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Research Article

Sofa-TV: The New Digital Landscape

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Television is attracting an enormous amount of attention from both researchers and managers, due to the profound changes that are taking place thanks to the diffusion of digital technology. The study of the digital landscape of television, including the players competing in its arena and their strategies, is well worth the effort. This paper, based on 32 case studies and the census of the Sofa-TV (Sat TV, DTT, and IPTV) offerings, aims at describing the current state of channel offerings, individualizing the principal players, and identifying their strategies, thus allowing us to give a few predictions as to the possible future changes in the industry. The analysis will have a general applicability, as the considerations made are not particularly country-specific, although performed within the Italian context, one of the most advanced in the development of digital television platforms.

1. Introduction

Television is attracting an enormous amount of attention from both researchers and managers, due to the profound changes that are taking place. The television business, traditionally static and conservative, is undergoing a radical transformation process in the multimedia age. The introduction of digital technology is indeed driving important changes in the market offerings and expanding the boundaries of the television business. While these boundaries are becoming fuzzier, opportunities for new players are largely increasing. Hence, the study of the digital landscape of television, including the players competing in its arena and their strategies, is well worth the effort.

2. The TV Industry

The television industry, for decades quite static, is currently undergoing important changes [1]: such business is in fact being shaped by a number of driving forces, such as the digitalization of the TV signal, the diffusion of new alternative access technologies, the development of broadband and streaming video technologies, the introduction of Web TV and new generation access terminals, and the progress of interactive and personal television solutions [2–7]. Past changes, as well as those to come, are so radical that some authors prefer to talk about TV (r)evolution rather than evolution, asserting that the very meaning of the term "television" needs to be revised [8].

The TV business is no longer restricted to few actors but is becoming territory to be conquered by new entrants from industries like Internet and telecommunications. The market offerings are reaching new access terminals (such as PC and handheld devices), meeting and integrating with the Internet and with other online multimedia services, and changing by creating new television formats, such as the personal and the interactive television.

The technological evolution has shifted the boundaries of the TV industry. Television platforms are in competition, not only among themselves, but also with "New Media" offering contents and services not specifically related to the television sector [9, 10]: (i) Internet and (ii) all the new ways of offline use of digital contents (e.g., podcasting, downloading of entertainment contents on the PC or mobile phone). There is strong competition between traditional media and new media for the *share of time* of users and the *share of advertising* of investors.

The evolution or (r)evolution of television has caused the emergence of various television typologies being all very different amongst themselves: ranging from the more "traditional" one, based on linear programming (whose main new features are its transmission platform, which is digital instead of analog, and its viewing device—not only the television screen but also the PC or telephone) to the more innovative on-demand based editorial contents or those generated by the user (for which the need for the television terminal itself could be challenged).

Six digital platforms can be identified on digital networks: Sat TV, DTT, IPTV, Web TV, Mobile TV on DVB-H network, and Mobile TV on cellular network. However, given the differences and similarities between the six platforms, a further clustering that would achieve a subdivision into only three TV macrocategories could be a possible scenario [11].

(1) *Sofa-TV*. It includs all digital television typically viewed through the "traditional" television screen. The "new" Sofa-TVs are based on three digital platforms: Sat TV, DTT and IPTV. The use of the expression, "Sofa-TV" aims to clearly describe the viewing opportunities and modalities of these televisions.

(2) *Desktop-TV*. It includs all the video channels that are viewable through the Web (and Internet in general). In this case, the distinguishing element is the proactive viewing ("elbows on the desk") of the contents.

(3) *Hand-TV*. It includs all the TV and video offerings available on the Mobile platform, based on both DVB-H networks and cellular networks. The use of the expression "Hand-TV" aims to focus on the concept of TV viewable in the palm of the hand, which frees this type of television from the underlying technologies, both at the network level (DVB-H, cellular networks, and—in the future—WiFi and its evolutionary products), and at the terminal level (not only cell phones, but possibly other small devices, like portable music readers, mobile game consoles, etc.).

