# Reconceptualising Audience Research and Survey Strategies for Radio: Portuguese Case

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#### **Abstract**

In the context of digital communications, this essay explores audience ratings and survey strategies for radio, to analyse the influence of technology on new research methodologies as well as the re-conceptualisation of audience, most particularly, the listener concept. Concerning radio ratings across Europe, relevant conclusions are found, about the influence of digitalization in audience behaviour. Considering key concepts of audience and listener, conventional radio broadcasting and audience research are observed to be out-dated or, at least, inappropriate to describe the cross-media, multiplatform and multitasking behaviour people have today concerning media, most particularly radio. Therefore, the aim of this essay is to present new insights to audience ratings methods and the concept of radio listener.

Keywords: Radio, audience research; Rating.

# İzleyici Araştırmalarını Yeniden Kavramsallaştırmak ve Radyoda Araştırma Stratejileri: Portekiz Örneği

#### Özet

Bu makale, radyoda izlerkitle reytinglerini ve araştırma stratejilerini, dijital iletişim bağlamında incelemekte; teknolojinin, yeni araştırma metodolojileri ve izlerkitlenin özellikle de dinleyici kavramının, yeniden kavramsallaştırılması üzerindeki etkisini analiz etmektedir. Avrupa çapındaki radyo reytingleri göz önünde bulundurulduğunda, izlerkitle davranışları üzerinde dijitalleşmenin etkilerine ilişkin anlamlı sonuçlara ulaşılmıştır. İzlerkitle ve dinleyici anahtar kavramları düşünüldüğünde, geleneksel radyo yayıncılığı ve izlerkitle araştırmalarının güncelliğini kaybetmiş olduğu ya da en azından özelllikle radyo söz konusu olduğunda dinleyicilerin medyalararası, çoklu platform ve çoklu görevli davranışlarını açıklamakta yetersizliği nedeniyle geçerliliğini yitirdiği öne sürülebilir. Bu çalışma, izlerkitle reyting yöntemleri ve radyo dinleyicisi kavramlarına yeni bir bakış kazandırmayı amaçlamaktadır.

Anahtar Kelimeler: Radyo, izlerkitle araştırması; reyting.

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# Reconceptualising Audience Research and Survey Strategies for Radio: Portuguese Case

#### Introduction

Here in this article we tried to explore audience ratings and survey strategies for radio; studying most used audience measurement systems in Europe, analyzing in detail Portuguese ratings standard 'Bareme Rádio' methodology, sample, questionnaire and data gathering. This was combined with the analysis of 'Ouvinte Mais RFM' the first radio e-survey designed to study audience behaviour and music preferences, replacing the call out phone interviews. This is combined with the study online traffic, streams, player and demographics of most popular terrestrial radio stations in Portugal, examining the relevance of technology to define a listener profile. Our approach concerns demographics as a targeted audience, technology and use factors. Radio listening can no longer be observed strictly by a demographical point of view as cannot media consumption or any social activity that relates offline with online context. Although young people are thought to be the most active Internet users, we can not forget that older generations also forge online environment both as users and creators. The web is a working environment, leisure and social gathering virtual space where different people from different age rankings meet, socialize, share and interact, in a sort of open life-stream, improving social engagement.

There's one fundamental aspect within this analysis, which is the fact that, although radio stations try to improve ratings information by developing market surveys combined with some qualitative research, websites and streaming are still consider as complementary features

and platform for radio broadcasting. As much as they know, it can be either the FM listener who goes online when terrestrial signal is out of reach; in places where radio listening is not allowed or recommended (as for instance, at work); or even anyone else, who found the station online and likes to listen to music. Since all of Portuguese radio stations in analysis, alongside with FM streaming offer multimedia content in their websites with some producing web-only music channels, the online platform is a brand extension that can be also an alternative for programming and advertising, as well as future platform of listening. Or should we say, interaction? In this sense, what should we be calling the listener who is also the online user? Are they just listeners or a hybrid concept of audience, regarding this listening component as well as the user concept, referring to online radio?

#### Why to measure radio?

From the earliest studies and measurement of radio audiences (Allport and Cantril, 1935; Beville, 1940; Lazarsfeld, 1940 and 1946; Lazarsfeld et al., 1944) sociologists and psychologists seek to understand the audience influence in radio programming. Today's approach to those who may listen to radio covers a wide range of topics, from brand and ratings related perspectives to audience analysis in relation to mass media and the web (Blumler and Katz, 1974; Rubin and Windahl, 1986; Rubin and Rubin, 1985; Katz et al., 1973; Palmgreen, 1984; Levy and Windahl, 1984 and 1985; Hoffman and Novak, 1995) and also

perspectives of audience as markets and the change taking place in the nature of business, using works of Küng-Shankelman, 2000; Küng, 2004; Albarran, 1996 and 2010; Napoli, 2003; Caves, 2000 and 2005; Beck, 2003; Hendy, 2000; Rifkin, 2000 and Mitchell et al., 2009. Both in theory and practice, radio programming is developed for a specific audience. To be popular and influence the largest possible audience, it is to fulfil listener's needs, according to their tastes and expectations. Baring this in mind, social influence of radio is result of audience measurement and audience research, to find the best appropriate relation to a specific target of potential listeners.

