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Dynamic content in mobile applications. A new paradigm of multichannel development with an unknown business model

El contenido dinámico en las aplicaciones móviles. Un nuevo paradigma de desarrollo multicanal con modelo de negocio desconocido

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Abstract

Mobile applications occupy the screen of the devices of millions of people, but only 1% generates profitability and the user does not frequently use more than six applications located on the desktop of his device. A documentary review allows us to reflect on the evolution and current situation of the cultural industry and how different studies predict the importance of mobile technology, mobility and permanent connection, trends that are now a reality. A transforming reality of the digital world, where content is a fundamental value for applications but does not generate enough revenue and very few companies achieve the necessary stability of billing of a productive and consolidated line of business, and when they do it is in a temporary way.

Keywords

Media Management; Markets; Business models; Apps; Payment contents; Mobile platform

Resumen

Las aplicaciones móviles ocupan la pantalla de los dispositivos de millones de personas, pero solo un 1% generan rentabilidad y el usuario no utiliza con frecuencia más de seis aplicaciones ubicadas en el escritorio de su dispositivo. Una revisión documental nos permite reflexionar sobre la evolución y la situación actual de la industria cultural y como diferentes estudios predicen la importancia de la tecnología móvil, de la movilidad y de la conexión permanente, tendencias que en la actualidad son una realidad. Una realidad transformadora del mundo digital, donde los contenidos son un valor fundamental para las aplicaciones pero que no generan suficientes ingresos y muy pocas empresas logran alcanzar la estabilidad necesaria de facturación de una línea de negocio productiva y consolidada, y cuando lo hacen es de forma temporal.

Palabras clave

Empresa Informativa; Mercados; Modelos de negocio; Apps; Contenido de pago; Plataformas móviles

1. Introduction

Cultural industries have undergone an important conversion process (Bustamante, 2018) along the 21st-century thanks to interactive digital communication (Meyer, 2006; Scolari, 2008; Curran; 2009; Picard; 2010), enhanced by the economic crisis of 2008, through digitalization and new technological tools, which has facilitated important changes in the uses and consumption of information and communication products (Cea-Esteruelas, 2013; Goyanes & Vara-Miguel, 2017).

The number of mobile users in 2018 reached 5,135 billion, which means 68% of the world population, and users with internet access exceed 4,021 billion, with a penetration rate of 53% (Ditendria, 2018; ONTSI, 2018). The change in the way that people interact with the environment has undergone an evolution that has originated the Information Society (Duderstadt, Atkins & Houweling, 2002).

This transformation reaches its climax with the irruption of wireless technology, a scientific progress that has modified fundamental aspects of social behavior. The so-called "mobile revolution", breaks the current standards and promotes a new way of interrelation based on mobility that allows the mankind to be connected anywhere. We are witnessing a change of scenery that has an essential protagonist: the mobile phone (Niño González, 2014). In 2017, the number of users declaring 'mobile only' compared to those combine mobile and computer has increased in almost all markets and in the case of Spain there are already more mobile users than desktop (ONTSI, 2018; Rodríguez-Fernández, 2017).

In 2017, consumption of dynamic content increased as the amount of content viewed on the mobile phone has increased (4% more), while visits from tablet have decreased by 13%, increasing the time we spend on the mobile for social networks and messaging (75% of total digital minutes) and 59% of news consumption worldwide, 90% of mobile data traffic will come from smartphones, whose contribution is expected to be multiplied by nine (V.V.A.A., 2018).

It is in this search for alternatives for the future where the industry has noticed that the emergence of mobile communication offers a new context with its own ecosystem (Aguado, Martínez, & Cañete, 2015) with the network as a new scenario (Castells et al, 2007), in which users have welcomed the so-called "fourth screen", with informative and entertainment interest, thanks to the availability and ubiquity that provides the user, becoming a key element in the progress of convergence and integration of digital communication (Costa, Rodríguez & López, 2016) and already in 2017 users have increased video consumption by 13% more than in 2016 thanks to the high resolution displays and the new streaming video platforms (according to Ditendria's prospective report, 75% of mobile data worldwide usage in 2023 will be of video).

