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The multimedia challenge for communications operators

Keys for an IPTV strategy



The logo for everis, featuring the word "everis" in a white, lowercase, sans-serif font. The text is centered within a solid, lime-green, irregular shape that resembles a splash or a drop.

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A large, abstract graphic composed of several overlapping, wavy, organic shapes. The colors are muted and pastel, including shades of light grey, pale yellow, and soft green. The shapes overlap in a way that creates a sense of depth and movement, with some areas appearing more prominent than others.

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CONTEXT

The combination of emergent demand patterns, technological advances and strong competitive pressure has resulted in the commercial deployment of IPTV.

But what is IPTV? With regard to services and related technologies (ie. Web TV), IPTV is defined in this document as a group of multimedia services (television, video, audio, text and graphics) supported by IP networks, under an operative model that guarantees a competent quality of service (QoS) level in the user experience, in a secure and reliable way.

IPTV as imperative to guarantee the survival of operators

In a stagnant environment of the traditional business of communications operators, IPTV is now considered by many analysts as being imperative to exploit new revenue sources which guarantee their survival. Nevertheless, the approach to an opportunity such as IPTV requires a group of relevant issues to be addressed, which have to be managed throughout the whole process.

On one hand, entering the multimedia market requires major investment and continuous orientation so that all aspects are optimized (Financial, Commercial, Strategic, Operations, Technological...).

Similarly, we find a complex process which first players took an ample timeline (+5 years) to deal with. However, it needs to be approached in record time by newcomers, most probably within 12 months. The “time to market” in this process is a critical factor to be considered.



In addition, there are no second chances in this environment where the user’s first experience is decisive. As a result, it is necessary to manage the process so that the quality of this experience is exceptional. To do so, it is necessary to prepare as an organization, with a series of very rigorous determining factors which involve people, processes and technology. Therefore, with the support of an experienced partner, the initiative’s success applying this specific focus is ensured.

NEW COMPETITIVE ENVIRONMENT

The telecommunications market has undergone a radical transformation in the last few years, the media and leisure industry frontiers having become blurred with the technology and communications industries. This fact has changed the traditional business model defining a new scenario where the market does not only present opportunities in the multimedia world, but which many telecom operators have found to be an obligation if they want to survive in the medium and long-term.

The paradigm of convergence

Several forces have diluted the frontier among adjacent industries, converging in an ICT Hyper-sector (Information and Communications Technology, Media, digital leisure and consumer electronics). As a result of the market transformation, the telecommunications value chain has fragmented and has led to a new map of opportunities and challenges, breaking the initial role of the operator's service as provider.

There is currently a double view on what the operators' role will be. On one hand, it is a key component in providing the final user with the content or service required: "if content is King, distribution is King-Kong". On the other hand, the operator will only be the communications channel between the content and service provider and the final user, becoming a dumb pipe, and looking after the part of the process that provides the least value to the customer.

In fact, value has migrated towards companies that have best oriented their business models to obtain the value of end customers in capital markets. In addition, various market disrupters have been arising in the past few years with very significant implications for operators, among which are the significantly popular Apple, Facebook, FON and Hulu, among others, which have proven that traditional categories and definitions may not be the correct ones.

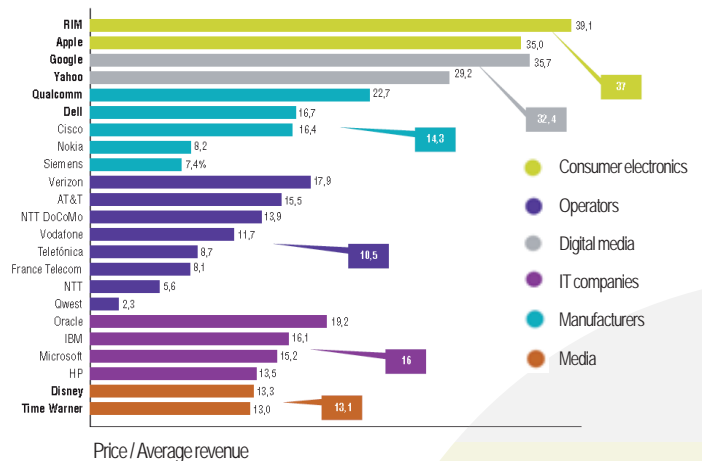


Figure 1. Valuation multiples for relevant players

The maturity of the telecom market...