The role of audience in radio is not only a result of a complex structure of subjective notions of interest and quality, but also objective audience ratings, in which marketing strategies deepen on to define radio programming, particularly advertising investment.

Contemporary radio broadcasters and advertisers still rely on audience research methods created decades ago. These do not properly represent audience fragmentation, cross-media or multiplatform consumption, mainly represented by terrestrial, mobile and online radio listening.

Radio programming design and development is built upon information about the audience; socio-demographic profiles and what attracts people into radio listening are key elements in this process. In the capitalist broadcasting framework, radio seeks to maximize profitability establishing audience loyalty within the most relevant marketing targets (demographics with higher income) corresponding to most popular radio formats oriented towards audience lifestyle<sup>1</sup>.

1 A radio or programming format refers to the overal content over a radio station. Each format can be divided into sub-types and niche formats, to an even more defined target audience, being adjusted according to each countries' socio and cultural characteristics (for instance, CHR - Tejano is geographically defined to Texas, the southwest United States and northern Mexican, with popular music; Fado is geographically defined to Lisbon, presenting a popular specific music genre called Fado).

Radio monopolized mass communication between 1930 and 1950. In the United States, it was assumed as the most important advertising medium, able to reach large numbers of people and diverse socio-demographics. As Marchand (1985) described, advertisers quickly realized the unique characteristics of radio communication, intimacy and bonding with listeners, overlapping social influence of newspapers.

Information about listeners became crucial to provide accurate data to radio programmers. Using audience research, broadcasters achieved to attract radio listeners, becoming the leading media (ratings and advertising investment). Radio schedule became highly dependable on commercially sponsored programs. Therefore information about the reported number of listeners indicating each program impact, as well as the audience fragmentation by different hours has become very important for radio industry.

The evolution of radio and programming strategies highlighted the division between quantitative and qualitative research methods. Statistical information would be combined with marketing and advertising strategies, creating a business model that relates listeners with advertising investments, transforming audiences into a commodity for exposure to ads. This business model is based on audience attention: Terrestrial radio broadcasters provide a free service and profit from selling airtime, which depends on audience ratings, namely the percentage of the population likely to listen to radio advertising in a given time.

# Audience research in radio: Early days

The history of audience research in radio can be divided into two major periods: 1) The study of listener attitudes and listening behaviour, corresponding to information needs about broadcasting content, in addition to audience ratings, to provide specific data to advertisers about 'who heard what'. 2) Today, we need to go further, to find not only listening habits and hours of listening, as well as the listening platform people use.

Ratings arouse around 1929, the year that Archibald Crossley, from the Cooperative Analysis of Broadcasting (CAB), a non-profit organization of broadcasters and advertisers, developed the first method to measure the audience via telephone: It consisted in calling to listeners and ask them about what they had heard the day before, relying mainly on memory and popularity of radio stations, as still happens today in many countries, for instance, in Portugal. A few years later, C. E. Hooper innovated the method of calling radio listeners and asking them what they were listening at the moment. Since telephone was, by then, considered a luxury that only few could afford, between 1940 and 1959, another organization, the Broadcast Measurement Bureau (BMB), resorted to voting bulletins mailed to listeners to assess radio audience ratings.

Nevertheless, these methods were not corresponding to the information needs about radio-listeners. AC Nielsen and CE Hooper sought to develop a new approach, creating a system that crossed different methods. It was based on personal interviews, listening diaries, telephone polls and surveys in grocery stores, to describe the relationship between listening and purchase of products that sponsored radio programs. In the 1940s, Nielsen introduced a new system of measurement; Instantaneous Audience Measurement Service (1942), using an audiometric device installed in the listeners home. Then, data was related to social class and location to provide information about audience behaviours and characteristics. Evolution and systematization of methodologies consolidated audience as a measure, as well as a commodity between broadcasters and advertisers.