Applications are the new interface through which the information, communication, knowledge and creativity society in which we live interacts with the media. A bidirectional communication channel that is already an online alternative to deliver products and services to users connected in a universe of multiscreen and multitasking consumption, including its impact on families (Ramírez-García, González-Fernández & Salcines-Talledo, 2018), and that in 2018 it suppose more than 80% of the time we spend using the mobile phone. In 2017, 178.1 million Apps were downloaded worldwide and each Smartphone has, on average, 80 installed applications, of which only the half of them are used. The most important feature of these devices is not their almost infinite potential for interaction, but, for the first time in the history of media groups, they can have real statistical estimates.

The potential of this enormous amount of information, its analysis and its value may have for communication groups, is just looming in our times. Big Data analysis and interpretation of information packets from the audience will allow rewrite how these media groups satisfy the consumer experience of those users which are connected and identified through applications or other software tracking and interaction with consumers (Ortega, González Ispuerto & Pérez Peláez, 2015).

To understand nowadays the lack of real incomes of mobile applications in these latest generation emerging media, such attractive to the audience as difficult to amortize, we must consider the factors that lead to a situation of difficult economic resolution for modern media companies (Peinado & Mateos, 2017).

The crisis of these recent years has affected the economy, and it has caused recessive effects on communication companies, and significant changes in property structures, productive organizations, groups and professional profiles, user or consumer behaviors, models editorial or business and a rethinking of the media industry and their traditional values (Peinado & Mateos, 2016).

One of the most striking effects of this double current and structural crisis that gravitates on the media industry is the generation of strong reconversion processes and the flowering of intensive innovation dynamics. Reconversion, restructuring, renewal and innovation are the main concepts in the media management agendas nowadays. The crisis is temporary in its economic and financial perspective, but it

is also structural due to the impact of the technological, cultural and social changes that are taking place in the communication systems.

The use, production, circulation, and communication structure are changing. We have changed from the mass media of the twentieth century (press, radio and television), to the current mass media which combines the traditional media with the mass self-communication: blogs and social networks. The changes that are occurring in the systems, models and structures of the media give a significant challenge to the practice and theory of business management. We are facing such deep, quick and transformative changes that identifying them, isolating them, knowing their orientation, measuring their intensity and studying their consequences is not an easy task. (Campos Freire, 2010).

The main effect of the global financial crisis in the communication sector was the reduction of advertising investment, its main means of financing. The most affected media, in that first phase, were the payment ones with a high informative content (especially the press) compared to those media with a more entertainment and with a lower news content. The reason is that the media business model was already in crisis before the mismatch, so the economic context acted as an accelerator of this process (Farias Batlle & Roses, 2009).

In the current socio-technological scenario of moving and adaptation, there are new media that have passed very quickly become part of our daily lives. Referred to them as the "fourth screen" (Cebrián Herreros & Flores Vivar, 2011; Aguado & Martínez, 2010), mobile devices are revolutionizing the content creation industries thanks to the combination of two fundamental elements: their broad social diffusion and their network connectivity.

Although it was considered that the arrival of the mobile phone originated the emergence of new expressive modalities and a transformation of the original concept of journalism, recent research confirms the current commitment to a more replicating journalism than an innovative or adapted to the environment one, in terms of modalities of narrative. Discursive structures and the required specific creation for the new platform have a very low application rate in the journalistic environment (Costa, Rodríguez & López, 2015; Costa, Rodríguez & López, 2016; Peinado & Mateos, 2017).

Thus, an anticipated context of difficulty is configured for the new communication channels. Although mobile devices and small and large-area terminals have grown vertiginously, this enormous devices' incursion in the society has not provided a revenue increase of the innovative information channels, particularly mobile applications offered from two operating systems which have monopolized the app supply: Google Play and App Store.

The obstacles to generating revenue in applications do not differ much from revenue in digital media. Understanding the mobile application as a prolongation of the digital media, the real profitability difficulties are similar to cybermedia, with substantial differences in terms of the technology developed and the context in which they are offered.

Mobile application, as a channel in itself, is developed in a restricted and limited environment by several fronts thus only the technique allows to open it to new required and interesting interactions. Technology does not necessarily mean progress, but it offers opportunities. However, it also involves new problems such as technological dependence, that is, the belief that technologies will solve all problems or the feeling that technology controls our lives, and is a source of frustrations when it does not meet expectations (Marques, 2000).