While very different in format, modality, and viewing capabilities one from the other, these three macrotypologies of New TV, although not in tight competition with each other at this time, certainly do compete, together and, in a wider sense, with other nontelevision contents and services, for the users' share of time and investors' share of advertising.

Even if Desktop-TV and Hand-TV will be able to play a very important role in the future digital television arena and are already at present very promising platforms from the point of view of creation of new businesses, globally, the majority of sales presently continue to apply to Sofa TVs.

For this reason, this paper will focus on the area of Sofa TVs, in particular describing the current state of channel offerings, individualizing the principal players and identifying their strategies, thus allowing us to give a few predictions as to the possible future changes in the industry. The analysis will have a general applicability, as the considerations made are not particularly country-specific, although performed within the Italian context, one of the most advanced in the development of digital television platforms.

In order to achieve such results, the paper is further divided into four sections. The first section will present the empirical study on which our considerations are based. The second section will describe the offerings of the Sofa-TV sector. The third section will deal with the players of the Sofa-TV industry and their strategies. Finally, the fourth section will offer some elements for further discussion.

3. Empirical Study

The information needed for the analysis and evaluation of the Sofa-TV sector in Italy was mainly collected through a case study methodology, and an exhaustive census of the Sofa-TV offerings was also taken in order to complete the information base.

As far as the case studies are concerned, as Pettigrew noted [12], it makes sense to choose the cases of analysis as extreme situations and polar types in which the process of interest is "transparently observable." Hence, the sample has been selected considering companies that conformed to the main requirements of the study while presenting both similarities and differences considered important for the analysis. Thus the empirical study has been conducted on a sample of 32 companies that operate at different stages of the new digital television value chain and have different characteristics (e.g., size, revenue, business model).

The panel comprises the following:

(i) 13 cases from broadcasters and Telco operators (i.e., Elemedia, Fastweb, Gruppo Mediaset, Gruppo Telecom Italia, Infostrada, La7/TI Media, MTV Italia, Rai, Rete A, R.T.I. Interactive Media, SitCom, SKY Italia, Tiscali),

(ii) 6 cases from content providers (i.e., Digicast, Einstein Multimedia, Endemol, Turner Broadcasting System Italia, Walt Disney, Yam112003),

(iii) 8 cases from service providers (i.e., BIP, Cisco Italia, IBM, IconMedialab, Kora, Skylogic, TXT Polymedia, Xaltia),

(iv) 5 cases from media/advertising centers (i.e., Carat/Isobar, Digitalia '08, MediaCom Italia, Niumidia Adv, Sipra).

Information was gathered through semiopen interviews based on a common investigative framework. The use of semistructured interviews gives considerable freedom to the interviewer and interviewee, but at the same time, it ensures that all relevant subjects are discussed and that all the required information is collected. Our initial contact was made by email with the managers and/or those directly responsible for the media and platform strategy of each company, providing them with an explanation of the research objectives. We then contacted those managers directly by phone in order to check their availability and to schedule interviews. Finally, we had one or more face-to-face interviews with them.

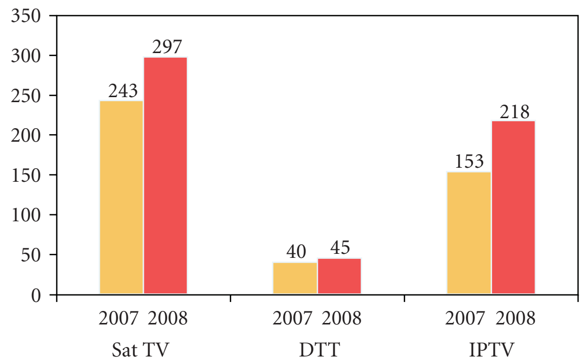

Figure 1: Sofa-TV: the number of channel offerings.

