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MUSIC RADIO APPS IN SPAIN AND PORTUGAL. OLD STRATEGIES IN THE SELF-COMMUNICATION ERA

ABSTRACT

The transposition from radio to smartphones is a new phase of radiomorphosis, which has expanded its communicative potential due to the characteristics of this distribution platform. Assuming smartphones as screens where content and communication converge give the radio the opportunity to enrich multimedia messages, explore new ways of distribution and advance on medium's customization. Also, the connectivity of those devices and location technologies multiplies the potential for local information, enabling contextual experience consumption. Smartphones and mobile broadband penetration in Spain and Portugal have led into a favorable context for mobile radio development. Radio stations, being conscious of this, have expanded their online universe to this platform, expansion reflected in the growth of applications for an optimized content access and net-radio channels.

However, in its change to mobile platform, these radio stations show significant divergences; especially in structural complexity and usability of these applications, and also in contents essence and distribution.

In the case of music stations, the growth of music on demand distribution platforms as Grooveshark or Spotify has led into intense competition for specialized radio, which must find new ways of engagement listeners, also on mobile.

This paper aims to analyze the transposition of main Spanish and Portugal music stations to the radioAPPs, in order to determine the appropriation degree of this new distribution platform, using several items like content, content format, functionality, navigation levels of these applications or the possibilities of customize access and consumption. An analysis has identified trends in the appropriation of these platforms around three perspectives: volume of listeners, nationality of these radio stations and operating system developed in (iOS and Android).

Keywords

Mobile radio; radio APPs; music; music on demand platforms

Introduction

"And we watched hundreds of students walking around campus, sitting on the buses, or lying on the grass in the park, with MP3 players 'glued' to their ears" (Salmon & Nie, 2008, p. 1).

Portable devices are part of our everyday landscape. Beyond the MP3 identified by Salmon and Nie, our personal technological equipment is enriched with various high-performance technologies like media players, netbooks, e-readers and tablets that multiply in our pockets. This context of digital convergence has defined a new social, mobile, open and interconnected environment in which they hold leadership smartphones (Weinberger, 2011). Indeed since Apple launched the iPhone (2007) smartphones have lived an exponential expansion that ranks as the new engine of the Information Society (Cerezo, 2010). At the global level these terminals already reached 72% of mobile users, 84% in Spain and 40% in Portugal (AMETIC & Acenture, 2014; ANACOM, 2014).

Also the increasing penetration of smartphones has favored the development of mobile broadband, which already forms the usual Internet access for 78% of Spanish mobile users and 34% of Portuguese (AMETIC & Acenture, 2014; ANACOM, 2014).

The connectivity and functionalities of these mobile gadgets go further the concept of telephone terminal to become a social, expansive and immersive screen where converge – one way only – communication and content (Aguado, Feijóo & Martínez, 2013).

Immersed in the era of portability (Kischinhevsky, 2009) mobile devices are postulated as the new horizon of the radio. While transistorization radio allowed the reception of Hertzian environment in several wireless devices, including mobile ones, it's not possible to talk about mobile radio until the start of experimentation of sound environment with this new support, more than a decade ago (Vacas, 2007).

THE RADIO ON THE MOBILE PLATFORM

The quick development of high-performance mobile phones has led to the development of multiplatform solutions for the distribution of audio content (Gertrudix & García, 2011).

As Fidalgo (2013) states, radio and smartphone share portability and sound essentially, unique qualities for consumption in a mobility

multitasking context. Also it is remarkable the intimate and personal nature of both media, an issue that increases the chances of user engagement. This revolution, sponsored by smartphones and mobile broadband, has redefined mobile computing, with the provision of light-software extensions for optimized access to web services. They're called APPS, that provide access to a wide portfolio of content from radio stations (Gertrudix & García, 2011).

Radio stations, being conscious of this, have expanded their online universe to this platform, expansion reflected in the growth of applications for an optimized content access and net-radio channels.

