# Radio does not die on the air: Podcasting and on-demand broadcast strategies among speech-based radio stations

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# Abstract

In recent decades, speech-based radio stations in Spain, whose programmes have been aimed at the general public, have transformed their on-demand content broadcasting strategy by incorporating audio processes in the form of podcasts, followed by transmission through websites, aggregators and applications. The overall objective of this article is to provide a detailed account of the evolution and scope of the podcast as an on-demand distribution channel for speech-based Spanish radio broadcasters, and to reveal how this format is changing the approaches taken by the most prominent national radio stations [*Cadena SER, COPE, Onda Cero,* and *Radio Nacional de España (RNE)*], with special emphasis on prime-time morning shows. The methodology employed combines quantitative and qualitative techniques along with an analysis of the content uploaded to the website of these morning programmes, which are part of the weekly programming cycle, together with semi-structured interviews using closed-ended questions that have been given to the main heads of programming and digital areas of the broadcasters under study. The results show that radio stations have incorporated podcast distribution into their usual routine in order to give new life to the content emitted, with the aim of serving both traditional users as well as new generations of digitised native listeners. In addition, they process daily content in an increasingly systematic way, on the basis of a model of mixed management coordination between programmes and digital areas. Similarly, broadcasters have made considerable progress in the measurement and analysis of the time-shifted audience, as well as in broadcast multiplication techniques using push notifications, social media, and monetisation.

# Keywords

Morning show; Podcasting; Radio on-demand; Speech-based radio; Web repository; On-demand; Broadcast strategies; Radio stations; Programming; Prime time; Speech-based radio stations; *Cadena SER; COPE; Onda Cero; RNE*; Spain.

# 1. Introduction

If anything has defined radio during its first hundred years of life, it is undoubtedly its ability to adapt generally to social changes, and specifically to those experienced by its audience. Such resilience is one of the hallmarks of the broadcasting media (Martínez-Costa; Legorburu-Hortelano, 2020), which is based on its ongoing attention to the demands, expectations and preferences of successive generations of listeners, along with its use of technical advances to overcome diverse threats that have arisen over the decades, especially from television.

In its quest to survive, radio has incorporated (and improved) methods for measuring and analysing its audience since the 1920s (**Pedrero-Esteban**; **Legorburu-Hortelano**, 2021). Moreover, from a technological point of view, it has also infused its production and distribution processes with inventions such as frequency modulation, satellite and digital broadcasting, and online transmission through the Internet (**Hilmes**; **Loviglio**, 2013; **Martínez-Costa**; **Prata**, 2017). To a large extent, the same can be said of podcasting at the present time, which offers new opportunities to the future of broadcasting (**Terol-Bolinches**; **Pedrero-Esteban**; **Pérez-Alaejos**, 2021).

Regardless of the ongoing debate in professional and academic circles regarding the use of the term *podcast* in connection with radio (**Berry**, 2016), the fact is that this sound format has been used by traditional radio stations to give new life to content that is broadcast live. This is known as radio on-demand, which opens up new opportunities for the sector, not only in terms of distribution and marketing of its products, but also from a purely strategic point of view, the purpose of which is to attract and retain an audience segment that has become elusive in recent times, referring to young people.

Even though significant scientific literature has been produced on the different aspects of broadcasting digitisation in recent years, specific studies on the use of podcasts and their close relationship with radio on-demand are not as numerous (**Galán-Arribas** *et al.*, 2018). Therefore, this study could be of interest in gaining more precise knowledge related to the scope of this new audio distribution channel, while at the same time facilitating its use by the broadcasting sector.

# 2. Podcasting and radio on-demand: two decades of evolution

The acceptance of the podcast by traditional radio, which was previously the case with online broadcasting, must be seen in the context of the digitisation process that all media have been undergoing since the global spread of the Internet. Initially seen as just a useful tool, the Internet has gradually become a key element in this scenario. In fact, as stated by **Berry** (2014, p. 3), "The future of radio is the Internet, not just being on the Internet".

Likewise, from the time it was invented in 2001 by Dave Winer and Adam Curry (**Nuzum**, 2019), podcasting has undergone its own development. It has passed through different stages, ranging from a highly experimental phase between 2001 and 2014 (**Sellas**, 2011; **Spinelli**; **Dann**, 2019), which lasted nearly three lustrums. This was followed by the so-called *second era* (**Bonini**, 2015), which was characterised by the progressive professionalisation of the 'Serial' phenomenon (**Linares-Palomar**; **Neira-Borrajo**, 2017), as well as the widespread expansion of connectivity and the use of smartphones and apps (**Piñeiro-Otero**, 2015; **Ribes-Guàrdia** *et al.*, 2016). Finally, the present stage, known as big podcasting (**Quah**, 2019), features a succession of million-dollar investments from multinational companies such as *Amazon*, *Apple*, and *Spotify*, as well as from radio corporations like *American iHeartRadio* and *SiriusXM*.