To help interviewers and ensure comparability, an investigative framework was created to cover the most important issues to be investigated in order to achieve the research results. In particular, four main areas of investigation were identified and analyzed during the interviews:

(i) Overall company strategy (e.g., television platforms portfolio, launch of new platforms),

(ii) Value chain analysis (e.g., make or buy decision, partnership relations),

(iii) Organizational structure (e.g., number, roles and structure of the people involved in the Sofa-TV organizational functions),

(iv) Television offerings (e.g., channel offerings on the specific platform, differences of own vs. competitor strategy).

Within the framework, we also indicated possible "prompts" to clarify questions, stimulate discussion, and help the interviewer in data-collecting activities.

For each case, we had single or multiple interviews (according to the relevance and the size of the firm) in order to talk with all the most important decision makers. After the interviews, a short questionnaire was sent out in order to clarify any unclear points and gather more quantitative information.

Moreover, an exhaustive census of the Sofa-TV offerings have been done aimed at mapping all the channels transmitted on the digital Sofa-TV platforms present in Italy today. More than 500 channels were individuated and analyzed both in 2007 and 2008, and for each, 23 important variables were investigated.

The interviews were carried out between April 2007 and October 2008. The census was first taken in October 2007 and then in October 2008, in order to highlight the changes. All the research on the New TV sector began in January 2007 and is still in progress.

4. The Sofa-TV Offerings in Italy

In this chapter, we will analyze in detail the television channel offerings in Italy relative to the three digital platforms included in the Sofa-TV category: Sat TV, DTT, and IPTV.

In Figure 1, we have reported the channels offered in Italy on the three platforms in 2007 and 2008: in all cases, we observe a significant amount of growth in the number of available channels.

(i) The offerings on Sat TV grow from 243 to 297 channels, thanks to SKY Italia's portfolio expansion.

(ii) The DTT offerings increase from 40 to 45 channels, thanks to the introduction of new channels on the part of, first, Mediaset (e.g., Joy, Mya, Steel, and Disney), then Rai (Rai4) and finally radio broadcasts from the Espresso Group (Radio Deejay, Radio Capital, m2o).

(iii) IPTV channel offerings rose notably, from 153 to 218, as the result of two phenomena: first, the transposition of channels from SKY Italia satellite platform to IPTV, and second, the significant increase both in the on demand channels, due to the entry of two new players (Tiscali and Infostrada) in this arena as well as in the channels of already existing operators (geared towards specific market niches that were, up until now, ignored).

The Sofa-TV offerings can be broken down referring to the means of distribution of the channels. There are essentially two: on demand channels, where contents are viewable upon viewer request, and linear channels, where there is a programmed schedule that is predefined and delivered in an ongoing manner. There are also certain channels that cannot be classified as either on demand or linear because they do not have sufficient ongoing programming nor are they viewable when the viewer chooses. All these channels provide valuable contents (particularly soccer, but also sports, movies, and TV series) but are available exclusively during certain predefined times and for only a few hours per day.

It should be noted that the on demand channels are only present on IPTV (see Figure 2), the only platform that, from the technological point of view, can support one-to-one delivery on request. The other platforms, nevertheless, are trying to increase the viewing flexibility of their own contents in order to more closely match the on demand rationale. On the one hand, both the satellite and the DTT platforms have introduced their +1 versions for certain pay channels in order to make them more easily viewable for their users (since they transmit the programming with a one-hour delay), and on the other hand, the monopolizer of the satellite platform, SKY Italia, counts mostly on its MySKY service which, in fact, allows the user to create his own on demand library through program recording (see the following box on "Time shifting and Catch-up TV").

To complete the analysis of the offerings, it is beneficial to distinguish between "native" channels on each platform (created specifically for that platform) and transposed channels (those replicated on the platform in question, but native of other platforms) (see Figure 3). Naturally, given the technological limitations that were previously mentioned, such a distinction makes sense only in regards to linear channels, since on demand channels are present exclusively