In a stagnant environment of the traditional business of the Telecom market where revenues from the landline telephone have been continuously reducing and the mobile phone market has been clearly slowing down in the most developed countries, operators are faced with the challenge to maintain and increase their customers' value. Nevertheless, the broadband market is still in evident expansion and the digital Television market is in full development as a result of the cessation of analog broadcasting which will take place in the next few years, although without certain risks and doubts regarding its profitability.

On the other hand, network businesses are being consolidated and there are some very successful examples. On-line business is the common purchasing method for many. The on-line games market had an exponential growth between 2003 and 2008 and it has already exceeded DVD sales. The advertising market decelerated its growth between 2004 and 2008, while Internet advertising doubled at the expense of traditional methods (TV, press and radio).

On the contrary, the digital user is proactive when deciding what s/he uses, when s/he uses it and through which method, as a result of easy Internet access and the possibility of generating content (UGC) in portals such as Wikipedia, Youtube, Blogger, Flickr, Facebook, etc.

...and the player's response

With regard to the maturity of the Telecom market, companies complete their service offering by bundling several services (landline telephone / mobile phone / Internet / TV). The converging offer of services has the immediate effect of increasing the customer's ARPU as the number of services is increased (Revenue Generating Units) and reducing the churn rate.

Depending on the type of operator, there are different options to be considered to complete its service portfolio, and given the operator network deployment, the natural option for many of them when distributing TV is through xDSL, using IPTV technology (Internet Protocol Television).

In this battle to increase customer value and loyalty, it is certainly possible to try to survive without offering TV services, but everything seems to indicate that IPTV will play an important role in the medium / long term, and it could become a business imperative. While there are still certain question marks in this regard, operators cannot abstain from preparing their strategy to offer this service, quantify and qualify the need, evaluate the business case, and resolve the major technological and operations challenges that this involves.

WHAT IS THE OPPORTUNITY?

There is a potential IPTV demand that may grow exponentially and which the operators must try to take advantage of. In addition, the most characteristic services included in an IPTV offer also show acceptance among the target audience.

Potential demand for the IPTV service...

Existing projections of demand estimated for the next few years only refer to the commercial demand without considering the technological feasibility, an aspect which operators also need to deal with.

In this regard, according to Gartner's most recent study on IPTV1 penetration, there will be a demand of approximately 60 million users at the end of 2011. As a result, this market has an annual growth potential of 100% in the next few years. This study affirms data of 19.6 million subscribers at the end of 2008, and that this penetration was supported by the high potential of acceptance of services such as VoD.

...and great flexibility in the offer

The IPTV television offer, due to the tuner or Set-Top Box and a remote control, allows the user to enjoy both Broadcast services and value added services. The TV Broadcast offer would be made up of the broadcasting of common content for all users, ie. the television channel programme grid through multicast channels, adapting the offer to the home.

Besides the channel offer, there is another series of services that provide a clear differentiation and which can be subdivided according to topic:

- **Services on demand:** VoD, PPV or Catch Up.
- **Content storage services:** PVR or Time Shift.
- **Value added services:** Informative, interactive or transactional.
- **Other services:** PiP, Video conference, IP remote surveillance, games...

In addition to these interactive services, there will be new applications in the future that will allow interactivity between the user and the television. To ensure that these applications are successful, the key is for them to be contemplated to cover the user's needs and their real demand.

The IPTV and its services deployment scale is very different depending on the degree of technological development. The more consolidated and implemented the technology, the more complex and useful value added services will be generated for the user. There are 3 large-scale zones for IPTV service development: Latin America, Europe/USA and Asia. Nevertheless, with regard to potential markets, Middle East is positioned as a great opportunity for IPTV penetration, with extensive growth perspectives and a substantial demand of value added services on television.