If the transposition of the radio to the Internet involved the transformation of sound in multimedia products, the emergence of new forms of content distribution and interaction with the listener (Albarran & Pitts, 2001; Priestman, 2002; Tolson, 2006; Nyre & Ala-Fossi, 2008) and the jump to mobile phones have led to the incorporation of communicative potential of this platform (Paulo, 2013; Paulo & Cordeiro, 2014).

In their paper about habits of use in mobile phone, Xu et al. (2011) found a predominant trend of customization in smartphones, both from the perspective of access and content, which joins to the personal nature of mobile terminals in building a sphere of private consumption.

In addition to the possibilities granted by the mobile terminals about personalization of consumption, the radio in the smartphone has the opportunity to offer geolocated and participatory content (Videla & Piñeiro, 2013; Cerezo, 2010).

In order to take advantage of the potential of this new medium, and create its own language and expressiveness, mobile radio requires redesigning the structure and content of APPs. Following Johnson, Adams, Cummins et al. (2012), best applications are those that are fully adapted to the potential of the device itself, using positioning data, motion detection, access to social networks or web search in a perfectly nested complete experience.

INDIVIDUALIZATION AND CUSTOMIZATION OF THE SOUND FIELD

Regardless of the possibilities of smartphones, the jump from radio to mobile is also an opportunity from the perspective of the access. The growing number of connected mobile users has developed an enabling context for the expansion of mobile radio in Spain and Portugal.

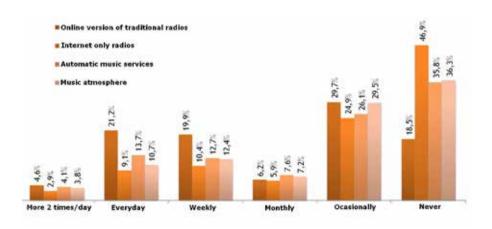
According to IAB (2014) three out of four Internet users are users of Internet radio in its broadest sense, ie, they consume online versions of

conventional radios, netRadios or automated services (like Spotify, Grooveshark). Half of these users already enjoy radio content through mobile applications.

While 81,5% of users continue listening to their favorite radio stations offline (also on the Net), there is already 64,2% of Internet users who are consumers of automated online music services.

The difference between the listeners-users of online radio practically disappears in the case of always-connected users (those internet users who access non-stop to the Internet) These listeners-users show two important features for the study we are proposing: they are mainly mobile Internet users (which allows them to access the online radio when and where want) and they belong to generations of youth or young adults (mostly consumers of Contemporary Hit Radio).

In fact, the age group where online radio has greater penetration is settled between 25-44 years. These listeners are opting for the consumption of this kind of radio due to the flexibility over conventional radio. Indeed, how and where listening is the main reason those users prefer Internet radio stations (48,2% of the listeners), followed by the variety and the ability to find content (indicated by the 41% and 39,6% of listeners respectively).



Graph 1: Types of most played online radio, based on the frequency of use of radio content on the Web

Source: IAB 2014

In a process of personalization of media consumption, called *self-communication* by Merayo (2000), mobile radio allows building a digital sound sphere in which the listener-user is who decides not only what to

listen, but how, when and under what conditions (Perona, Barbeito & Fajula, 2014). While the socialization of the sound were lived in conventional radio we live within, mobile radio involves individualization, although it multiplies shareability options, especially in automated music platforms where the social component is essential to discover and recommend music.

As Perona, Barbeito and Fajula (2014) indicate, there is a change in the communicative paradigm when setting the message in the center of technological mediation. This way, conventional Contemporary Hit Radio stations have lost exclusivity in the creation of musical sound experience for the listener-user on mobile platforms.

Platforms like Grooveshark, Radio Sonora, Soundcloud, Deezer, Spotify or Pandora (this one still no accessible from Spain and Portugal) allows users to access - both Web and Mobile – to a library of over 30 million songs. In addition to its database of songs and bands, these automated services have in common: offline consumption (often as a premium functionality); custom playlists that can be shared with registred users or networks social; customizable streamings by musical genre; the use of recommendation algorithm for automated playlist based on the users experience; and strong integration with social networks.