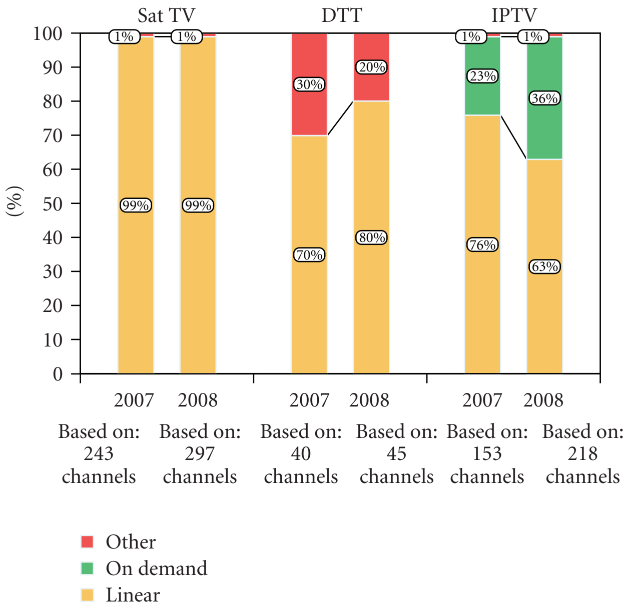

Figure 2: Sofa-TV: modalities of channel delivery.

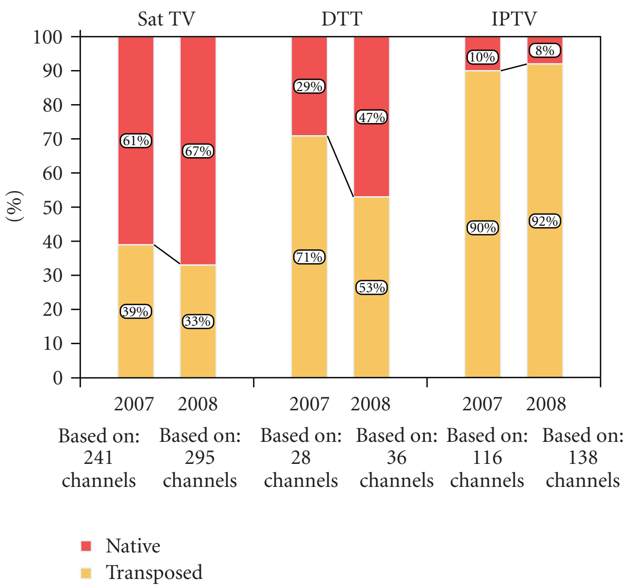

Figure 3: Sofa-TV: native and transposed linear channels.

on and were created solely for, IPTV. In the case of linear channels, we see how the previously indicated growth in the number of channels can be explained in two ways. On one hand in fact, it can depend on the diverse propensity for innovation (intended as the ability to create new channels) of the different platforms, and on the other, it can be tied to the diverse propensity for imitation (intended as the ability to replicate the offerings generated by other platforms). In the case of satellite and DTT, the propensity for innovation prevails, and the widest assortment of "native" channels continues to be that of satellite. However, in the last year, there has been a significant planning effort on the part of DTT as well, despite the intrinsic limitations of transmission capacity. In the case of IPTV, there is the prevalence of duplication of the SKY Italia channel offerings, since at the moment, such a platform is not able to create its own original offerings of linear channels.

4.1. Time Shifting and Catch-Up TV. The two most innovative services present on Sofa-TV platforms are Time shifting and Catch-up TV.

Time shifting is a term referring to the possibility of viewing a program the moment it is chosen by the user, at a time other than the actual streaming of the channel. This typically means that the program is recorded either on a decoder equipped with an integrated hard disk or remotely on a server. In the latter case, the service can be provided through subscription. Its functionality is very developed compared to traditional Video Recorders: for example, it is possible to begin viewing a film before recording is complete. Currently, Time shifting is present on Sat TV and IPTV platforms and can be activated remotely through the broadcaster website or user cellular phone. It is offered by most digital televisions in the world: in the United Kingdom and in Ireland, for example, Sky+ offers the option, whereas the US market is dominated by TiVo and DirectTv; in Italy the service is offered not only by Sky on satellite through MySky service but also by Fastweb and Infostrada through IPTV.