Along this first period, it was only assessed individual exposure to media, leaving unanswered the aspect that still proves to be the most complex; radio's influence and the relationship with the listener. Qualitative research sought to relate audience measuring and behaviour. The multidisciplinary background of Paul Lazarsfeld contributed to the diversification of audience research, approaching social stratification and the psychology of consumption. In the Bureau of Applied Social Research at Columbia University, Lazarsfeld approached radio

in terms of social life and consumption<sup>2</sup>. Lazarsfeld's major studies in this bureau have found that many listeners saw ads in an educational perspective (1946), counselling programs enriched their social life (1940) and radio novels were considered to moralize their lives (1948). Radio was then, a unifying medium; in a golden era when families gathered around radio devices to listen to live sponsored network broadcasts.

Nevertheless, as today, quantitative data was fundamental to assess behavioural data: 'Who listens to what, how, where and when' considering also media exposure for advertising investment. The development of new measuring processes became dramatically different with the introduction of the computers in the 1970s, allowing the creation of socio-demographic and lifestyle databases to define market segmentation. Today, rating companies portray themselves as industrial producers of information and tend to rethink methodologies and samples, in favour of more reliable procedures according to the unreliable nature of audience behaviour and the need to find ever-smaller niche markets.

Current discussion around audience ratings is about next generation of electronic ratings. Designed by U.S. company Arbitron, Portable People Meter (PPM) is a card-shaped device similar to a pager that captures and stores an audio signal sent by the broadcasters. It is inaudible to the audience, logging each time it finds such a signal, compiling information regarding how many people are exposed to radio and television stations. Using similar technology, radiocontrol (GfK) is smaller than PPM, being similar to a wristwatch. Infratest Burke (TNS Infratest) within the same group, seems although, to be more technologically sophisticated.

These three devices have some common features; the unit of study is the individual and not the device. It is carried out passively, which increases scientific observation, because it does not depend on the testimony of listeners. Another advantage of these devices is that they

2 Lazarslfeld (1946); Lazarlsfeld (1940); Warner and William (1948).

measure audiences anywhere, not confined to home. Also allow picking up signals at any time, unlike current systems that apply questionnaires at fixed times of day and for households with telephone. It is also a multimedia device allowing to a simultaneous measurement of radio and television audiences.

In the U.S, audience ratings samples also consider cell phone users. Beginning in 2008, Arbitron recruited diary keepers by calling cell phones, a significant development if we consider increasing percentage of people that relay exclusively on it.

# How and what to measure today?

Change in media and cultural consumption, reconfigured research and rating methods, towards the effectiveness of characterization of consumer behaviour, in order to reduce unpredictability and captivate new niche markets. This process results from the convergence between technology, consumption, culture, marketing and media. Market research, audience ratings and audience studies get together as interdisciplinary studies to reach complementary findings to explain audience fragmentation and dispersion. As for media, especially radio, programming strategies are today developed considering lifestyle features like owned assets, social or cultural consumption.

In order to find the most important feature for radio broadcasters; 'who listen to what, why, when, how and for how long?' we propose to combine the best from qualitative and quantitative methods, analyzing their strengths and weakness in digital context. Radio should use new techniques for audience research to chase new listeners, develop niches, retain old listeners and please this new self-made generation. This leads us to changing in research methods and information gathering, considering ratings inadequacy, PPM accuracy, the importance of callouts and other approaches that radio broadcasters have been developing, enabling to complement ratings with studies that combine quantitative with qualitative research methods.

Nowadays, listeners in same age group have different practices and relate differently with radio, especially if we consider online radio (Cordeiro, 2009). In this scope, what should we be calling the listener, or who is also the online user? FM broadcasting formats should already combine market segmentation with multidimensional categories related to media and technology literacy, since radio is no longer just an analogical media. Experience with technology, choice of devices and web surfing portray variations in behaviour, establishing different technological profiles, between newcomers and experienced users, without considering aspects such as age, education or social class. The question is not whether people are abandoning radio, but transformations within radio consumption: As they listen to FM radio, they also use websites to search for more information and to keep listening where they can not receive a clear terrestrial signal. People share radio's podcasts, follow the station in Facebook and interact with radio presenters in as many ways as the Web can fulfil this need (Cordeiro, 2009). One-to-one will be the future broadcasting and business model, using digital platforms. Each medium will become a 2.0 platform of information and communication, where professionals, advertisers and audiences will work together in the creation of meaning and value (Cordeiro, 2007b). In this scope, should we talk about listeners or a hybrid concept of audience, regarding the listening component as well as the site browsing, referring to online radio?

# Audience ratings in radio: An approach to different methodologies

Although new systems are in development, the methodology for measuring audiences is based primarily in interviews (face-to-face or via telephone) and daily listening diaries. Hendy (2000) reproduced the work of Laing and Tyler (1998) about the characteristics of each method, explaining that street interviews can be useful to gather instant information on programming at the expense of listening habits; and telephone interviews can condense qualitative information, but can leave out of the sample all of those who no longer have telephone at home (using solely mobile phones) or those who, for any reason did

not answered the phone. Of these three methods, the daily listening diaries have been most criticized. Although they can provide very detailed information about the listening process, tend to be properly and carefully filled in by listeners more aware of its importance, leaving the listeners sample without representation among more young or less active members of the family in which it was distributed (Hendy, 2000: 123).