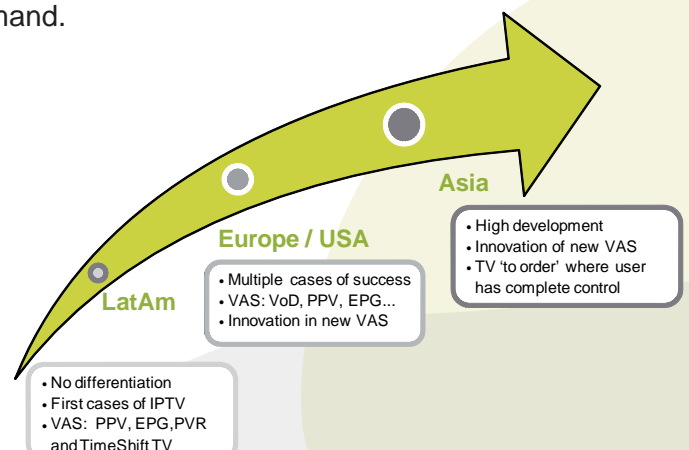


Figure 2. Deployment of IPTV

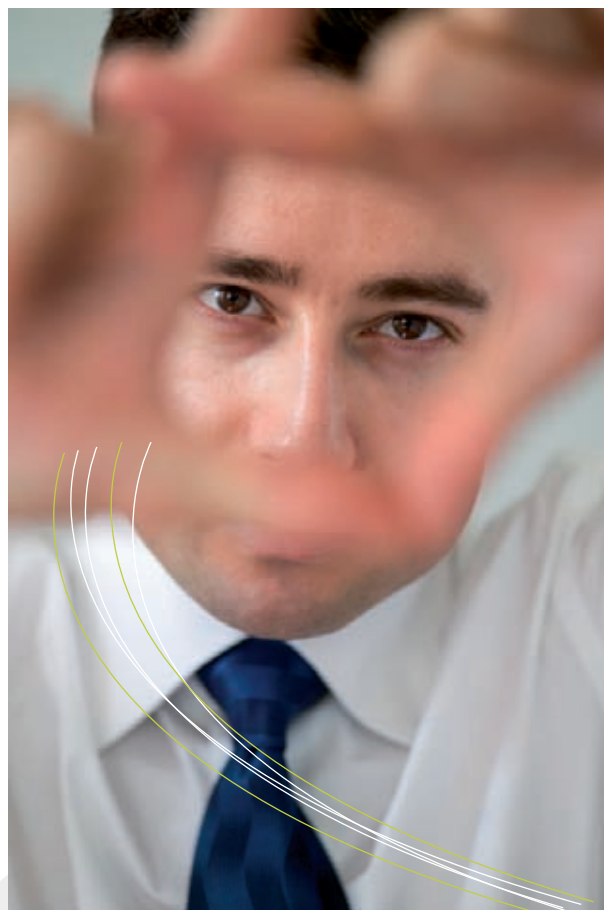
CHALLENGES AND UNCERTAINTY

Multimedia services are a strategic path for telecommunications companies although the business model is not the only aspect that presents an element of uncertainty. There are also challenges with regard to television service provision over the landline telephone infrastructure.

Traditionally, communications operators have had a lot of exposure to external factors (ie. regulation). The launching of television services as part of Triple or Quad Play packages which align the operators with converging trends of the sector will change the sensitivity of the business, operational and technological model to different external variables such as regulation, macroeconomic environment, providers, geography and socio-cultural environment. It is a key aspect for the operator to understand the possible impact of all the variables.

In addition to exogenous factors, which the operator has very limited or zero control over, there are other factors which are more related to its scope of application which should be analysed before undertaking a network deployment or preparing to offer the IPTV service. These question marks can be classified into three large areas:

- **Business:** How can the offer be adapted and to whom? What should the offer attributes be? Should alliance with a content partner be contemplated? Would different models be possible to reduce CAPEX and increase variable costs? Based on the risk sharing structure? (from fee per subscriber to revenue sharing).
- **Technology:** Is it necessary to purchase a platform and implement it in accordance with the operator's business model? Should a leased platform by a technology distributor be used?.
- **Operation:** What options should be contemplated from the point of view of the process model in accordance with the operator's control scale of the customer (ie. commercialization and supply)? What organization is needed to handle these new services? What functions and capacities need to be developed?