Although radio and podcasting share a common language, they have significant differences. Specifically, as **Newman** and **Gallo** (2019) point out, podcasting refers to an episodic series of audio files that can be consumed, downloaded, and subscribed through various digital technologies. These audio products can be specifically created for offline consumption (native podcasts) or previously broadcast radio programs that are made available to the audience in a digital repository (radio on-demand). Thus, it is logical that traditional broadcasters quickly discovered how useful this new sound format could be in making the passive, ritualized consumption of traditional broadcasting compatible with the much more intentional, selective, active instrumental consumption (**Chan-Olmsted**; **Wang**, 2020).

As such, on the one hand they could offer new listening opportunities to their most loyal audience, enabling its interaction with content according to their preferences and schedules (Laor, 2022; McClung; Johnson 2010; McHugh, 2022; Nyre, 2015). On the other hand, an opportunity was created in an attempt to connect with the new generations of digital native listeners (Chignell, 2009; Hirschmeier; Tilly; Beule, 2019; Novaceanu, 2020; Soengas-Pérez, 2013), for whom the mobile phone is the dominant access device (Martínez-Costa; Moreno-Moreno; Amoedo-Casais, 2018; Pedrero-Esteban; Barrios-Rubio; Medina-Ávila, 2019).

In Spain, broadcaster *Cadena SER* began using podcasts on April 10, 2005 followed weeks later by *COPE*, which immediately chose to process its programs as well (**Sellas**, 2012). From that moment on, its use became widespread. In fact, by 2009 all speech-based radio broadcasters had significantly developed this distribution channel, regularly updating their online news, uploading their latest hourly bulletins, and incorporating video as well (**Moreno-Moreno**; **Martínez-Costa**; **Amoedo-Casais**, 2009). In 2010, *RNE* (*National Spanish Radio*) produced approximately fifty daily podcasts and *COPE* generated around 30, a trend that increased two seasons later (2012-2013), especially with regard to the processing of morning shows (**Sellas**, 2012). By that time, it could be affirmed that podcasting had already become common practice for the distribution of previously broadcast content on a delayed basis (**Gallego-Pérez**, 2010; **García-Marín**, 2019; **Gutiérrez-García** *et al.*, 2014; **Pessoa**; **Prata**; **Avelar**, 2017). Moreover, at that same time it should be noted that according to the aforementioned phases of podcasting evolution, even though this type of listening was promising, it was not yet consolidated, neither on the webs nor in apps (Videla-Rodríguez; Piñeiro-Otero, 2013; 2017). Similarly, although Spanish operators used it quite extensively, in reality, they did so without a well-deThere has been a widespread effort to include text and images in the inserts, provide a date and metadata for all items, and to fine-tune the search engines as well

fined strategy (Fernández-Sande; Rodríguez-Barba; Rodríguez-Pallares, 2013). Their aim was initially to maintain the status they had already enjoyed in the broadcast radio market (Martí-Martí et al., 2014).

However, parallel to digitisation and the rise of podcasting over time, programmers were also redefining their intra-media objectives (Napoli, 2011) and enhancing their content management techniques by mixing linear broadcasting (the classic grid) with asynchronous broadcasting (Martínez-Costa; Prata, 2017). In short, they mixed flow content with stock content (Bonet; Sellas, 2019), thereby enhancing their listening through the use of alerts (Pedrero-Esteban; Herrera-Damas, 2018) and social networks (Sixto-García, 2018; Suing; Ordóñez; Herrero-Gutiérrez, 2020; Martínez-Otón; López-Schilchting, 2022). Thus, the different programmes and their sections have become nodal content, which is processed and made available to the audience through web repositories that have since grown in volume and importance.

Thus, in the decade of the 20s, and parallel to the aforementioned boom in podcasting, speech-based radio stations in Spain now consider radio on-demand as an essential means of distributing their content. As such, they have been developing strategies to manage and amortise it as efficiently as possible. This approach, which applies to all programming, has had a significant impact on the most relevant and popular content, referring to the morning shows (**Rodrí-guez-Luque**; **Alonso-Fernández**; **Legorburu-Hortelano**, 2020). An example of this growing importance is the launch on 16 March 2021 of *SER Podcast*, which has "the aspiration of leading the Spanish podcast market" (*Cadena SER*, 2021). This initiative has been joined by regional corporations of the Basque Country, Galicia and Aragon and several of *Prisa Radio*'s thematic music stations.