Listener's panels, market surveys and callout research are techniques that best represent the qualitative study of audience in radio, without measuring audience. Panels are repetitive surveys to a permanent sample of audience, providing information about the evolution and trends in the listener's behaviour. It is mostly used to evaluate specific changes and programs. In some European countries, these panels produce also listening diaries, which, although may be skewed by the lack of randomization, are very complete with useful data for radio stations.

Radio stations also use a range of different psychological evaluation tests, to deepen several issues and study listener needs or motivations: Music tests, perceptual studies, focus studies, call outs, market surveys. Music tests (by telephone or using digital tools) measure respondent's feelings about what they are hearing as they listen to actual segments of music or programming content. Perceptual studies are full-scale market segmentation studies to find listeners' perception of a radio station and other stations in the same market. This kind of study is designed to appraise market potential, uncover necessary adjustments to increase market share and market format search analysis, using large samples (from 400 to 1200 people), via telephone or online tools. Focus studies derive from focus group and structures to evaluate content, measure reactions and direct discussions, providing in depth analysis of listener reactions to a radio station programming. Market surveys evaluate new radio formats, testing listener's sense of difference and classifying its most successful characteristics. Call outs offer weekly or bi-weekly feedback from most active listeners (30 to 40 songs from 80 to 100 listeners) with an on-target sample, to find songs that drive passion and those that cause tune-out, as well as familiarity and song awareness. Call outs are useful tools to define radio station music profile and playlist composition. These seek to understand listener's reactions and effective behaviour in relation to songs and artists. By allowing a comparison of results over time, surveys create a database of music to which the radio station audience positively reacts. It can be done quite regularly, reflecting the average of total market, with information that allows operating promptly adaptations in musical or editorial content. Call outs biggest problem is related to changes in individual taste and generalization of results. So, wise and careful choice of sample of individuals for a callout test is central to successful results. The difficulty to find how many, what they hear, why they do it, for how long, where and in which listening platform may only have proper results combining different approaches, crossing qualitative and quantitative methodologies to audience study.

# Ratings in Portugal

Marktest's 'Bareme Rádio' is a quarterly audience rating, representing a quantitative analysis in Portugal since 1983. Rather than describe the structure and methodology used by Marktest, which is similar to other countries, we present a relation between characteristics, limitations and different methods used by radio broadcasters to follow listener's behaviors and their tastes, using ratings mostly as an advertising management tool<sup>3</sup>.

The 'Bareme Rádio' universe of study is the Portuguese population aged 15 years and over, according to 2003 Census of Population, produced by the National Institute of Statistics. 'Bareme Rádio' is built upon a sample of Portuguese population, from the public database of telephone numbers. It gathers information using computer-assisted

3 Our research shows that as Portugal, countries like Austria, Croatia, Czech Republic, Denmark (local radio stations), France, Germany, Greece and Slovenia rely solely on CATI/CAPI systems, while Belgium, Hungary, Poland and Sweden combine CATI with diaries, and Italy with panels, and other European countries use other systems (digital or diaries). interviews, of a proportional sample with respect to sex and day of week, for each of municipalities in Portuguese mainland: A total of 5054 interviews, not proportional on region and age, in an over-sample of 952 interviews for each of waves of study (quarterly)<sup>4</sup>.

Critiques to this ratings system are result of several possible biases, superficiality and a general knowledge of listening behaviour. Sample and questionnaire construction, data gathering and professionalism of collecting and analyzing data are most controversial issues.

One of the criticisms at Marktest's 'Bareme Rádio' is related to the renewal of the sample (every ten years, after the census of population). However, more important is the sample construction. Although technically reliable, it is restricted to households with standard telephones and applied during working hours, a time when most part of population is not available to participate. On one hand, quarterly renewal of the sample declines possible biases, but also favours results with share and accumulated audience flotation, which may not correspond entirely to radio ratings during the period under review.

In fact, this structure does not include mobile phones, which may represent a constraint in understanding the universe of study. However, the introduction of mobile phone numbers would bring serious implications for overall management of Bareme, based on regional sampling distribution, since mobile phones have no geographical allocation. Using a method of random routes is also a workable formula for this type of research, though difficult to implement in Portugal, by downgrading of electoral registers.