But the issues that cause incidents of varying severity in the use and behavior of technology, either for safety reasons, either for ethical reasons, are related for example to the privacy of virtual spaces themselves (email, web pages and currently mobile applications); control of privacy and confidentiality, and unauthorized access to information; the vulnerability of the computer systems as, for example, in computer transactions.

Other problems have a direct relationship with the development of huge companies that operate globally, some larger than many states (Google, Apple, Microsoft ...); intellectual property of software and materials found on the internet; internet information overload and lack of knowledge to select the right information; the cyber pollution can create dependency or other difficulties that make us waste time, furthermore the lack of responsibility in the cyberspace for user's actions, motivated by a certain anonymity, can facilitate impunity of the transgressor, so it is required a worldwide ethic code to avoid it.

The objective is to define a habitat in which the contents are edited, and they interact: sharing, valuating and are showed to the user/reader in an instantaneously and continuously way and at high-speed thanks to the applications. The analogy between the web and the applications, in terms of content, requires synchrony, since each content shown in the mobile application must be a bridge to the web and social

networks and vice versa. In this interconnected network, the content flows from one channel to other creating a system of interconnected informational reservoirs.

Based on the theoretical framework proposed, the valid working hypotheses to set up a conclusive response to the contents embedded in a mobile application and its real value compared to traditional media already mentioned, it is considered that payments for content through a mobile application are difficult to perform and to get a positive amortization. In addition, fourth-generation mobile technologies onwards have improved the response of the devices in apps contents, increasing its use through increased speed of opening and reading.

It is to be also noted that the mobile fourth generation technologies and subsequent have fostered interconnection between channels and the interconnection is based on the quantification of real impacts of reading, so that the usability of content applications is a factor main for their consumption.

And finally, content, although excellent, is not the main driver for reading, but the positioning of it and the ease of access to other channels that enhance it. This causes that content of low quality, even over an outstanding technology, will not be followed, so the balance between content quality and technology is a necessary variable for its reading. This content requires a brand value to be revalued, and thus, the brand becomes a benchmark of the own content and its quality.

2. The content market environment

The current context of Spanish press is marked by a series of change processes and their corresponding derivations (AMI, 2017). First, a decrease of paper headlines, which reached its peak in 2007 with 140 then, but are currently counted 113. In 2008, the year considered the impact of the economic crisis, started the massive closure of paper newspapers. The digital headlines, meanwhile, experienced a growth on average until 2010 (When the 134 digital headlines are reached; been reduced then until the 125).

Next, there is a sharp decrease in the volume of its dissemination and advertising investment. And finally, a change in the reading habits of the traditional paper press reader, which increasingly migrates to online media and news distributors and aggregators.

In November 2004 began the initiative to create the necessary requirements to develop mobile devices, called "Fourth Generation." One of the main aspects was to improve the average transmission rate data in three to four times compared to the speed of the third generation. The aim was to obtain peak download speeds of 100 Mbps and 50 Mbps rise. In addition, it was sought to obtain less delay time and less energy consumption in mobile terminals.

The increasingly frequent changes in mobile telecommunications technology, as a result of the data and video transmission speed boost and the use of applications via the Internet, allow SMEs to use a wide variety of services that increase their productivity and its efficiency to meet strategic objectives. These requirements determine techniques that help measure the impact of these changes and, in accordance with the analysis of the results, identify motivations for the use and adoption of ICTs, so as to increase productivity in SMEs. (Polo, J. & Cardona, 2011).

Telecommunications service providers nowadays operate in dynamic markets whose business models want to be successful and therefore they require to find and develop new opportunities to combine endogenous knowledge with exogenous skills, always aiming to improve new knowledge's creation processes.

And these communications service providers, despite their market capitalization and technological resources, cannot carry out all the required changes with their own resources and, at the same time, remain competitive in the current troubled scenario. In this sense, new challenges appear, such as the incorporation of external knowledge, often by tacit nature, in the business processes of companies and the articulation of dynamic capabilities in a highly interconnected context, dominated by substitution economies rather than by scale economics (Chilton y Bloodgood, 2010)

This is where external agents come into play to assist to providers of telecommunication services in the processes of innovation and product development. A thousands of companies and individual expert users who continuously interact with innovating products. This allows companies to appropriate product innovations which they had to buy them before.