Catch-up TV is a service that allows through On Demand modality the possibility to view programs already transmitted previously during regularly scheduled programming. For their users, the service providers record on specific servers programs already aired on National channels. In this way, they create a temporary library available to the user after program airing or streaming has taken place. In Italy on Sofa-TV, this service is available only on Fasteweb's IPTV through the ReplyTV service, which records the previous three day's National channel programming (RAI, Mediaset, La7, and MTV). Orange, a French IPTV platform, offers a Catch-up TV service that allows repeated viewing of all programming transmitted on 5 national French channels on air from 18 to 24 hours prior to streaming and maintains it in a library for a minimum of 7 to 30 days.

5. The Principal Players and Their Strategies

The introduction of digital technology in the Sofa-TV arena has greatly changed the competition in this sector, allowing the entry of both new operators, born specifically to take advantage of the possibilities offered by digitalization as well operators coming from other industries. In particular, in the Italian Sofa-TV market, the categories of most important players refer to the "traditional" broadcasters of analog TV (i.e., RAI, Mediaset and La7), satellite TV broadcasters (i.e., SKY Italia—the result of the fusion of the first two Italian operators in the satellite TV arena—Stream and Telepiù), and a series of players who, with already consolidated businesses in sectors like telecommunications in particular, but also paper publishing, entered the Sofa-TV arena thanks to the opportunities introduced by the new digital technology (e.g., Fastweb, Telecom Italia, Infostrada, Tiscali, Gruppo L'Espresso, Class Italia).

Therefore, digital technology, while on one hand bringing a strong increase in the number of competitors in a sector characterized for years by the Rai-Mediaset duopoly, and on the other, putting in competition many different players, has decisively changed the strategies of the players and their ways of competing in the Sofa-TV arena.

Following this paragraph, we will try to highlight the main characteristics of the most important clusters of competitors discussing the strategies developed by these operators.

5.1. Traditional Broadcasters. Due to both recent EC legislation delineating the passage to digitalization and its analog-to-digital switch-over times, and to the effective strategy executed by SKY Italia on satellite, traditional channel operators have been pushed to a faster and more efficient capitalization of digital opportunities. However, in order for DTT to not represent merely a siphoning off of revenues from the analogical to the digital platform, they must maximize strategies and channel offerings that, on one hand, can offer a competitive alternative to SKY Italia's pay TV (and the IPTVs, as well), and on the other hand, can increase the volume of advertising on free-to-air channels either through an increase in the audience and/or its greater segmentation and profiling or through innovative advertising campaigns, that, thanks to the possibilities offered by digital technologies, could prove more effective.

Mediaset, in particular, completely changed its strategy in 2008, improving on an already extremely interesting offer, based no longer only on pay channels centered on soccer, cinema, and sports, but also on three new pay channels (which offer, in a premium rationale, the segmentation that characterized the historical free-to-air triad) as well as a children's channel (Disney). This offering primarily addresses a different target compared to the SKY Italia offer, with the clear intent of broadening its pay TV user market, relying on the ever-increasing penetration of integrated tuner televisions.

Rai introduced a new channel, Rai 4, and has continued experimenting on HD. There is a big question mark as to the role that Rai will be able to play, considering its limitations as public operator, which do not allow it to compete in the pay TV market.

La7 has worked on several interesting experiments tied to the assessment of the potential DTT offerings in terms of interactivity and advertising.

On the other platforms of Sofa-TV, traditional broadcasters have continued, up until 2008, to position themselves further upstream in the chain as content and programming suppliers with less concentration on the final client. Already from 2009 things should change, since a consortium of the three biggest traditional broadcasters is working to launch a free satellite platform as an alternative to that of SKY Italia.

5.2. Satellite Broadcasters. At the moment SKY Italia is the only important operator in the satellite platform arena, even if, as noted, things could change soon. In these last few years, it has been getting extremely positive results (it is in fact ranked the Number Two Italian television operator in terms of revenue, if we do not consider the national Rai-imposed tax that all Italians must pay in order to have television).