Collection of information is indeed the question that seems most pertinent to analyze, most for denials than interviewers performance. According to Marktest, the system of information collection avoids any human bias, by dispersion of interviews; reduced number assigned to each interviewer; tight supervision and computer proce-

4 Audience quantification is based in data extrapolation, assuming to be representative of the universe of study.

dures that allow an extreme region rotation, collection periods and levels of repetition. Most worrying factor are denials, for the difficulty in assessing its nature and influence in ratings results, derived primarily from inaccessibility, database misclassification or difficulty in filling the quota.

About 'Bareme Rádio' questionnaire, it is also criticised for measuring radio stations' popularity only asking listeners about what they heard the day before, relying mainly on memory and spontaneous answers. Generally, this corresponds to spontaneous recall, for top of mind references: Radio stations with high levels of branding investment strategies. In addition, these questionnaires measure duplication, but do not indicate which is prime station or even listening behaviour, concerning the kind of attention dedicated to radio contents. This way, duplication can only be assessed by duration of listening. We continue, however, without knowing whether if radio was on as background noise, or what kind of attention listener devoted to radio contents. On the other hand, this method also favours radio stations with clearer signal, measuring in first instance, comfort of listening. This means that, within regulatory framework of Portuguese radio broadcasting and taking in consideration country geography, radio stations with powerful broadcasting servers; those with frequencies for the whole country (mainland, since Portuguese islands are not part of Bareme sample); those who establish partnerships with local radio stations to create a network across the country; and most particularly, radio stations which can afford to have broadcaster servers all over the country (specially in mountainous areas), are the ones which can easily be listened everywhere. In other words, in some regions there is not much choice among radio stations.

# Information about listeners and listening profiles: Listener + RFM

To obtain more detailed information radio stations combine quantitative and qualitative methodologies. Although qualitative analysis rarely provide information about the number of listeners, therefore,

unhelpful for radio advertising, it is particularly suitable for identifying trends in tastes, attitudes and expectations concerning radio programming, as Browne (1982) noticed. In Portugal, most radio stations combine different methods and techniques to complement quarterly ratings provided by Bareme Marktest. Market surveys and callouts are the most used, designed, operated and analysed by marketing departments, and applied to each station listeners (Cordeiro, 2010a).

RFM<sup>5</sup> conducts bimonthly music call outs to set current playlist and two annual music tests to structure the station musical profile. For each, RFM constitutes a random sample loaded with telephone numbers from telecom companies, including the same company Marktest uses to build the Bareme sample, as well as other telecom companies, allowing to specify zip codes and gender, among other options. Bimonthly call outs have a sample of 75 individuals and are made by telephone. Annual call outs use a sample ranging between 75 and 100 individuals, in the scientific assumption that a larger sample does not alter the profile of responses. The application is by attendance of participants in two different days.

Since 2005, RFM established a new method for collecting the information, which depends on spontaneous participation of listeners via web, in a sort of e-callout: "Listener + RFM" is a digital interactive auditorium music test, scoring library songs and music flow. It is structured as an online platform for data gathering and has a growing database of listeners available (and willing) to participate. In December 2006 (after a year and a half), accounted for more than 8 thousand members who voluntarily respond to the bimonthly emailed online survey, to gladly evaluate songs and other issues related to programming. Today it is around 60 thousand members with an increased response rate over 10% at each application.

<sup>5</sup> RFM has been, for the last 10 years, the most listened radio station in Portugal, with an average of 1 million listeners, which is about 10% of the total population.

Each callout has a set of songs for evaluation, one in each page, through a navigation interface that allows respondents to listen to each music piece and evaluate it according to criteria set by the station, defining degrees of knowledge, classifying each song according to sympathy or dislike. The success of "Listener + RFM", in relation to telephone research studies as mainly four reasons: The subscribers volunteering and comfort in filling; reduced costs and increased response rate.

Furthermore, contact is made by mail, with a minimum of 45 days interval, allowing also responding when it is most convenient and, unlike previous standard, it can also be interrupted and finished at the most convenient time. The rate of return has achieved very positive results, representing on average 10% percent of the panel (according to the size at the time of each callout)<sup>6</sup>. Method randomness is not affected since from the total number of subscribers, only one part is contacted at each callout, a sequence that is randomly generated by computer and organized according to filters defined by RFM<sup>7</sup>.

- 6 The invitations for each callout are sent to those who did not participated for the last 45 days. RFM presents 6 surveys in each interval (two surveys every 15 days), gathering around 800 participants in each, which means around 6.400 interviews for every 45 days.
- 7 This system represents an evolution of letters and e-mails from listeners, produced and sent spontaneously, which often contained information relevant radio programming. Although RFM will continue to encourage participation of listeners through letters or email, it has created an agile, inexpensive and apparently quite effective system to measure station performance station, to assess listeners expectations, using this information to draw socio-demographic characteristics of participants.