KEY POINTS WHEN ADDRESSING IPTV

Business: focus on successful cases and the customer

An operator that decides to enter such a complex market which undergoes very significant changes on a continuous basis has to resolve multiple aspects to obtain the success anticipated:

- Identify existing successful cases on an international level, on the basis of telecommunications operators and also all of the players involved in the multimedia world.
- Analyse customer needs and segmentation along with the current offer to define the need for a bundle offer, content offer and service segmentation.
- Analyse the customer profile, offer and marketing mix, looking for the differentiation with regard to capacity, flexibility of response to the environment changes and the constant innovation of services and offer.

These three aspects are essential when defining the positioning and design of the company's value proposal.

Technology: attention to technologic impacts

The deployment of an IPTV solution, with the aim of offering a mass-scale service, has a high technological impact which goes beyond the IPTV ecosystem selected:

Network infrastructure

From the point of view of network and platform infrastructure, the following aspects need to be considered:

- The evolution required of the current network to support the service.
- The design of an IPTV solution in line with the business strategy.
- The deployment scenarios in line with other initiatives of the company.

The IPTV ecosystem is made up of 3 large sub-systems: IPTV Head-end, Middleware (more content, services and IT) and CPE (Customer Premises Equipment).

In addition, there are two sub-networks on which this ecosystem is supported: access network and transport and aggregation network. The bandwidth parameters and network quality (package loss, latency delay, jitter) are essential for the IPTV to operate correctly. The analysis of these factors is critical to ensure the implementation of an IPTV solution.

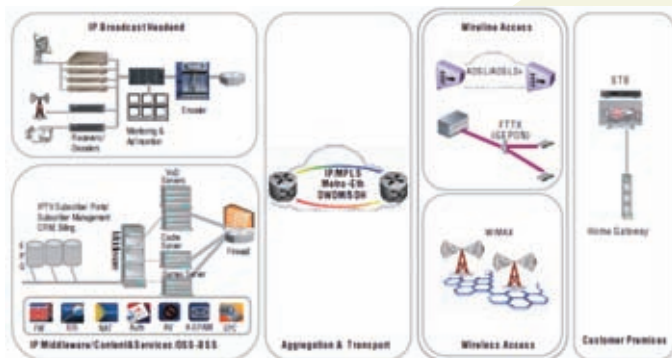


Figure 3. Overview of IPTV network architecture

OSS / BSS systems

And it is more than just a new service; it is the paradigm of interactive television, with a range of operations that due to its innovating character regarding traditional services are not usually supported by the operator's systems map. It is of vital importance to align the technological (network and platform infrastructure) and business requirements with the systems map, defining the final scenario and the deployment plan which leads to this target situation.

The implementation of IPTV in general involves an evolution of systems which also means that the rest of ongoing initiatives need to be considered, ensuring the use of possible synergies. The optimum approach is to establish an orientation to processes and on this basis, delimit the systems which will be affected, ensuring alignment of the availability of the processes and systems that support them. Some of the systems that receive most impact are those of sales, supply, assurance and invoicing.

IPTV QoS and QoE

The quality of the IPTV service is undoubtedly what the end customer will judge. In addition to considering the network's global monitoring (QoS), it will also be necessary to monitor the user's experience (QoE).

The use of platforms designed specifically for monitoring and simulating the user's real experience with the operator's IPTV service will complement the control solution for the technical parameters of the network's quality, offering a complete end-to-end IPTV monitoring solution.



The monitoring and simulation platform of the user's experience must enable the operator to centrally control real audio and video signals which the subscriber is using in their home. It must not be limited to only TV broadcast channels and should also include interactive service monitoring (portal, electronic programme guide – EPG, games, VoD, etc.) which cannot be monitored using technical parameter measuring equipment. In addition to monitoring, it is also recommended that the system provides the option of replicating or simulating any action or situation that a real user of the service can find, such as VoD purchases, using the same interface as the real user.

Operations model: concentrating on the most affected areas

Ensuring the success of the IPTV launch requires establishing the operations model of processes and functions from a new perspective which considers its particular features from the beginning. Including, but not limited to the following, are some key points in the orientation of the main processes and functions in both operations and business areas.