In the last year, SKY Italia has aimed for both a further broadening of its already ample and varied channel offerings, as well as a greater penetration of its most innovative services (MySKY, which allows an easy program recording and/or delayed viewing, and HD, which allows High Definition viewing of a great number of contents).

It is not present on DTT, whereas on IPTV it plays an indirectly key role, since its offerings represent a fundamental component of three of the four Telco operators' packages in this sphere.

5.3. The Telcos. The Telcos play their game in the field of television by pushing IPTV, even if, in absolute terms, the results are still marginal compared to other digital platforms. It is, however, necessary to highlight that the offerings in the Telco television sphere are more tied to the need to expand their service portfolio in order to reduce the churn rate and increase the ARPU than to their desire to develop a new business that can be profitable in and of itself.

Certain important events have characterized this division in the course of 2008: Telecom Italia changed its strategy, presenting its television offerings in a bundle with broadband, without extra cost to the customer (thanks to this new strategy and an intense promotional campaign, Telecom significantly increased its number of users, closing in on the leader in the sector, Fastweb); two new players, Infostrada and Tiscali, entered the field, and even if up until now they play an absolutely marginal role, they are interpreting the concept of IPTV in an original way, with a "hybrid" model that brings different characteristics, typical of the Web to Sofa-TV. Tiscali, in particular, has greatly invested in IPTV, creating a decisively innovative product in regards to user interface, graphic qualities, and on demand content offerings.

To complete the analysis of Sofa-TVs, besides the players in direct competition previously analysed, it is appropriate to make a few considerations regarding other players belonging to the television industry, which, from a strategic point of view, play an important role.

5.4. Content Providers. They have the task of creating and aggregating television contents, including shows, daily news, films, soap operas, fictions, cartoons, various series, and commercials. For this reason there is a wide range of players able to fill this role; amongst these we also include the user, the creator of UGC (User Generated Content), now very diffuse, especially in the world of the Web, but also on Sofa-TVs like Qoob TV, a channel transmitted through DTT, IPTV, and Web TV, where part of the programming, even if aggregated by the Broadcaster Telecom Italia Media, is formed by content totally generated by the user. At the moment, there is a simple transposition of contents from one platform to another, but there are some companies, such as YAM112003, that are realizing adhoc contents for specific digital television platforms.

5.5. Network Providers. These are those who deal with the distribution and diffusion of the channel; the main actors are Telcos that exploit their own infrastructures already diffuse on the territory, in order to transmit the television signal on various platforms, like Fastweb, which has created its own network. It has exploited the advantages of vertical integration, in the face of steep costs involved in sustaining in initial phases. There are then the broadcasters who operate as network providers as well, like Dfree, which, besides being a broadcaster, also transmits on its own MUX both its offer and a group of Mediaset channels.

5.6. Service Providers. They create services that are integrated and distributed in the broadcaster offers. The main services are, for example, Video On Demand, Time Shifting, Catch-up TV, T-Gaming, T-Learning, and all the services of Conditional Access. The actual creators of services are those like IconMediaLab, Enterprise Digital Architects, Kora, and Xaltia, which operate in close contact with all the main New TV players, creating applications, graphic interfaces, and interactive platforms inserted in contents and programming of different television offers.

In the following section the company profiles of the three main players in the Italian Sofa-TV sector (i.e Mediaset, Rai and SKY Italia) will be described.

5.7. Mediaset. Mediaset S.p.A is the main commercial Italian television group and leader, together with Rai television in free-to-air TV, and is present abroad as well (with 50.3% of Gestevisión Telecinco Group, a Spanish TV broadcaster) and operates on all the new digital television platforms with different roles in the value chain.

Given the increasingly greater strategic importance of controlling the creation of television contents, it has recently acquired 75% of Endemol, developing a twofold strategy: the in-house realization of contents transmitted on free-to-air channels and the acquisition from external providers (or production in partnership) of contents transmitted in the pay television area. Thanks to this strategy, the company has significantly reduced the lead of the first mover in the pay TV market, SKY Italia.