If word-spoken stations have succeed with information and geolocation, musical radios must add value to listeners-users in a context of high number of distribution platforms of content on demand.

Platforms as Grooveshark, Spotify has led into intense competition for specialized radio, which must find new ways of engagement listeners, also on mobile.

This paper aims to analyze the transposition of main Spanish and Portugal music stations to the radioAPPs, in order to determine the appropriation's degree of this new distribution platform, using several items like content, functionality, the possibilities of customize access and consumption or the socializing ability.

There are previous works around this object of study, like the ones developed by Videla and Piñeiro-Otero (2012, 2013), Piñeiro-Otero and Videla (2013) and Ferreras-Rodríguez (2014) on the Spanish radioAPP, Paulo (2013) and Cordeiro and Paulo (2014) concerning the Portuguese Contemporary Hit Radio stations; even a multinational approach performed by Ramos and Gonzalez-Molina (2014). However, this study provides a new approach to mobile radio due to its focus on customization opportunities on these platforms in Iberian Contemporary Hit Radio stations.

MATERIALS AND METHOD

In order to know how conventional Contemporary Hit Radio stations have adapted to mobile radio, it was performed an exploratory study of their apps using content analysis as a research method. As Igartua (2006) points out, content analysis is a systematic procedure for examining both "meanings" (thematic analysis) and "significant" (analysis of procedures, conventions, formal traits) of any text. This way, the analysis of the Iberian radioAPPS corresponds to the analysis of "significants".

The selection of the study sample has been performed in two stages. A first stage where major brands of musical radios of Spain and Portugal – according to the number of listeners offline (EGM, February-November 2014; barème Rádio, September 2014) were selected. To incorporate in the sample the two public broadcasters – Radio 3 (Spain) and Antena 3 (Portugal) – it was set an audience criteria, including those radio stations having a 2,5 share or higher.

In a second stage were chosen the applications for iOS and Android smartphones (main mobile operating systems in the Iberian market), selecting those Contemporary Hit Radio stations with APPs for both operating systems. When having duplications (often on public radio stations) individuals prevailed over collective applications.

Finally, the study sample consisted of 15 Contemporary Hit Radio stations applications for iOS and Android (a total of 30 radioAPPs).

RADIO	Түре	COUNTRY	ıOS	Android
RN ₃	Public	Spain	Individual	Individual
C40	Private	Spain	Individual	Individual
Cadena Dial	Private	Spain	Individual	Individual
C100	Private	Spain	Individual	Individual
Kiss FM	Private	Spain	Individual	Individual
Rock FM	Private	Spain	Individual	Individual
Máxima FM	Private	Spain	Individual	Individual
M8o (SP)	Private	Spain	Individual	Individual
Radio Olé	Private	Spain	Individual	Individual
Antena 3	Public	Portugal	RTP Group	Individual
RFM	Private	Portugal	Individual	Individual
Mega Hits	Private	Portugal	Individual	Individual
Rádio Comercial	Private	Portugal	Individual	Individual
M 80 (PT)	Private	Portugal	Individual	Individual

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Cidade FM Private	Portugal	Individual	Individual
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Table 1: RadioAPPS of the study sample Source: Compiled by the authors

The study was performed following research tool based on the topics: content, content language, functionality, navigation levels, linking to other online radio stations and customization. Particularly, It has been analyzed:

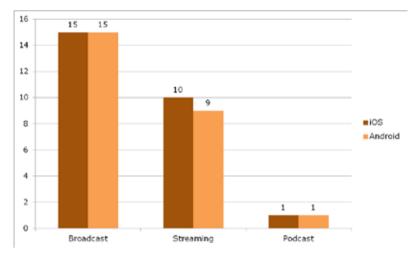
- Contents: Kinds of intended distribution, multimedia content.
- Functionality: Presence of action bar, action bar content, other features.
- Navigation levels: navigation levels.
- Customization: Customizing design, selection of main station, playlist creation, subscription content, alerts system, saved for later consumption and other customization options.
- Socialization of content: stations' shareability options.