Operations processes

There are numerous implications in the operations processes to be managed which will enable a traditional operator to offer multimedia services. The main impacting process will be network planning and engineering, installation and supply, service provision (technical support and O&M) and logistics.

Business processes

In the business area, there are also relevant implications to enable a traditional operator to offer the services that IPTV represents. The main areas to be focused on are customer care, commercialization, invoicing and collection, and product and service management.

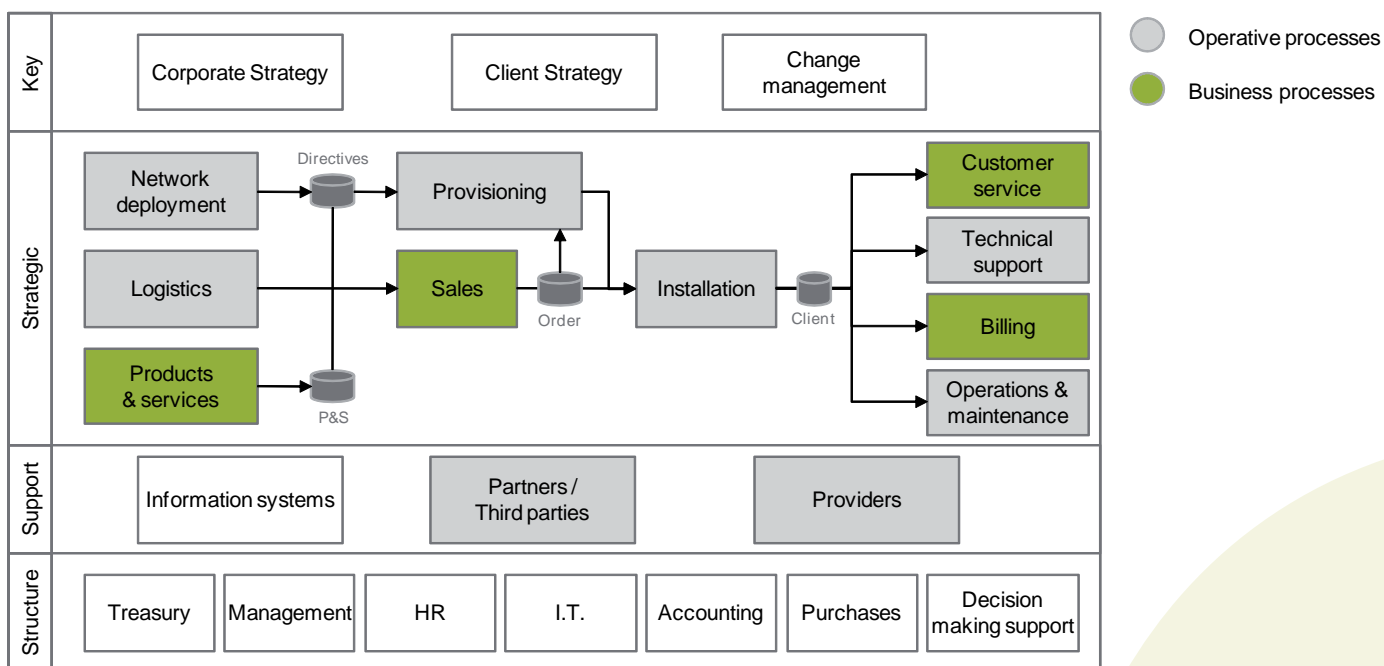


Figure 4. Operations and business processes affected

POTENTIAL STRATEGIC SCENARIOS

On the basis of the three main components of the IPTV service (Business, Technology and Processes) and in accordance with the operator's capabilities and objectives, it is possible to establish several scenarios. A strategic matrix can be made from the three mentioned elements and classifying the independence / investment levels into low, medium and high, allowing the operator to choose the most appropriate path to reach its goals.