While it was first thought that the podcasting boom would be exploited by native producers, the truth is that they share the spotlight with the more experienced content creators, which are radio stations with decades of experience behind them. This is evident from viewing the different rankings (*AIMC, Chartable, Edison Research, iVoox, Podtail, Triton Digital*, etc.), in which these recycled programmes have considerable influence, along with the fact that reprocessed pod-casts nearly double the number of those that are native (65%-35%) (**Amoedo-Casais; Moreno-Moreno; Martínez-Costa**, 2021). Moreover, in this realm traditional broadcasters have also been carrying out the following actions: production of a significant number of native podcasts (**Pérez-Alaejos; López-Merayo**, 2013); the retrieval of neglected genres such as the audio feature (**Legorburu-Hortelano; Edo-Bolós; García-González**, 2021) and radio drama (**Markman**, 2015); experimentation with the so-called *reverse programming*, or in other words, the broadcasting of programmes during low-audience slots that are nonetheless very well received offline (**Legorburu-Hortelano; García-González; Dorado-Colmenar**, 2019); and lastly, the lack of objections to their entire production being accessible outside their own domain through other platforms and aggregators (**Piñeiro-Otero; Terol-Bolinches; Vilà-Talleda**, 2019; **Sullivan**, 2019).

Finally, it should be noted that in recent years the audience for podcasts has increased exponentially. Between 2019 and 2021, such growth was especially significant, exceeding 53% in the latter (*Prodigioso Volcán*, 2022). In this context, the trend toward listening to radio on-demand has also been growing, as it reached approximately one million listeners by the end of 2021 (*AIMC*, 2021), reaching the third most consumed digital audio format by Internet users (46.1%), only behind music and radio streaming itself (*IAB*, 2022).

# 3. Objectives and methodology

Based on the foregoing, the overall objective of this research is to determine the evolution and scope of the podcast as a means of on-demand broadcasting in speech-based radio in Spain in recent years, and more specifically between the 2019-20 and 2021-22 seasons, in which its evolution can be verified. In addition to this overall objective, two others that are more specific have been added as well:

- The first is to discover how this format is changing the broadcasting strategies of the main national broadcasters: *Ca*dena SER, COPE, Onda Cero and Radio Nacional de España (RNE).
- The second focuses on carrying out a descriptive analysis of its use in the most popular programmes, which are the morning shows such as *Hoy por hoy*, *Herrera en COPE*, *Más de uno* and *Las mañanas*, which comprise two blocks (*España a las 6, 7, 8 y 9* and *De pe a pa*), respectively.

These specific objectives have been made more even explicit by asking the following research questions:

- How has on-demand broadcasting developed among morning shows in the 2019-20 and 2021-22 seasons from an organisational, business point of view?
- From a quantitative perspective, how have morning shows used the main platforms, aggregators, and social networks in the 2019-20 and 2021-22 seasons?

To achieve these objectives, and in order to answer the research questions, a mixed qualitative-quantitative methodology was used. On the one hand, an exhaustive review of the existing literature on podcasts and the management of live and on-demand audio content in the field

Speech-based radio stations in Spain now consider radio on-demand as an essential means of distributing their content

of broadcasting was carried out, in addition to that of the websites and apps of the aforementioned radio stations and morning shows. Furthermore, in order to consult primary sources (Vallés-Martínez, 2014), a semi-structured interview with closed-end questions was conducted.

Registry: Broadcaster/Name/Position/Date of completion

#### **General issues**

- How useful is on-demand broadcasting compared to live broadcasting?
- To which niche audience/s are these previously broadcasted content aimed?
- What is the name of this type of audio compared to native podcasting?

#### Processing the content

- Which area/department is responsible for processing the content (packaging, metadata, content preparation for online publication, uploading, etc.)?
- What strategy or system is followed when processing content?
- Are there different levels of processing endeavour depending on the relevance of the programme, especially flagship programmes? If so, how are such programmes processed?

#### **Broadcasting the content**

- By what procedure is this type of audience measured?
- How much knowledge of the listener/user is available?
- Do you obtain information, or metrics, regarding your audience on aggregators and platforms?
- Are metrics used to refine the broadcast strategy and set your advertising rates?
- By what means and strategies is the dissemination of this content expanded?

#### Comments

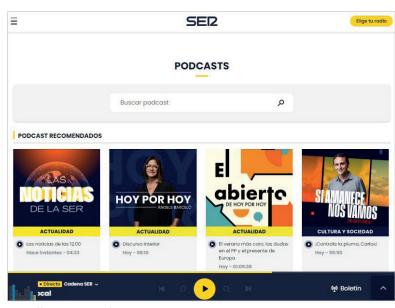
Figure 1. Questionnaire for managers of digital areas or programmes

The target population consisted of the heads of digital or programme areas of the above-mentioned radio stations, who are key individuals capable of providing the necessary information to achieve the aforementioned objectives:

- Ana Ormaechea, Chief Digital Officer (CDO) of Prisa Radio (Cadena SER);
- Javier Escartín, Digital Coordinator at Ábside Media (COPE);
- María Sainz, Head of Digital Product at Atresmedia Radio (Onda Cero); and
- Alfredo Laín, Director of Programmes at Radio Nacional de España.