While innovation and development processes were carried out within specific business units in big companies, it is difficult for a single company to independently develop them, given the increasing complexity associated with innovation processes in systemic environments and the required of having

various external elements that guarantee the economic approval derived from these innovation processes (Pitelis & Teece, 2010).

If we add to the above the decrease in costs associated with the transfer and absorption of knowledge, they also encourage the development of open innovation models and associated business. These represent a paradigm shift in the way of innovation processes organization, increasingly in the market rather than within companies. (Miguel-Dávila, López & Pablos, 2012).

2.1. Types of content application

This study is based on a documentary check review as a basic methodology which allows us to reflect on the evolution and the current situation of the cultural industry and more specifically of the classical news and media companies in comparison of the reports that provide the actual market data.

Given the intense and dynamic contribution made to the academic scope with studies of researchers and professional reports, in domains of apps and the web, we understand that there must be an interaction and differentiation element between the web: the mobile web (or application generated for reading on mobile devices) and the native application (expreso programmed application with native languages for each market platform such as App Store, Google Play, Microsoft Store etc.) because both have substantial variations, as there is shown on table 1 "Characteristics of the different content applications" because the native apps allow more capabilities than the applications generated with web languages and interconnected with the conventional web page.

The native application supports the latest innovations in the interaction with the user. They incorporate new marketing formulas and linking with sales, geolocation and offline reading systems by complete content download, as well. Likewise, its opening speed and user experience is greater than the websites adapted to the mobile or the mobile websites offered in the markets with launcher icon.

Table 1: Characteristics of the different content applications

Characteristics	Native Apps	Web APPS	Webpage
Optimized for the mobile	Yes	Yes	No
Navigation speed	Very fast	Fast	Slow
Internet connection	Not required	Required	Required
Offline storage	Very good	Limited	None
User's interface	Very good	Good	Bad on small screens
User's experience	Very good	Good	Bad on small screens
Push notifications	Yes	No	No
Geolocation	Yes	Limited	No
Hardware access	Yes	No	No
Need for approval	Required	Not Required	Not Required
Access to the app market	Yes	Not Available	Not Available
Barcode scanning	Available	No	No
QR code scanning	Available	No	No
Voice recognition	Available	No	No
Augmented reality	Available	No	No
Camera access	Available	No	No
Agenda access	Available	No	No

Own creation table

Another issue regarding native applications is that they need to pass a review process in the most popular markets and also meet the publishing protocols; which are sometimes complex, at a technical and even ethical level (Google Play requires filling out a deontological form and App Store, directly, rejects those applications that do not comply with its regulations, forcing the developer to change its programming or its contents).

2.2. The content as a value

Content is the basis of the transmission of knowledge. As such, the message is the essential form of apps' communication. However, the interacting content increases its value when it is transmitted, replicated and shared.

We understand that modern societies need to be informed, they need to know and need to learn, because it develops their welfare. Parallel to these needs, instruments and mechanisms that are satisfied and develop technologically, so it is easy to assume that these will boom.

And somehow, all these concepts lead us to a common place pointing unidirectionally to the same aim: ICTs (Information and Communication Technologies), which it can be defined as a set of products and processes developed with the latest tools generation arose from computing, information media and communication channels and related to the storage, processing and digital transmission of information (García, Niño & Núñez, 2011).

The search for a profitable and effective business model remains one of the major issues in the cyber journalism field. Without going into the huge economic cost of contents incorporation to Internet Network has been for many media companies, after about fifteen years, which has been clearly shown is that an information company is more than an idea. It is a ninety percent of management including concepts such as realism, rigor, flexibility, observation, perseverance and humility (Parra, 2008).

Regarding the information dynamics, mobile devices are being consolidated as a tool for information (47% of adult Americans use their phones and tablets to obtain local news and information). Reading the press on the Internet is the fourth daily activity, after chatting, using email and accessing social networks. In 2018, after ten years since the first mobile application arrived on the market, we have been using these apps, more each time, for our daily tasks until 2017 where we spent more than 80% of our time to the smartphone use, in the world.