The meticulous concretion of these categories of analysis aims to approach the study as much comprehensively as possible. From these categories, or lack thereof, it's able to point the degree of adaptation of the main Contemporary Hit Radio stations of Spain and Portugal (data: October 2014).

CONTENT DISTRIBUTION

APPs of Contemporary Hit Radio stations of Spain and Portugal are mainly support for live broadcasting. All analyzed radioAPPs allow hearing the live broadcasting, a feature that 80% of the applications (a total of 24 PPP 12 iOS and Android 12 respectively) is activated by default when opening the APP.

Only Cidade FM and RFM (iOS and Android) and Antena 3 (iOS and Android) let their users (via button) follow on air broadcasting.



Graph 2: Types of most common content distribution of common content in radioAPPs attending the OS

Source: Compiled by the authors

In addition to the live content, 70% of the analyzed applications (111 APPs iOS and 10 Android) provide access to some of their content on demand. These contents are essentially programs or contents created by the own stations, usually distributed in fragment (19 of the 21 PPPs). In the case of Kiss FM APPs (iOS and Android) on demand contents are available on the website of the station, so the application implemented an optimized access to the specific section of the page that hosts the content.

Attending to the type of distribution on demand, streaming dominates over other types as podcast. Only two in 21 applications allowing access on demand distributes its content using podcast format. This facilitates access and upgrade downloading (using push technologies) and offline content consumption. Another step towards a more personalized medium, given the possibilities of contents subscription and everywhere and anytime listening.

In any case, legal restrictions related to copyright and music distribution establish limits to on demand distribution, so, the choices of the listener-user. Stations like Cadena 40 provides on-demand listening for the songs included in its classic weekly compilation, but the download of these songs are not allowed. It the listener-user wants to, there's a direct access to iTunes, an Apple music store where users can purchase the item-specific disk [feature present in apps Cadena Dial, Rock FM, Máxima FM, M80 (SP) and Radio Olé for iOS].

MULTIMEDIA CONTENT

On demand radio content distribution makes possible the construction of an enriched radio universe that adds value to the consumption of conventional broadcasters regarding automated services.

This is why it is interesting to analyze the kind of content – according to its language – distributed by these radio applications.

Almost all tested applications (24 APPs, over 80%) incorporate small text summarizing the content available on the air or on demand ready to be consumed by listeners-users.

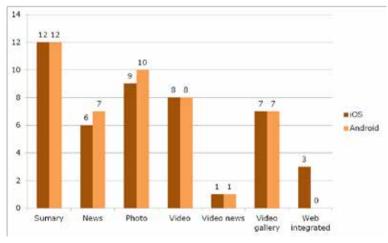
These stations often attach live broadcast with excerpts that introduce the listener on the song, artist, album or other data relating to it. In the case of Cidade FM (iOS and Android), the information provided is only the title of the song and artist.

Every time the RadioDJ introduces a new song, the display text changes simultaneously.

In addition to these textual content, 43% of the stations (six and seven iOS Android) add a related content feature showing info concerning to music or other topics that may be of interest to the target audience.

In this case, Radio Comercial y RFM (iOS and Android) develops a more complex content strategy, offering textual information (beyond nowadays news) that complement and enrich the station's musical selection.

This strategy, also reflected in the use of images and videos, provides highest capacity engagement to de APP.



Graph 3: Languages and contents in Contemporary Hit Radio station APPs attending to mobile operating system Source: Compiled by the authors

In terms of image content, 63% radioAPPs (19 stations) incorporate visual content in their applications. These contents can be images that illustrate the text content or related to the live broadcast, showing the album cover or artist photo of the playing content. In the case of Cidade FM (iOS and Android) visual content is used as an identifier of the program, it's used a picture of the radio speaker on the air.