The questionnaires were completed during the month of January, 2022.

This qualitative perspective has been complemented with content analysis (Bardin, 1986) of the morning shows, based on how broadcasters use the podcast on their respective websites. The sample selected was based on a constructed week (Riffe; Aust; Lacy, 1993) from the Monday to Friday programming cycle. Specifically, the broadcasts analysed were from January 3, 11, 19 and 27 of 2022, and February 4 of 2022, between the hours of 6:00 and 13:00, or in other words, there were five complete editions of each morning show, or a total of 20 programmes. As previously mentioned, in order to update a previous study that analysed the 2019-20 season (Rodríguez-Lugue; Alonso-Fernández; Legorburu-Hortelano, 2020), we have also selected the 2021-22 season. For this purpose, a technical analysis sheet has been designed, consisting of the following registration variables based on the above-mentioned study.



https://cadenaser.com/podcast

#### Registry

- Broadcaster (Cadena SER, COPE, Onda Cero, RNE)
- Date (day/month/year)
- Time (included/not included)

#### Accessibility

- Number of access routes
- Presence of access routes on the website (homepage, highlights, menu bar, its own profile, etc.) (description)
- Search option and filters (yes/no)
- Features of the search option and filters (description)
- Number of clicks to access the offline content of the morning show

#### Processing

- Number of podcast segments per edition
- Data (date, duration, etc.) (yes/no)
- Summary of content (yes/no)
- Length of the podcast segments
- Taxonomy of processing:
- Full programmes (yes/no)
- Programmes per segment (yes/no)
- Permanent sections (yes/no)
- Description of permanent sections (monologues, commentaries, interviews, news, daily and weekly slots, etc.) (description)
- Exclusive online content (description)

#### Dissemination

- Web/app push alerts (yes/no)
- Social networks (yes/no)
- Social networks used: Facebook, Flipboard, Instagram, Twitter, others (description)
- Aggregators (yes/no)
- Presence in aggregators: Apple Podcasts, Google Podcasts, iVoox, Podimo, SoundCloud, Spotify, Spreaker, others (description)
- YouTube (yes/no)

Figure 2. Content analysis form.

Source: Adapted from Rodríguez-Luque; Alonso-Fernández and Legorburu-Hortelano (2020, p. 17)

This form was used for each of the analysis units. The data collected were then processed using the *SPSS* software (*IBM*) in order to carry out frequencies and the cross-referencing of variables, and also using *Word* (*Microsoft*) for the layout of the different tables.

Finally, all the information was cross-checked with that of the previous work mentioned above. Moreover, other publications that have addressed this issue have also been helpful, to a greater or lesser extent (Fernández-Sande; Rodríguez-Barba; Rodríguez-Pallares, 2013; Moreno-Moreno; Martínez-Costa; Amoedo-Casais, 2009; Sellas, 2012), as well as the contribution of Peña-Jiménez and Pascual-García (2013) on the specific issue of social network use as an amplifying factor in dissemination.

# 4. Results

Considering the stated objectives, as well as the research questions and methodologies applied, the results obtained from the interviews conducted and the data extracted from the content analysis are presented in the following paragraphs.

# 4.1. On-demand radio offered by speech-based radio stations

As pointed out above, the podcast has fostered a situation in which speech-based radio stations have been incorporating their programmes into their websites over the past decade, in order to enable their consumption at a later time. It should be noted that although *Cadena SER* started this practice in 2005 (**Sellas**, 2012), there are audios in its repository from 2003. Regarding other broadcasters, the *RNE* archive contains programmes broadcast since June 2008, the repository of *Onda Cero* since April 2011, and the data warehouse of *COPE* since January 2015 (there are also some files from 2013 and 2014), although the latter began processing content nearly a decade earlier.

With regard to the naming of this distribution channel, a consensus among broadcasters has still not been achieved for the 2021-22 season, which has been inferred from the in-depth interviews and can also be seen in the following section, which focuses on the analysis of supply. Both *Cadena SER* and *COPE* have replaced the term *on-demand* with *full hours* and *podcast*, depending on the level of processing used. *Onda Cero*, however, bundles all of its on-demand content under the umbrella term of *a la carte programmes* and reserves *podcast* for native production. *RNE* uses the term *on-demand audio programmes*. It bears recalling that in 2008 the preferred term was *audio* (Moreno-Moreno; Martínez-Costa; Amoedo-Casais, 2009), and just two seasons ago the terms that prevailed were *audio* and *podcast* (Rodríguez-Luque; Alonso-Fernández; Legorburu-Hortelano, 2020).