On Digital Terrestrial, the leading platform, it carries out the activities of Content Supplier, Channel Operator, and Service Supplier, setting itself up as a strongly integrated vertical operator. The offerings of the group can be divided into four typologies: the generalist channels present on analog TV as well, channels created ad hoc for the DTT platform, like Boing (children's channel) and Mediashopping (channel dedicated to telesales), Mediaset Premium channels (thematic channels with Pay content), and Premium Gallery channels (thematic channels viewable only by monthly subscription). Both Premium channel typologies are based on strong content appeal, like soccer, movies, TV series, and cartoons. For these contents the modality of acquisition does not require a contract but is based on the acquisition of a prepaid, rechargeable card. The company's entire array of DTT offerings aim to create channels that are complimentary to the generalist channels, with a well-defined viewer target (i.e., segmented channels) and a reduced membership cost for Premium packets compared to its competitor SKY Italia, although offering a narrower breadth of offerings. The company is integrated downstream as well with the control of two Multiplexes, through which it broadcasts its own offerings, and rents, in adherence to the norms in force, 40% of the transmission capacity to third-parties, setting itself up as a full-fledged network operator.

Finally on satellite and IPTV, the company is set up as a video content provider.

5.8. Rai. Rai, the Italian public broadcaster, controls all the New TV platforms using various strategies.

On DTT it maintains a vertically integrated control: from content production to the management of transmission infrastructure. At the level of national offerings, the Rai television channels can be grouped into three different typologies: the simulcast of three generalist channels (Rai 1, Rai 2, and Rai 3), channels initially broadcast via satellite and re-presented on DTT (Rai News 24 and Rai Edu 1), and finally ad hoc channels developed for DTT (Rai Sport Più, Rai Gulp, and Rai 4). The current business model of Rai's DTT offerings, in continuity with its generalist channels, is in better terms based prevalently on advertising and the national TV tax, as it has no pay offerings at present. Rai has done some experimenting with transmitting in HD for certain major sporting events like the Winter Olympics in Turin and the European Soccer Championship in 2008. Moreover, on DTT Rai acts as a network operator, managing two national Multiplexes and renting 40% of its transmission capacity to third-parties, setting itself up, in this case, as television content carrier for others.

On Satellite, Rai is present both as channel provider for the SKY Italia pay package as well as free public service broadcaster. Finally, through Rai Trade Company and in partnership with the Inter, Juventus, and Roma soccer clubs, it produces and commercializes channels dedicated to these teams and distributed by SKY Italia.

On IPTV, Rai has been present since 2001 with Rai Click, a joint venture between Rai (40%) and Fastweb (60%), created to broadcast the offerings originating from the current Rai1, Rai2, and Rai3 programming as well as the Rai archives and Rai cinema films in VOD modality through the Fastweb TV platform. Rai is also present on the IPTV platforms of Alice and, since 2008, those of Tiscali with offerings in thematic areas.

5.9. SKY Italia. SKY Italia is the only satellite pay operator in the Italian television market and boasts over 4.6 million subscribers (September 2008).

Its program and service offerings are qualitatively and quantitatively significant, with over 170 thematic and pay per view channels that cover all the different categories: film, entertainment, sports, news, documentaries, travel, music, and children's channels.

The company operates through partnerships with Italian and international content suppliers: thematic channel publishers hosted by the platform, and production companies involved in the creation of the programming and new formats for entertainment, cinema, sports, and news channels.

SKY Italia tries to make up for the reduced intrinsic interactive capacity of its satellite platform by increasing services embedded in its decoders: for example, it offers the possibility to record and save programs thanks to the hard disk included in the STB and offers its HD viewing service with 6 channel offerings, which at the moment is the only of its kind in Italy. Even within its programming there are certain interactive services available that allow the user to play games on TV and to have interactive mosaics during certain sporting events.

SKY Italia broadcasts its own channels on IPTV channels as well, on Fastweb, Alice Home TV of Telecom Italia, and Infostrada TV of Wind, through agreements with these carrier companies that allow it to increase its subscriber numbers and the penetration of its offerings within the Italian territory.