Many scenarios can be described from the matrix, four of which stand out as possible references for operators when approaching IPTV service development:

- **Standard strategy:** this is generally presented as the first option considered by medium and small-scale operators, as it lets them work with what they already know, implementing and operating network infrastructure, while leaving content implementation to a strategic partner.
- **Low cost strategy:** selected by operators that wish to introduce IPTV into their service portfolio quickly, with an initial low investment and not taking high risks.
- **Shared risk strategy:** reduces the risk of the IPTV service implementation project but without relying completely on the strategic partner, unlike what happens in the low cost strategy.
- **Maximum investment and independence strategy:** involves a high investment to purchase content, negotiating directly with distributors, and generally used by large-scale operators, type Tier-1, who try to use their great negotiating power to reach suitable agreements with primary content distributors.

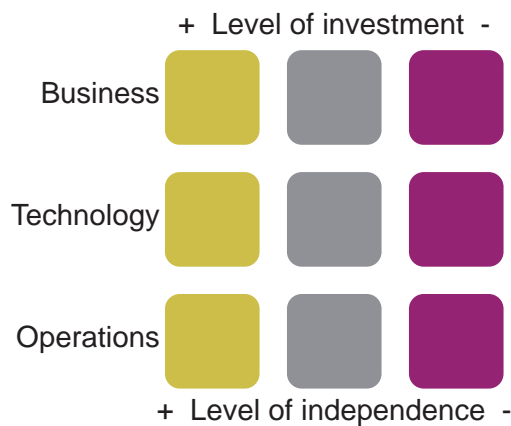


Figure 5. Strategy matrix

The four strategies described above are to be used only as a reference guide for operators so that they find the appropriate strategy for IPTV inclusion into their product portfolio. Indeed, the strategic matrix provided in this document offers a great number of options whereby only the operator can decide which is the most suitable in accordance with its own unique and exclusive environment and expectations for the new service.

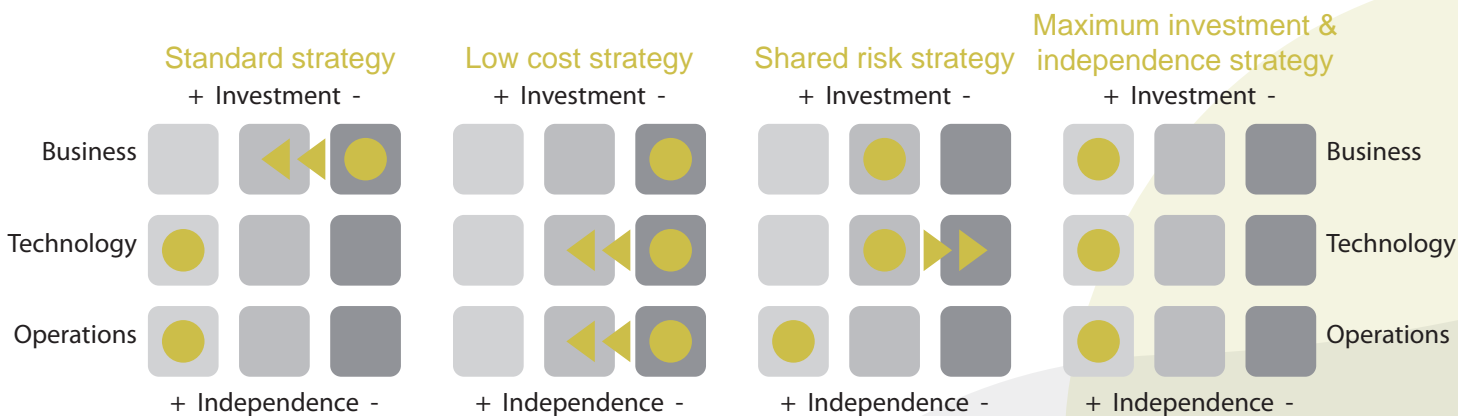


Figure 6. Strategy matrix for scenarios described

MULTIMEDIA FUTURE

We are currently in a convergence situation of communications, leisure, consumer electronics and media. The future of IPTV is marked by different determining factors according to geographic area and the market to be exploited, and its potential is situated in the development of new interactive services and the convergence of different services to compete in the Triple and Quad Play market. The interactive services will acquire their highest potential on IPTV since they dispose of a return broadband channel based on IP allowing a multitude of possibilities with regard to service deployment and its integration with those already existing.

In fact, the most successful interactive services will combine interesting content, their usability, simplicity, security perceived by the customer and the need for them.