In any case, this practice has become fully institutionalised in speech-based radio and is currently based on two fundamental principles. Firstly, as in the 2019-20 season, the aim is to extend the life of the content once it has been broadcast, or at least this is what the heads of the digital or programme areas of the four broadcasters under study have stated. Moreover, they place special emphasis on the benefit to their listeners in allowing them to consume their favourite content offline, whether they are programmes or sections, because as Javier Escartín (*COPE*) points out,

Radio has once again found an opportunity rather than a threat with Internet and the podcast, the latter of which is a new tool for distributing its content, thereby providing new life beyond the live broadcast

"Even though live radio continues to be strong,

we cannot ignore the fact that there are users who want to listen to it any time of the day, and in any place,"

which is an approach that is also fully agreed upon by María Sainz (*Onda Cero*) and Alfredo Laín (*RNE*). In a similar vein, Ana Ormaechea (*Cadena SER*) affirms that

"for the listener, it's the best way to recapture the fragment of a broadcast they weren't able to consume, but that they want to retrieve, and for the broadcaster, it is the optimal means of distributing its linear broadcasts in an organised, structured, well-labelled way."

Secondly, this distribution method is used in order to maintain loyalty with traditional users who are adapting to the new technological environment, as well as to new generations of digital native listeners. This is how *COPE* explains it:

"Even though studies have shown that young users between 18 and 40 years of age are the ones who consume it the most, in recent years we have found more and more people above that age range who are getting used to listening to radio on a delayed basis."

With this approach, Cadena SER has divided its on-demand distribution into two distinct areas:

- On the one hand, its website offers

"automatic hourly cuts and full time slots aimed at the loyal audience (recurrent and heavy users), who already know the programme and want to listen to a very specific fragment.

- On the other hand, in the SER Podcast,

"Content is selected, packaged and distributed thematically. Through this second means, the aim is to incorporate new listeners, following the niche consumption approach of podcasts."

Although *RNE* considers that "radio on-demand is not aimed at a specific niche audience", it does bear in mind that young people are the ones who use it the most:

"One of the great advantages of this content is that it can be consumed by people who do not listen to the radio, either never or rarely, due to the fact that users have found these audios or programmes through social networks, or because they have searched for information on the Internet about a topic covered by a particular audio or programme."

In the case of Onda Cero, the opportunity to please regular followers prevail, as its on-demand broadcasts are aimed mostly at

"loyal listeners of the programmes or sections", even offering them "the option of rewinding the live broadcast without having to wait for the programme to be available on-demand."

In terms of content processing, the three commercial broadcasters have chosen a mixed management model for the 2021-22 season, based on cooperation between the digital area and the individual programmes. For its part, public radio has chosen to centralise this endeavour. As Laín explains,

"In the digital area there is a team that is dedicated exclusively to uploading the complete broadcasts to the website, and a second team that is responsible for broadcasting the most relevant content, both through the website and social networks."

According to the model used, the processing tasks are organised differently. For example, in the case of *Cadena SER*, as explained by Ormaechea, automatic processes (complete programmes) coexist with others that are more manual in nature (sections and highlights). In this way, the schedule is automatically edited and published on the website in a structured way according to time slots. On the other hand,

"At the end of each block or section to be distributed, a technician removes the advertising, standardises the audio quality, and integrates the input and output covers. Moreover, an editor from each programme is responsible for publishing the metadata on *SER Podcast*."

The routines at *COPE* are similar, as full hours (and hourly news bulletins) are also uploaded automatically to the web, while everything related to processed content is manual, and advertising is not deleted. As Escartín points out,

"We make news from the content of different programmes with text and audio (...) In this case, it is the digital team that indicates what is of interest to those in charge of each programme (...) the criteria are based on editorial aspects and relevance."

#### At Onda Cero, Sainz explains that

"the newsroom follows all the programming live and takes the most important audio clips, as well as sections and full programmes, whose RSS feed is distributed to platforms and aggregators. Everything is processed through our content management system (...) All programmes are cut in the same way."

#### At RNE, Laín states that

"there are protocols to guarantee correct uploading to the web, which are mainly related to metadata."

#### He then adds,

"We take care in ensuring that there are no differences at the moment of uploading the full broadcasts of the programmes (...), although extracts are taken from the flagships of the radio station in order to give greater exposure to its main content."

#### In addition, he stresses that

"care is also taken to make sure that not too much time elapses between the broadcasting of programmes and their availability."

Audience measurement and analysis has turned out to be a key issue for all the broadcasters studied, which was previously the case, though incipiently, in the 2019-20 season (**Rodríguez-Luque**; **Alonso-Fernández**; **Legorburu-Hortelano**, 2020). Most of the broadcasters use tools such as *Google Analytics*, as well as *Adobe Analytics*, with the exception of *Cadena SER*, which uses an external provider (*Triton Digital*), whose measurements conform to the 2.1 standards of the *Interactive Advertising Bureau* (*IAB*). The aim is to obtain in-depth knowledge of the user. For *Onda Cero*,

"Metrics are the key to everything, which include knowing and understanding our listeners, continuously improving our product, setting objectives and strategies, being able to monetize, etc."