In either case, studies conducted by RFM contribute significantly to structure of programming and music selection. However, data that serve to guide those responsible for music content and programming, providing evidence of listeners pleasure or displeasure, radio stations they hear and expectations they have regarding RFM. To these, professional team adds a great deal of knowledge and experience in field, whose musical and artistic sensibility, and reactions of listeners, that are assumed as essential elements for building a schedule balanced, diversified and based on personalization (Cordeiro, 2010).

# How about the audience? Listener, user or a hybrid concept of e-listener?

Soengas (2003) proposed a typology of radio audience that crosses qualitative and quantitative aspects of listener's relationship with radio. We feature five sets that this author uses to define different contexts of reception: Potential and real audience; quantitative and qualitative audience; shared and transitory audience; participatory, receptive and passive audience; also, fragmented and segmented audience.

Potential audience corresponds to the number of individuals who are able to tune a radio station and that can become listeners, while listeners that are effectively listening to a radio station, a program on a regular or sporadic basis, shape the real audience. The quantitative audience evokes overall number of listeners of a radio station or program. From the qualitative point of view, audience is related to characteristics and reactions of each group of listeners. Thus, qualitative audience will be one that adopts a critique attitude about radio contents, reflecting and taking an interested stance, so this attitude will be more important than its size (Soengas, 2003: 204).

When listeners hear several programs at the same time, author considers this to be shared audience that, in our view, represents duplication<sup>8</sup> in audience ratings. It differs from transitory audience, which corresponds to people who listen to a program occasionally, by chance or in special circumstances. Regarding participatory audience, Soengas (2003) believes that it is from interaction between radio presenters and listeners, through their live participation in radio, using communication tools such as telephone. In this context, author also lays out a receptive audience, as the one that assimilates, but not necessarily to generate a critical response. Finally, defines passive audience, when listeners do not pay attention to radio content transmission (Soengas, 2003: 205).

8 Number of individuals who contact simultaneously with two media; percentage of total contacted by a radio station in contact with other radio station. Duplication is calculated on the maximum coverage. Soengas (2003) also develops some considerations relating to audience fragmentation and segmentation, concepts relevant to understand deregulation of media. The wealth of information and entertainment, multiple platforms and cultural options available led to the fragmentation of the audience, divided into smaller and smaller groups, which make their choices according to their similar characteristics, needs and expectations. Fragmentation is too, related to other concepts, such as audience redistribution and audience loss. When listener stops following a specific program or radio station, opting for another, or replacing radio listening by other activities (Soengas, 2003: 206).

Crisell (1994) had already related some of these definitions with those used by radio broadcasters, to define audience size and determine the number of listeners for each radio program. Thus, listener conceptualization must be understood in the context of time and tuning, depending on length of listening to a program in a specific period of time.

Although these categories can be related to terrestrial radio broad-casting, they can also be applied to online radio listening. Communication practices are today highly influenced by Internet utilization and incorporation of online activities in our everyday life. Tabernero et al., (2008) analysed these processes and its impact on media to conclude that Internet is the key technology, a multimodal means of communication, specially for younger generations: "The higher level of use of the Internet on the part of the young as a source of entertainment implies not necessarily a substitution, but a certain degree of modification of their elders' previously established information and content consumption habits" (Tabernero et al., 2008: 287).

People use technology differently and relate with media combining different approaches to same old activities; communicate, work, relate with each other and get information. In addition, people are no longer happy to consume whatever radio serves. Music is now available from a rapidly growing number of sources and consumers are experiencing over-choice, and a certain control on what they consume. Consumer took control of Internet and user generated content became mainstream, with personal blogs and podcasts increasing day-by-day, as broadband grows and diminishes the line between content creators and consumers, developing hybrids formats, somehow more compelling that what terrestrial radio still offers.

Virtual social ties contribute to social identification since most individuals are both online and offline, trading experiences, communicating and relating with others. People are also creating and distributing compelling rich-media Internet content, competing with professional media, using these systems as they broaden and sophisticate. One-to-one will be the broadcasting and business model, using digital platforms. Each medium will become itself a 2.0 platform of information and communication, where professionals, advertisers and audiences will work together creating social meaning and value.

### Who are these e-listeners?

In Portugal, radio stations still use profiles that combine sociodemographic information with lifestyle. Most important categories in use to market segmentation, consequently, to define listener's profile, are the ones also used in Marktest's 'Bareme Rádio': Sex, age, social class, region and occupation. Recently, radio stations added other kind of categories allowing to identify the lifestyle of potential audience: Kind of car people choose to drive; favourite TV channels and most important social and cultural consumption, like favourite restaurants, bars and clubs, newspapers or magazines they read, frequency of attending the cinema or cultural events. Although this represents an evolution from ratings demographics, it does not include any kind of data about technology or platforms mostly used to listen to radio.