These images introduced in live broadcasting – even those illustrating some streaming content (in the case of the list of Cadena 40) –, must be understood in the context of the *visual thinking* that dominates the Net. In fact, the inclusion of the album cover on playing music is common in automated audio services.

Talking about presence of audiovisual content aims to live complementary content: videoclips, concert clips, statements from the artists, and even visual records of the program on the air become part of the galleries of videos that are present in 46% of the sample (6 APPs in Android and 6 in iOS).

Only RFM station (iOS and Android) publishes videos with current information. Antena 3 for iOS, due to the collective nature of APP (this application is part of the group of Radio Television of Portugal) uses videos very close to flash news; so it has been consider outside the space of the application.

In any case, both the audiovisual pieces of the gallery and news are quite short, an issue that facilitates consumption from mobile phones.

Another remarkable issue on this subject: Antena 3, Kiss FM and Rock FM for iOS incorporate content or sections found on the website of the station, integrating this web on the screen of the application for an optimized access and consumption.

The incorporation of content in various formats and languages shows greater adaptation to the platform, while it complements the audio content providing greater value to listeners-users.

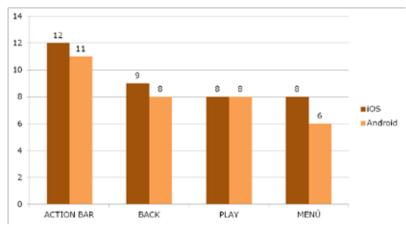
In this sense it's highlighted a set of radioAPPs providing a higher multimedia content experience. These radioAPPs are Cadena 40, Cadena Dial, M80 (SP), Rock FM, FM and Rádio Comercial High (iOS and Android). The strong weight of Spanish radio stations in this group against the Portuguese, only represented by Rádio Comercial, leads into a partial conclusion: Spanish radio seems to be aware of the potentialities of this platform. However, it is noteworthy that all the Spanish radioAPPs reflecting more multimedia adaptation belong to the same media group PRISA, and show similarities between applications and strategies.

FUNCTIONALITY

In terms of functionality, although most radioAPPs show some structural complexity, as reflected in the navigation levels (an average of 3.07 levels in iOS and 3.27 in Android) functionalities tend to be limited. Especially focused on those accessible from action or navigation bar.

Although this shortcut bar is present in 76% of the sample (a total of 23 applications) functionalities provided from that bar are quite basic: backtracking in navigation (17 applications), play or stop the broadcast (16 applications) and access menu (14 applications).

Android phones offer more possibilities for optimize this access, directly in the device using back-key or a drop-down menu button, easing the action bar – so, having less features in android's action bar compared with iphone's ones.



Graph 4: Presence of action bar and its funcionalities in Contemporary Hit Radio radioAPPS attending the OS Source: Compiled by the authors

Another action bar feature, minority in the sample, aims to content shareability of radioAPP through the user's own channels (via email, social networks and other 2.0 platforms). This shareability options are find only in Cadena 100, Rock FM, Kiss FM (iOS and Android) M80 (SP) and Antena 3 for iPhone and Cidade FM for Android.

If we focus on social interaction possibilities, only Kiss FM provides this access. In fact, Kiss FM Android APP allows listeners-users participate in social conversation on Twitter without leaving the radioAPP.

Rádio Comercial also allows their listeners-users follow the lyrics using a shortcut on the action bar (iOS and Android applications).

Beyond the features included in the navigation bar, it's highlighted an original (but limited) functionality in Cidade FM apps (iOS and Android). User can consult played songs from the last 24 hours, but having not access for listening them again.

CONSUMPTION CUSTOMIZATION

The most common consumer customization way is linked to on demand content that allows listeners-users to establish a personal tracked consumption and even their own sound narratives creating sequences of content that were not originally created. The possibility of podcast subscribing (M80 (PT) applications, i.e.) represents a further step in customizing the radio.