At COPE, "consumer behaviour and content preferences" are also analyzed. RNE obtains

"daily, weekly and monthly results that offer data such as the hours of highest consumption, the most heavily-consumed programmes and audios, rankings of Spanish cities and countries, and the type of device used."

A similar situation occurs in the case of *Cadena SER*, which also monitors parameters such as logins, total listening hours (TLH), downloads, and CUME figures (number of unique listeners within the market for at least 5 total minutes), which in the short term aims to identify the unique user, trace their audio path, and discover their average consumption rate, as well as the particular content that logged-in listeners consume. For this radio station, metrics are crucial in making any decision, whether it concerns the achievement of objectives, the editorial line, or advertising.

Similarly, the broadcasters analyzed measure the listening of their content outside their own domain. In this realm, significant progress can be seen with regard to the 2019-20 season, at which time there was still not enough information available (**Rodríguez-Luque**; **Alonso-Fernández**; **Legorburu-Hortelano**, 2020). *RNE* carries out this task through an internal dashboard. This is also the case with *Onda Cero* and *COPE*, who also use the dashboards of aggregators and platforms. For its part, *Cadena SER* relies on *Triton Digital*, yet it also calls on external agents "when it needs additional socio-economic data." It should also be noted that broadcasters collect data from *Comscore*, which measures the number of unique users, in order for the focus not to be aimed exclusively at the listening aspect. One should also keep in mind that the total sum of unique users exceeded 24 million in December of 2021 among the commercial broadcasters under study (*Comscore*, 2021).

Advertising rates are established according to the totality of these metrics, due to the fact that

"the number of downloads or programmes consumed audibly influences marketing prices, as Escartín affirms (COPE),"

# Ormaechea of Cadena SER points out

"that audience data is used not only for direct sales, but for indirect sales as well, both for pre-roll and mid-roll audio podcasts, as well as for pre-roll streaming."

These formats have been increasingly used in recent years, in addition to classic banners and layers.



Finally, in the 2021-22 season, there has been significant development in terms of strategies for expanding the dissemination of this content, which in 2019-20 was limited to notifications and the use of social networks (**Rodríguez-Luque**; **Alonso-Fernández**; **Legorburu-Hortelano**, 2020). *Onda Cero* uses both internal and external means. Sainz explains that

"the internal means involve disseminating such content on the website and app, thereby relying on social media profiles of both the station and the programmes, as well as on push notifications and a recirculation strategy with the different *Atresmedia* sites."

As for external means, these

"include aggregators and platforms, as well as smart speakers."

According to Escartín, COPE uses mostly social networks, although these audios

"are also displayed in a highly visible way on the web, so that the listener can access them directly and quickly, download them, etc. This improves the user experience."

He adds that they are also available on aggregators and platforms. *RNE* concurs with this strategy, which makes intensive use of social networks involving both the station's profile and those of each programme, as well as the website and the *RTVE Play Radio* platform. Finally, *Cadena SER* distinguishes between two different strategies, depending on whether the aim is only to reach regular users or to attract new listeners. For the former, it uses newsletters, alerts, push notifications, and cross-promotions; for the latter, it uses the broadcast itself, promotions on platforms and aggregators, pre-launch marketing initiatives, and exclusive content, according to Ormaechea.

# 4.2. Morning shows: audios in the display window

Currently, the processing of morning shows in the weekly programming cycle (Monday to Friday) has become a consolidated practice in speech-based radio in Spain in order to provide listeners with on-demand content. As was the case in the 2008-09 season, broadcasters upload their complete programmes to their repositories according to time slots, permanent sections, and main topics, though several disparate aspects exist, ranging from website accessibility to content processing, to the use of aggregators and platforms.

Regarding the ways in which users can access audio through the website, different options could be distinguished as early as the 2008-09 season, with almost no uniformity among the four radio stations, with the exception of "*Lo más escuchado*" [The most listened to] and "*Archivo*" [Archive]. At that time, tabs could be found under a highly diverse nomenclature: "*Escuchar audio*" and "*Lo que tienes que escuchar*" [Listen to audio and What you have to listen to] (*Cadena SER*); "Últimos sonidos" and "*Mis sonidos*" [Latest sounds and My sounds] (*COPE*); "*Audios*" [Audios] (*Onda Cero*); and "*Programas*" and "*A la carta*" [Programmes and A la carte] (*RNE*) (**Moreno-Moreno**; **Martínez-Costa**; **Amoedo-Casais**, 2009). In the current decade, while the four morning shows in the 2019-20 season offered between one and three options, excluding linear listening (streaming), the number of access routes has increased to between two and three in the 2021-22 season.