6. Conclusions: Current Trends and Future Turning Points

In conclusion, it is possible to make some consideration as to what might be the future evolution of the industry. Such considerations, although obtained from the analysis of the Italian reality, can certainly be applied to other international contexts as well, since the factors that could influence the development of the industry are, in large part, not country-specific.

The future turning points that we see on the horizon are (i) the competitive battle in the pay contents market, which is getting increasingly more interesting, with on one hand, SKY Italia's continued growth, increase, and enrichment of offerings, and on the other, Mediaset's new and improved, more aggressive game played by the field of DTT; (ii) Rai's ability to develop a position in the sector, considering its complete exclusion from the Pay TV arena, currently the most attractive attribute of digital television; (iii) IPTV operators' ability to carve out their own niche and exploit both the specificity of this platform and their key resources as operators of Telecommunication and Internet service providers.

In particular, the main factors that will be able to influence the development of the market, not only in Italy, but in general in every country characterized by the evolution of the TV towards digital platforms, are the following three:

(i) the normative and regulatory framework,

(ii) technological evolution of the networks,

(iii) the evolution of the systems and tools for measuring the audience and the users.

6.1. The Normative and Regulatory Framework. It is obvious that any evolution of the normative or regulatory framework could heavily influence the dynamics of this sector. Up until today in Italy the two most interesting phenomena are, on one hand, the definition of times and modalities (including the theme of public subsidies for the purchase of STBs) of the switch-off of analog TV, which have already begun to apply to certain regions of Italy and which, up until today, seem to be, in large part, fixed; and on the other hand, the theme of regulation of product placement in TV programs, which could have a strong impact on the roles and strategies of the operators.

6.2. The Technological Evolution of the Networks. The three categories of Sofa-TV are based on completely different channels from a technological point of view, due to both their current characteristics as well as the evolution that they will undergo in the years to come.

In an attempt to simplify and schematically present this theme, we can characterize the different digital platforms by three main performance characteristics:

(i) the bandwidth, which influences the number of deliverable channels and their quality (e.g., influencing the possibility of transmitting in HD);

(ii) the intrinsic interactivity, that depends on the presence of an embedded back hl channel;

(iii) The geographic coverage (which, in reality, is not an intrinsic characteristic of technology but depends on the investments made within the system of operators).

It is obvious that the positioning of the three digital platforms on these three parameters is varied and is destined, moreover, to undergo very different dynamics in time.

(i) Sat TV presents clear strengths in its territorial coverage and bandwidth; the weakness of this platform is, however, the absence of an intrinsic return signal, which limits its capabilities for certain formats (like on demand) and for certain more interactive services.

(ii) IPTV has, on the other hand, as its own strong point, the back channel intrinsic of its network (IP) and therefore capabilities on an interactive level; in terms of coverage of the territory and breath of range, it still suffers from problems tied to the digital divide, with the presence therefore of areas of the country not yet reached by a sufficient bandwidth.

(iii) DTT starts with good coverage of the territory, but suffers from a limited bandwidth and from a lack of intrinsic back channel.

With reference to the back channel it should be noted that the platforms that do not have embedded potential can still use external channels, with normal Internet connectivity at home or on the cellular network (as, i.e., has already been done for certain services, like the pay per view contents).

6.3. The Evolution of the Audience and User Measurement Systems and Tools. One of the great novelties brought by digital platforms is represented by the possibility of establishing a real relationship with users, to know their behaviors, and therefore, to profile and group them (even if this possibility is much greater in the presence of a back channel).

It is evident that, as these characteristics are very interesting for the advertisers, they have the ability to create new revenue opportunities for the broadcasters. However, in order that this truly become a reality, there is a need for adequate measurements which are both consistent with the new platforms, and trustworthy systems of measurement of the audience, ones accepted by the entire market.

The three factors analyzed above, the regulations, the technological evolution, and the achievement of audience measuring systems, will in coming years strongly influence the offering strategies and business models of the broadcasters on the different platforms and therefore their reciprocal competitiveness.

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