Beyond on demand content distribution, radioAPPs barely offer their listeners-users choices for content customizing. Among the customization features offered by radioAPPs are highlighted those which require an active role in selection and preset interests. Passive customization possibilities (based on geo location technologie) were not found.

RFM allows a selection of different stations of the same media group in its app. This is also present on Antena 3 collective app (iOS).

Beyond the podcast, some APPs as Antena 3 (iOS), Cadena 100, RFM and Rádio Comercial (iOS and Android) allow users to subscribe to certain content within theirs applications, this subscription functionality allows preset settings (that can be present as default). Also Antena 3, Rock FM, RFM (iOS) and Cadena 100 (iOS and Android) allow the creation of alert notifications so users can be aware of interesting content or the beginning of favourite programs.

RFM and Rádio Comercial APPs also allows you to mark content for later consumption. This marking feature places these contents in user's private area, easing its recovery when the listener-user has a moment of leisure.

SOCIALIZATION OF CONTENTS

In regard to the possibilities of socializing the content, applications of Cadena 40, Cadena Dial, Rock FM, Máxima FM, M80 (SP), RFM, Rádio Comercial (iOS and Android) or Cadena 100 and Rádio 3 (Android) allow listeners-users to share their content via email and other 2.0 platforms. These shareability option are greater in Android than in iOS, because of the open characteristics of the Google operating system.

However, the analysis underlines two distant issues on shareability and socialization of content in those radioAPPs:

On one hand, the limited shareability offered in several stations, restricting redistribution to e-mail - M8o (PT) and Cidade FM for iOS - or Twitter - Antena 3 (iOS). This reflects the null content socialization shareability in these applications.

On the other, the emergence of new forms of socialization i.e. the use of Washapp on Rádio 3.

The study of shareability and socialization of contents indicates differences between radio stations by country. It's necessary to point out best records in Portuguese ones.

Those Portuguese best records are also found in possibilities for customization of consumption in radioAPPs.

The possibility of content socialization and shareability demonstrated differences according to the broadcasting country. In this case it is worth mentioning a greater presence of possibilities of shareability and socialization of content in the Portuguese broadcasters comparing to the Spanish stations. A question that is confirmed if we consider the possibilidades offered by radioAPPs for customization consumption.

CONCLUSION-DISCUSSION

The present study shows a limited appropriation of the mobile phone possibilities by Contemporary Hit Radio applications.

While these applications allow live broadcasting and on demand consumption, and offer content in different formats and languages, functionalities are underutilized compared to the opportunities of the platform.

With regard to the possibilities of consumption customization it's highlighted the emergence of some basic features for configuring a more personalized medium: on demand content, content subscription, alerts, or "do it later" consumption. Some features that outlines a more personal radio, not enough to reach the possibilities of automated musical services.

As in possibilities of consumption customization, shareability options in radioAPPs are still limited, especially in iPhone apps, compared to content integration of 2.0 music platforms.

Regarding the differences between Spanish and Portuguese Radio, Spanish radioAPPs shows greater adaptation in terms of multimedia content and distribution formulas. Meanwhile, Portuguese radio stations use to be better at shareability and content consumption customization.

In short, although the analysis confirms progress in applications in both its functionality and adaptation to the platform, regarding the study of Videla and Piñeiro (2013), Contemporary Hit Radio APPs are still seeking their place in the field of online radio in its broadest sense.

The mobile platform offers various possibilities to the radio for adding value to listeners-users, an opportunity not exploited by Iberian Contemporary Hit Radio APPs.

If Contemporary Hit Radio radio wants to keep on being the main element on the structure and hierarchy of the listeners-users sound field, it must perform an ambitious bet – beyond a DJ who will act as the gatekeeper or speaker between new songs as Meneses (2012) notes –; two functionalities already implicit in automated music services.

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