To be more specific, access to each morning show through the main menu was identical two years ago, but with some differences once there. For example, on *Cadena SER*'s website, the option "*Programas y Pódcast*" [Programmes and Podcasts] was offered, and from there you could go to *Hoy por hoy*, yet you could do so by using three filters: "*Lo más escuchado*" [Most listened to], "*Actualidad*" [Current affairs], and "*Por relevancia*" [According to relevance], either through the grid or by means of an alphabetical search engine. *COPE* has also incorporated the option of reaching its main programme through the "*Programas*" [Programmes] tab, yet it offers two other options as well: a "Programming" tab and a search engine. The menu of *Onda Cero* directs the user to "*Más de uno*" [More than one] through "Programmes" and "Podcasts", as did *RNE*, although the latter did so with significant differences: in "Programmes", it offered an alphabeti-

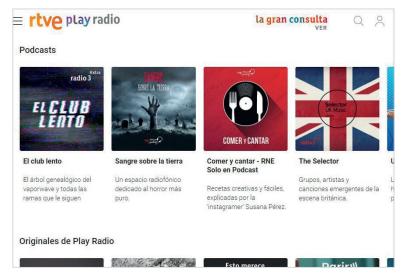
cal search engine to reach each section of *Las mañanas*, while the "*Podcast*" option offered segments and the complete hours that were most recent. Finally, an alphabetical search engine allowed filtering by categories (**Rodríguez-Luque**; **Alonso-Fernández**; **Legorburu-Hortelano**, 2020).

By contrast, in the 2021-22 season mentioned above, the way to access *Cadena SER* has been through two clearly differentiated avenues: "Programmes" and "Podcast". The first of these tabs contains the time slots for the day's broadcast, while the second contains the spaces/sections that have already been processed. To be more specific, this new configura-



https://www.ondacero.es/podcast

tion of the website based on the audio first philosophy was adopted as of 31 January 2022 (Cadena SER, 2022), which also made it possible to locate audios by name, programme, topic, and radio station. Until that date, audios were available in the PlaySER space (still active at the closing date of this analysis), which was found in the first four days of the constructed week. In this case, its configuration allows the three following access routes: "En directo" [Live], "A la carta" [On demand], and "Parrilla" [Grid]. On the other hand, one can also search for the podcasts through "Últimos audios" [Latest audios] and "Los más escuchados" [The most listened to], or by means of a search engine that allows filtering by date, section, and topic.



https://www.rtve.es/play/radio/podcasts

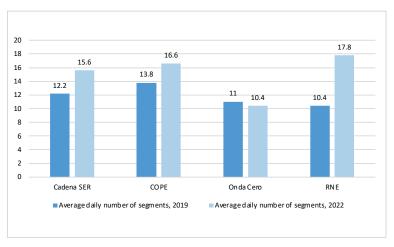
With regard to *COPE*, it has not undergone major changes, as it still allows access through the "Programmes" tab, where full hours, audios, podcasts, and certain permanent and special sections are uploaded. At this radio station, the "Podcast" section is reserved exclusively for native audios. In the case of *Onda Cero*, there are still two access routes, "*Programas*" and "*Pódcast*", [Programmes and Podcast], although in the first tab there is a menu that includes the following diverse sections: "*Portada*" [Home], "*A la carta*" [A la carte], "*Secciones*" [Sections], "*Especiales*" [Specials] and "*De 06:00 a 08:00*" [From 6:00 to 8:00 o'clock]. In the "Podcast" section, there are several specific sections (processed) of *Más de uno*, and native audios as well.

Lastly, *RNE* has three access routes. From the "*Programas*" [Programmes] tab, the user can click on *Las mañanas de RNE*, "*RNE*", and "*PlayRadio*", in alphabetical order. "*Programas*" [Programmes] is the main access route, because in addition to the fact that '*RNE*' refers to it, it displays three options: "*Emisiones*" (*tramos horarios*) [Broadcasts (time slots)], "*Clips*" (processed audios), and "*Relacionados*" [Related], which refers to other programmes with similar content.

With regard to the number of clicks needed to listen to an item of content in the repository, starting from the moment of access to the radio station's home webpage until it can actually be heard, a reduction to two clicks has been observed in the period analysed among all broadcasters. By comparison, in the 2019-20 study the fastest access pertained to *Más de uno*, with merely two clicks, compared to four for the others.

With regard to the processing of content, while in the 2010-11 season only complete programmes and counted segments were uploaded, the analysis shows that a decade later, in practically all cases, this process was carried out both for complete hours (except in the case of "*Más de uno*", which continues to offer the entire programme) as well as through numerous segments of sections and highlights.