Nevertheless, online broadcasting is becoming very important to Portuguese radio stations, which gather information about sites and online transmission to improve their relation with online listeners. Some have a profile of Facebook fans, since broadcasters assumed networking interaction with audience to be as important as terrestrial transmissions.

To develop our approach about levels of experience with technology, to define a contemporary radio listener profile, we inquired national broadcasters in Portugal with radio stations youth oriented as well as others, aiming for people 30 years old and up. Popularity and audience share were most important criterion of choice, as well as musical formats, which are most successful radio formats in Portugal. We interviewed the marketing department of RFM, Rádio Renascença, Mega FM (M/Com Group); Rádio Comercial, Cidade FM (Media Capital Radio Group) and Antena 3 (Public Service Broadcasting, RTP) to enquire them about: Characteristics of listener profile; website traffic metrics; online demographics; website traffic rank; general and multimedia click stream; number of online listeners on player; online listening peak hours and percentage of online listeners facing terrestrial audience (from 'Bareme Radio')9.

We have found that for the majority of radio stations, experience with technology or platform of listening is not considered to define profiles of listening and listeners. There are several reasons for this, but mainly 'Bareme Rádio' (the market standard for radio audience ratings in Portugal) data do not conclude about the platform listeners use (FM or web) and the findings stations have about their online traffic and FM listening are not worthy of comparison. For instance, online data considers listeners as result of a combination of IP address and player identification which does not provide most accurate results on exact number of people listening to a radio station through its website – at work, one single combination can fulfil several listeners, as long as it is played out loud; in addition, the same listener can listen to in different computers, assuming several IP addresses and player log in same day; beyond websites, people can also listen to any of these radio stations using social networks embed players, as well as websites that

9 For ethical, commercial and privacy matters, detailed data about each broadcaster or radio stations is not fully presented, to ensure the agreement established between the author and broadcasters, for information and data gathering. provide free Internet radio stations, including terrestrial radio stations<sup>10</sup>.

Although most stations can not gather information about listening platform, some are using demographics, countries, cities and language information in social networks to create an online listener profile, using also listener's loyalty as a feature to characterize them (based on the number of times they listen to online broadcasting). As for online demographics, there are no differences to listener profile of the stations that make an effort in gathering this information: Ages vary between terrestrial and online listeners among 35 to 44 years old, which correspond to most of social network users, since 29% are between these gaps, versus 24% of all Internet users (Lenhardt, 2009: 5).

According to Portuguese radio broadcasters, most important multimedia features in radio station websites are videos; click stream shows that homepage and online player are most visited pages, followed by web radios (for those stations that besides the FM streaming also have web-only radio channels<sup>11</sup>) corporate and presenters blogs. People listen to online streaming around two hours a day, mostly in working hours, between 9 am to 5 pm.

Nielsen measures radio audiences for more than 60 years and still, do not combine different platforms. Still uses household diary measurement, with a sample that includes households not currently reached by standard telephone samples and those who rely exclusively on mobile phone for their telecommunications. Nevertheless,

#### 10 Some examples:

http://sintonizate.net/radio/RFM.html

http://radiotv.pt-spt.com/radio/rfm-online

http://i9-radiosdeportugal.blogspot.com/2009/12/rfm-radio-portuguesa-

emissao-online-so.html

http://tazovir.com/mais-populares/rfm/

11 For instance, RFM, has three webradios: 80's RFM; Clubbing RFM and Oceano Pacífico. Rádio Comercial has five webradios: Nightstage; Água e Sal; Romance; Músicas para sonhar and Comercial Tuga. Further information available at each website www.rfm.pt and www.radiocomercial.clix.pt

ratings are enhanced with qualitative measurement of lifestyle and consumer behaviour, providing accurate measure on size and composition of radio audiences. Nielsen is a worldwide industrial information provider, measuring a broad range of consumer behaviour, including not only what people listen to on radio, but also online audiences through Internet metrics. The same happens in Portugal with Marktest NetPanel, the baseline study on the Internet Portuguese population behaviour that characterizes Internet access, usage, user profile and available hardware in Portuguese households. This data, combined with radio audience ratings information can provide a more accurate representation of audience and consumer behaviour, since most of our time is today, divided between analogue and online activities. As for online analytics, Nielsen also employs innovative technology and methodology, integrating data-driven from blogs, social networks, groups, boards and other consumer-generated media platforms, pulling data to analyze in text mining and deliver relevant information on buzz measurement.

On the other hand, UK's Rajar listening figures take in consideration market trends, including data about all radio listening and all radio listening via platform, presenting share for analogue and digital platforms, in which, Internet is included. Baring this in mind, and since most important feature on radio stations websites is online player, followed by other multimedia features such as videos or even blogs, as well as a tendency to introduce social networks profile to characterize online radio listeners, we propose, for now, the concept of e-listener to define contemporary radio listener, an heavy Internet user and experienced with technology.