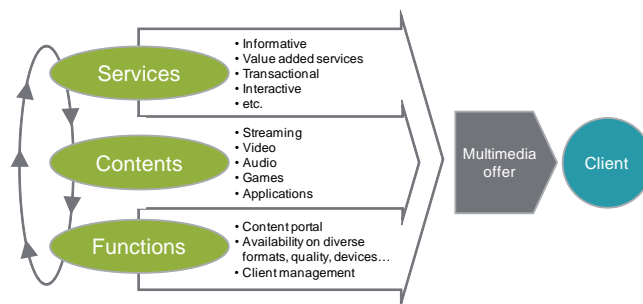


Figure 7. Composition of multimedia offer

The television business model is changing on the web

Within the television world on the Internet, there are different business models. On one hand, there are Web TV providers, such as Zattoo.com. If the growth of Web TV, presently in an experimental phase, improves its quality and gains in audience, this could be a problem for operators that manage network infrastructure, but could be an opportunity for media companies as their advertising campaigns on the Internet achieve between 5% and 10% higher reach than the traditional open TV.

The change in behaviour opens a new world in mobile devices

Behaviour patterns are starting to change, a fact that providers of mobile television solutions and services are beginning to take advantage of. They are starting to deploy timidly through the DVB-H format. The initial offer in this format will be based on the viewing of Broadcast channels on a mobile device. In addition to television channels, another series of service in mobile devices will be developed such as information services (traffic, weather...), leisure contents and event broadcast (sports, music...).

In short, the multimedia world tends to combine a unique user experience, based on an offer relevant to tastes and personal needs. In this dynamic environment, the operator's challenge is to redefine all of the components of its business model: detect the needs (expressed or undisclosed) of the end customers, define an innovative and differential proposal which enables it to extract the highest value from them, align its operations and organization model with the new market reality and encompass the investments in infrastructure and technological solutions into a strategic plan that generates efficient and sustainable business.

CONCLUSIONS

In an environment marked by the maturity of the Telecom market, IPTV is constituted as being a real alternative of growth and sustainability, offering new business opportunities from the customization and interactivity possibilities offered by the technology. And this customization is a key aspect in the IPTV offer, adding new business opportunities.

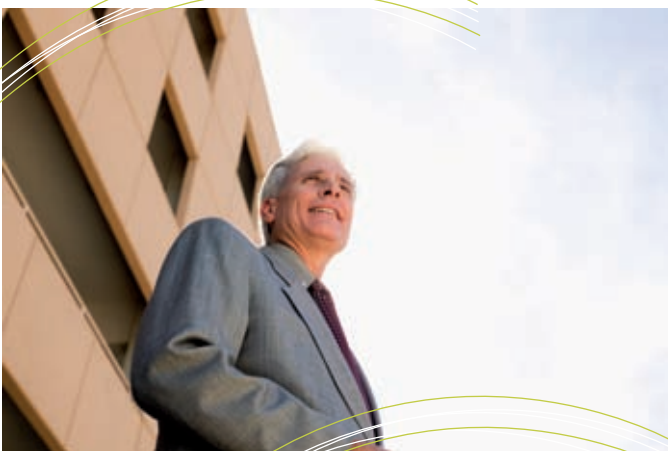
IPTV is the culmination of significant changes in technology in the last ten years. Specifically, it is the result of IP proliferation and broadband.

Nevertheless, to approach an opportunity such as IPTV requires handling a wide range of relevant issues which need to be managed throughout the whole process, guaranteeing customer satisfaction at all times through a suitable “Quality of Experience” supported by an operations excellence in both the installation and the service support.

With regard to defining their strategy, communications operators need to know the challenges presented by the decision to implement an IPTV solution and –what is even more important- the best way to win over these challenges.

How far will IPTV go?

Success in IPTV involves developing a complex ecosystem where disparate variables are crossed over such as network capacity or multimedia device evolution and customized content demand. The balance of all of these determining factors together with the adaptation and evolution capacity of the telcos is what will ensure the success of “something more than technology”.



everis owns a more detailed whitepaper based on its experience and knowledge in IPTV solutions. Please, ask everis for more information.



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