In 2017, the download of mobile applications was 178.1 thousand of millions, and it is expected to rise, in 2022, amount to 258.2 thousand of millions downloads. The time spent to apps compared to browsers is, globally, almost 90% of the users' mobile minutes, in countries like Argentina where the time spent on browsers is more than 5%. In addition, voice recognition systems will greatly stimulate the use of associated transmission services, and the Smartphone will be the most used device to access the internet (85.2%) overcoming to computers, Tablets, Smart TV or game consoles (ONTSI, 2018).

From the business perspective, offering a mobile application, in addition to be a new service to citizens, it can be an interesting way of consolidating the brand and a new channel for advertising revenue. Fidelity provided by the app compared to the web is an added value: the user, through an application, will access the media from a platform already permanently on their screen, avoiding the possibility of entering or not to the web, or at the least, through both systems (Costa, Rodríguez & López, 2016).

2.3. The brand as a form of content

The online and mobile environment is increasingly relevant for marketing due a new user model that consumes content and services in a different way than it had been doing until now (IAB Spain Report, 2018). In addition, online and mobile purchasing behavior is transformed by the emergence of new purchase channels, such as bonus and coupon websites, and due to improvements in technological devices equipment and the huge penetration of Smartphone, with internet connection and operating system

Strategic brand management through the media and specifically through new communication technologies gets a vital importance, day after day, and practically all the companies realize about the needing to carry out communication according to their audiences. That is why they have developed tools and adapted its brand communication to the different media and environments emerged in the market. Brands adopt the personality of their leaders or the people who work for them, they approach people. Brands adapt their visibility to the mobile communication environment, to new devices and their applications, which have an impact on the own brand image and, therefore, on the consumers' minds.

It is a priority to know how to reach the public through the correct communication tools (González & Contreras, 2012), so the good brand management will allow:

- 1.- Getting a position in their audiences minds which is essential in order to exist and constantly feeds on what company or brand says about itself and the ways it uses to do it.
- 2.- Facilitate its differentiation with their competition, because the mere fact of existing does not guarantee to be remembered or achieve a positioning. The correct management of communication, helps the brand not only to be present, but to differentiate itself from its competitors.
- 3.- Getting somehow avoid external factors influence in the purchase decision. This means that this image builds a previous reference scheme on which they can strengthen their purchasing decisions.

2.4. Content types, their interaction and their market valuation

The newspaper industry realized very soon the problems carried by the Internet and already in the nineties they designed different proposals (Shirky, 2009), such as micropayment systems, campaigns to educate the public to pay for the online content of newspapers, business models financed entirely by advertising, the establishment of DRM system and to sue offenders who do not respect intellectual property rights. But this author already notes that these plans and strategies designed by the industry have proved ineffective, since they were based on the principle of maintaining the old forms of organization of the newspaper industry, in the new environment where you can make perfect copies of any content in a very cheap way, even free.

The efficient organization model in the industrial production stage must be replaced by a model with structures optimized for digital data due to the disappearance of the printing costs which allows the internet. The newspaper printing high costs have enabled a markets' segmentation and guaranteed an oligopoly in this industry, even a monopoly in relation to local audiences.

But the internet has destroyed the printing costs barrier, because everyone can use it, which implies a change in the newspapers organizational structure to compete efficiently in this new reality.

Nowadays, more and more people tend to use social networks and new technologies, such as mobile technology, to search for items and purchase opportunities, services, etc. Therefore, companies tend to incorporate these new media, in many cases adapting the services they have. This brings new situations with points of conflict and failures from this new business model which we must study and solve through new frameworks, techniques, methods, tools and systems, which allow to address these new situations in an organized and repeatable manner (Peralta, M., Salgado, C., Montejano, G., & Riesco, D. 2016).

An information society with virtual communication enable conventional social networks more accessible to everyone, allowing humans to communicate in a global and dynamic way. From this perspective, current organizations raise the question of whether the use of these social networks and applications for these new devices will be profitable and/or productive for their business, and if they are, to what extent will be. Thus, it will be very useful the definition and application of tools to measure the extent to which these new technologies influence the performance of the organization (Núñez, Peinado & Pérez, 2015).