Radio is experienced across different platforms as consumers engage in cross media consumption, using more than one form of media at one time (while listening to radio, they search on the radio station website, post something on Facebook about the content they are reading in printed press and still, although soundless, take a look at the TV set and comment something with their friends using chat services on their mobile phones). On the other hand, radio content is consumed

through Internet in several multimedia devices, digital radio, cell phones, cable, in-home, at work, out-of-home, live and time-shifted, streamed and non-streamed webcast (podcast), consolidating the anytime, anywhere media consumption paradigm.

#### Conclusion

Audience ratings, as well as callouts and market surveys results are today in relation, to help radio station managers to better define programming and marketing strategies. These are tools used to sustain a professional culture that is developed and improved by experience and professional wisdom, to play in harmony with music and words, respecting listener's interests, but in conformity with business that underlies radio programming, profitability and reputation of radio station brand. In our perspective, relation between age and technology experience should be explored in order to contribute to a better understanding, also to confront the idea that within online radio listeners, users experience is not directly related with age but with the way integration of technology in everyday lives can establish categories of different levels of experience with technology, as Tabernero et al. (2008) wrote. Widespread of information and communication technologies in modern societies and individuals' levels of experience with technology leads to more intensity and complexity in communication practices, enhancing self management of information and communication both in international and local levels.

Radio stations are starting to use lifestyle features to characterize their listeners, but should also introduce technological characteristics to define listener profiles, examining computer mediated communication processes through socio-demographic features (sex, age, income and education) and technology, evaluating consumption and attitudes pertaining to online media in different levels of technology experience, through the length, frequency and intensity of Internet usage. The use should rely as the main aspect, distinguishing different kinds of Internet users, technological profiles and demographical identities.

Research should follow an integrated media measurement, to provide data on listening through different platforms, being computers and auto-radios the most important for now; later, Internet and mobile phones, when Internet becomes widely available in auto-radios. Out of home should also be considered, since radio is considerably heard in restaurants, bars, health clubs, hairdressers, beauty centres, footwear, clothing, accessories and other kind of stores. Internet panels should bring about more than metrics for online behaviour, providing information about the audience engagement with online radio, relating it with mobile applications and data from mobile phones, concerning both FM broadcasting and live streaming. This combination of data, similar to Nielsen's Three Screens<sup>12</sup>, can offer new insights on the radio listening process proving the idea that the radio listener is being replaced by a cross-platform, multimedia user that listens to radio in the most convenient available source. Radio is transforming programming into valuable content available in multiplatform. In many cases, one simple input is encoded to be delivered in computers, smart phones, tablets, consoles and televisions. Thus, to commercialize content and offer added value experience to e-listeners, radio broadcasters have to be able to analyse convergent data. Parallel to traditional radio, though broadcasters are rapidly investing in radio hybridization, different online platforms have online radios managed by users, using these free technological infrastructures with unique libraries and free tools to develop a social approach to radio, available anytime, anywhere in any multimedia device. Advertising biggest challenge is not only reinventing formats, more precisely, audience measurement and content (both editorial and advertising) optimization. Internet technologies allow precise segmentations and real time reports, using different targeting methods, such as profile selection (in each service requiring registration, profile creation or logging through social networks), geo-targeting (using users IP address) and most accurate,

<sup>12</sup> Nielsen "Three Screens" is a measurement solution that is par of the "Anytime Anywhere Media Measurement™ initiative (A2/M2™) (...) accurate and complete information on the audiences for these 'three screens' — television, computer and mobile phone". Available at http://www.agbnielsen.net/products/a2m2.asp | Accessed June, 10, 2010 |

overlaying in-stream audio and video ads. Real time reports allow broadcasters (even advertisers) to evaluate campaign ROI (return of investment) through impressions or clicks, for instance. Contemporary radio core business as changed, involving today audio and video content online, focusing on the best user experience, no longer, listening experience. Therefore, radio is delivering live and on-demand, providing media content on-strategy, on-time and on-device, in need of metrics to measure user behaviour on the player, advertising effectiveness and quality of the experience. The need to combine data from different platforms, listening behaviours and engagement should rely on as integrated measuring system, crossing: Real-time web based streaming, behavioural (on-player data) and content analytics (unique users, clicks, songs ratings and top stories). In this increasingly connected world, radio should develop a unique strategy for this multi-platform context to extend the radio station's brand and improve radio's influence in consumer's preferences and consumption, as well as an understanding of how people relate with media and devices, to develop integrated advertising campaigns, and multi-platform programming strategies.

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