powerline or BPL) using the energy grid but also all copper infrastructures (coaxial for example). PLC enables high and narrow speeds, as well as high flexibility and cost efficiency.

Setting up an intelligent PLC hub in the building and in each apartment fulfils the requirements for a sound business plan. Such a hub integrates and combines various appliances through both narrowband and broadband technologies. The solution can be connected to the electrical panel or using a usual plug. The building IP server is connected to the Internet. The applications offered through this hub cover the main fields of home networking. The platform is scalable and versatile to enable more flexibility and answers the needs of various types of clients. First products show how to easily integrate interfaces on this platform, be it the GSM network, bluetooth, zigbee, wifi or cable TV and thus to enable an instant, customized and personal communication platform.

Intelligent hub architecture



Source: Defidev (2007)

Smart building is an appropriate example to demonstrate how an open network can bring quick profitability. Smart building enables immediate return on investment thanks to strong installation costs savings, especially in the field of (audio/video) intercoms or access control installation. It also generates additional revenues through better building management. For instance, remote metering can be implemented for electricity, gas or water and is estimated to enable up to 30% savings in water spending. Enhanced communication between technicians and housing management allows instant notification of any incident. Moreover, as smart building is an open platform, it is possible to provide other services, such as security, health and comfort services. The smart building solution is considered to save more than 500 to 1000 € per apartment up front (source: estimation bmp TC) in relation with some basic in-building services: audio, video communication, energy related, security, access control, etc.



Various smart building projects have already been implemented, for instance by Electrocom in Russia and by Edev (subsidiary from EDF) or BPL in France. The platform provides dedicated services to both end-users and condominium companies, enables to secure the upgrade of the buildings and brings additional revenues.

In Russia, FTTB operator Electrocom created an inbuilding platform realised with PLC. It covers 8000 high rise buildings and provides services both to end users and to the partner housing companies and condominiums.

In France, smart building projects focus on social housing high rise buildings, enable to reduce the digital divide and bring broadband services to underprivileged populations alongside with energy efficiency and security applications.

Conclusion

As operators are struggling to introduce home networking applications, an intelligent inbuilding hub appears as an alternative and cost-saving solution, enabling close partnerships with diverse players. This new way to manage home networking applications can enable future looking business plans for operators, by including the expertise and concretised needs of various players and therefore can globally benefit to the viability of the home networking market. Moreover, such projects can be implemented in a variety of diverging frameworks, from smart home services for private customers to smart building services for companies or in social housing buildings.

Previous Market Reviews are available on the website below.

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About bmp Telecommunications Consultants:

bmp TC is a strategic consultancy in the field of telecommunications with a focus on central issues related to business models based on broadband platforms such as DSL, Wireless, Fiber or Powerline Communications. The longstanding experience & a wide-ranging industry view enables to create and launch new services for the market and support the implementation and introduction of unique and sound business models.

Selected recent references (complete references upon request)

Operators/ISPs

- ⇒ British Telecom
- ⇒ Cegetel
- ⇒ Electro-com, Russia
- ⇒ France Telecom
- ⇒ GTS Central Europe
- ⇒ Smart Telecom

Utilities

- ⇒ Copel Brasil
- ⇒ Compagnie Ivoirienne Energie
- ⇒ Electricity Authority of Cyprus
- ⇒ Electricité de France
- ⇒ ESB Ireland
- ⇒ RWE

Integrators, venues

- ⇒ Cegelec
- ⇒ EDEV-CPL
- ⇒ Sogetrel
- ⇒ Cmgj
- ⇒ Tank & Rast

Investors

- ⇒ Baring Vostok Capital Partners
- ⇒ Bearing Point
- ⇒ Durlacher
- ⇒ Morgan Stanley

Public authorities

- ⇒ African Telecom. Union
- ⇒ Département Meurthe & Moselle
- ⇒ DCMNR-Irish Government
- ⇒ Luxembourg City
- ⇒ Région Alsace/Alsace Connexia

Suppliers

- ⇒ Hewlett Packard
- ⇒ Itochu
- ⇒ Legrand
- ⇒ Mitsubishi
- ⇒ Schneider Electric
- ⇒ Siemens