Connectivity is no longer linked to space so that accessibility becomes continuous (always on). Hence the importance of the mobile as a personal device, as a complement to the person contributing to the projection of identity and personal brand, which allows consumption and production of content anywhere and at any time.

In addition, the mobile phone becomes a complement of use in the so-called interstitial leisure, which takes place mainly in waiting times and transfers, in the intervals between daily activities.

Moreover, access to the web extends the purpose of interpersonal communication (one to one), to mass communication (from the media to citizens), to group communication (between networks or peers) and from one to many (from the individual to their contacts network). Unidirectional becomes bidirectional or even multidirectional thanks to the tools of the participatory web (Costa, 2014).

Market liberalization, an increasing competition and the Internet power have given a major role to the user. Consumers have thus become an active part of commercial communication, selecting or ignoring the received messages according to their interests, and interacting or creating new content thanks to the Internet possibilities. In short, they have passed from being sellers and content generators, to a mixture of consumers and producers, that is, to be "prosumers". Moreover, the traditional market segmentation has been replaced by groups of communities linked, inside and outside the network, according to their tastes, interests, trends and/or opinions.

The ability to properly exploit social networks is also a key aspect. In this sense, the opinion leaders of those networks (such as bloggers, relevant characters, experts, etc.) play a very important role in spreading messages on the Web.

The applications (Apps) incorporate in their contents for the interaction and opening to other channels some different functionalities. The most used are the following:

1- Share contents by email.

2- Share contents through the main social networks that the iOS system supports for native applications: Twitter and Facebook.

3- Share content by a variety of networks and programs supported by the Android system at its terminals (on Android these programs are easier to link to the content as they are open source): Dropbox, Bluetooth, Chaton, Facebook, Flipboard, Google + Hangouts, LinkedIn, WhatsApp, wifi-direct, SMemo, Messages, Gmail, Email).

4- Rate the contents by numbering votes "for" or "against" with symbols and icons.

5- Add the content in the list of "Favorites" for later reading.

6- Search content within the application itself, by device cache or newspaper libraries on external servers to the application.

7- Full download of the application for offline reading (for areas without coverage), if the content application has been programmed natively).

In short, viral marketing and the online word-of-mouth effect are a powerful promotion way that can be used for the benefit of large companies with large budgets, as well as small businesses with little or no budget. Successful experiences of it have shown that, when they are used integrated into the rest of the company's commercial strategies, they can improve the brand recommendation and increase its notoriety in a market saturated with advertising messages.

To this purpose, it is recommended that companies fully adopt a multichannel strategy that consistently integrates traditional media with new media, taking advantage of mobile phones (smartphones) and social networks. It is also convenient to include interactivity and the introduction of new forms of non-intrusive advertising, through the express consent implied by the indication of preferences, thus being able to personalize the message with information relevant to the user (Aguilar, Payo & San Martín, 2014).

Regarding the impediments of mobile content, affecting equally to products and services that news, since the news is a product in itself, we identify, first of all, the impediments derived from ignorance and distrust in this new smartphones environment for selling, among which highlight the economic barriers or lack of resources and knowledge in their application by workers and/or managers.

To combat it, it is necessary to maintain public initiatives and a staff training to further enhance companies' technology implementation and try to reduce people's anxiety about these changes. In addition, it is desirable that companies also invest in the technology training of their employees so that they trust more in their use; avoiding their distrust which is a problem even in the most receptive to mobile selling companies.

Companies must develop solutions such as recognition, rectification or deterrence to face technologies implementation and their use resistance, as long as society does not have a native technological education.

Another impediment to mobile selling is its similarity to the online selling and therefore there is no need for mobile sales, since it is already using online sales. In this sense, it is curious that what for companies can be an advantage transferring customers from one channel to another and/or promote cross-selling, it is also a barrier for the company to decide to sell by mobile if they do not perceive the relative advantage compared to online sales.

The perceived threat and impediment can be converted into an opportunity or reason for adoption because that knowledge of online buying and selling can be used for mobile sales and attempts to cross-sell products or services to the same customers through different channels.

If the consumer knows how to use technologies, it is more likely that he can buy by mobile if he perceives advantages, and whether the company knows the application of technologies for selling, and it is satisfied with the results, it probably will transfer its knowledge to the new channel. So a good recommendation is to take advantage of the transfer of clients between channels and from the experience learned in the mobile electronic channel. This formula is used in communication group synergies between different media and devices, such as the radio and television press or the use of social networks in conventional media.

3. Business models: the content as a part, not as lead actor

In the press industry, smartphone apps are favored by the existence of a consolidated journalistic brand, which is the one that supports the user's knowledge of the new product. Moreover, mobile devices could help foster the problem of lack of definition of the business model (Galindo, 2016) and the gratuitousness predominant culture still existing in Spain associated to the Internet.

The new context is a more likely way to develop freemium models, as evidenced subscription models that already exist in Spain or those that are developing international reference headlines such as The Guardian (United Kingdom) or The New York Times (The United States).

Innovation is a high risk for business knowledge, betting on strategies in which there is no previous experience requires anticipating many fundamental elements and their impact on the company economic and financial results. The novelty makes difficult the precise estimation of how and when the technologies or the new processes will be realized and its costs, which, in turn, will determine its market acceptance, in what amount and rate, etc.

Consequently, the design of an innovative business model has part of art, of discovering, of understanding and distilling the "deep truths" of the clients' wishes and their ratings. Also, of understanding nature and the possible future evolution of both costs as of the capabilities of the competitors and the technological and organizational trajectories.

But it is not a matter of visionaries, it requires a lot of trial and error, as well as expost adjustments. It is clear that many attempts are required to find a sustainable business model in mobile content applications and, moreover, sometimes it is more a discovery than a reasoned and calculated process.

It should not be forgotten that the new business models may involve radical innovations, breaking the sector rules up to that moment, requiring major changes in how the company's approach in the different elements. Not only does it not have previous experience, but the existing one responds to the models that are to be overcome.

The most common business models for increasing revenue in content applications are the following:

- 1- Selling of products and services added to the content.
- 2- Selling of products and services from specific sales platforms for gateways on responsive systems adaptable to the online screen.
- 3- Selling of content subscription through mobile payment systems.
- 4- Freemium download models with integrated payment systems for the app areas with exclusive content.
- 5- Ads insertion between contents with hypertext (links embedded in the content to certain URLs, s)
- 6- Ads insertion on or under the content screen
- 7- Interstitial ads insertion on the content (Pop-up or Pop-under classic web systems extrapolated to mobile apps content)

4. Conclusions: challenges and expectations

The intelligent mobile phone or Smartphone is facilitating off-line and on-line integration, and it will allow market-oriented marketing plans and programs to be generated, whose advertising indicators will favor a new model to improve content traffic with other dynamics and the investors will get their objectives without disorienting consumers.

And all this with the use with caution of mobile advertising as a tool that offers very high expectations but that it will have to be checked according to the use and consumption of mobile applications in advertising communication.

If at the end, with mobile devices, the environment acquires its distinctive continuity and, at the same time, becomes the message, the environment becomes continuous (Díaz-Nosty, 2013), the potentialities coordination between both platforms is the key. Hence, the evolution of the technological industry advances in the fourth screen development, since many opportunities ahead are observed in development synergies to achieve new consumers and ways to generate income with specific financing, in addition to the savings of product low costs. New services are also offered, with temporary and spatial indicators adapted to the non-linear model of nowadays society consumption.

Finally, we remember the importance that has always had the need for content creation, well above technological development. Precisely, the dynamic content of mobile applications, is the challenge that opens, for the Spanish and world industry, from those narrative languages apparently, very different, applied to the environment, and where prosumers acquire new roles, new participation ways, which, with the social consumption, create trends typical of the current market.

But an exclusively a technological perspective would not reveal the study problem in all its complexity. Content is the challenge they face. New narrative languages, new prosumer roles, new participation and social consumption forms are trends associated with current ecosystem mutations. We are facing this new multichannel paradigm for which we must find universal profitability and adapt it to communication companies demands.

5. Acknowledgement

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