In any case, data regarding processing for the 2010-11 season (Sellas, 2012) is a long way off, where the number of segments of all programming, not just morning shows, ranged from nine for Cadena SER and COPE to six for RNE. If we look at Graph 1, which shows the evolution of the periods studied over time, the number of daily podcast segments is not only much higher, but has increased in all the morning shows analysed, with the exception of Más de uno, which has fallen from an average of 11 to 10.4. Hoy por hoy rose from 12.2 to 15.6, and Herrera en COPE increased from 13.8 to 16.6. Finally, Las mañanas experienced the highest growth, going from an average of 10.4 to 17.8. Tables 1 and 2 show the specific number of daily podcast segments for the two seasons during the constructed week.



Graph 1. Average daily evolution of podcast segments. 2019 and 2022 seasons Source: Adapted from **Rodríguez-Luque**; **Alonso-Fernández** and **Legorburu-Hortelano** (2020, p. 19).

#### Table 1. Number of daily podcast segments per morning show 2019-2020

Dates of the constructed week	SEI2	COPE	ON DA CIERD	Las mañanas	
	Hoy por hoy	Herrera en COPE	Más de uno		
Monday 04/11/2019	_1	14	11	13	
Tuesday 12/11/2019	15	18	11	11	
Wednesday 20/11/2019	10	12	11	12	
Thursday 28/11/2019	15	18	11	11	
Friday 06/12/2019	9	7	11	5	
Total	49	69	55	55 52	
Daily average	12.2	13.8	11	10.4	

Source: Adapted from Rodríguez-Luque; Alonso-Fernández and Legorburu-Hortelano (2020, p. 19).

Table 2. Number of daily podcast segments per morning show 2021-2022

Dates of the constructed week	SEI2	COPE		Las mañanas	
	Hoy por hoy	Herrera en COPE	Más de uno		
Monday 03/01/2022	10	14	12	15	
Tuesday 11/01/2022	19	16	11	20	
Wednesday 19/01/2022	19	17	9	15	
Thursday 27/01/2022	16	19	12	19	
Friday 04/02/2022	14	17	8	20	
Total	78	83	52	89	
Daily average	15.6	16.6	10.4	17.8	

With regard to detail, from the observation of the audio content during the two seasons analysed, it can be stated that all the radio stations employ a similar strategy in their morning shows, since they process and cut important sections, such as anchors' monologues, comments by collaborators, and other spaces. These same routines apply to the weekly sections as well. Moreover, they incorporate audios of interviews or relevant news into their websites, depending on current events.

These pieces invariably include a photograph and a summary, but not always with a date and time. In the 2021-22 season, all of the broadcasters analysed have put dates on the content, except *Cadena SER*, which includes the length of the audios instead of the time of broadcasting. It should be noted that two years ago, the morning shows of *Cadena SER* and *COPE* included these data, while that of *Onda Cero* only included the date, and *RNE*'s morning programme did not include either (although they did appear in its search engine), with the latter specifying only the length, similar to the action taken by *Cadena SER*.

As for exclusive content for the web, this is only provided by *Más de uno* and *Las mañanas*. In the case of *Onda Cero's* morning show, there are links to special programmes and videos of awards received by either the morning programme itself or the team. *RNE's* morning show includes information on its time slots and a webcam to watch them live. All four radio stations have search engines as well.

As mentioned above, one of the key aspects of radio on-demand is the increase in its dissemination through social networks and notifications. As far as the former are concerned, the four morning shows have their own profiles apart from those of their radio stations in order to promote the programme or its sections, or to call for listener participation, or even to show additional material (links, videos, etc.). Despite the fact that in 2013 *Cadena SER* was leading the work in this area on *Facebook*, and *RNE* on *Twitter* (**Peña-Jiménez**; **Pascual-García**, 2013), by the end of 2019 all of them were using *Facebook*, *Instagram*, *Twitter*, and *Flipboard*, with the exception of *RNE*, which was still not using the latter (**Rodríguez-Luque**; **Alonso-Fernández**; **Legorburu-Hortelano**, 2020). During the 2021-22 season, *Flipboard* has no longer been used by any of the broadcasters, as their activity is now carried out on the other three SNs. Likewise, as was the case in the 2019-2020 season, all four morning shows have been enhanced by the broadcasters' use of mobile messaging channels, in which in-app alerts stand out over *web push* notifications. In fact, in the 2021-22 period, only *Cadena SER* and *Onda Cero* were using the latter.

As far as aggregators and platforms are concerned, morning shows have been present since the 2019-20 season with hourly programmes (or complete programmes, such as *Más de uno*), and the corresponding segments on *Apple Pod*-

*casts, Google Podcasts* and *iVoox.* There also seems to be agreement on discarding *SoundCloud* and *Stitcher* (in the latter, only a few outdated audios from *Hoy por hoy* have been found). The case of *Spotify* is different, where

# There is widespread awareness of the need to become familiar with the listener/user in depth

in the first season analysed, *Hoy por hoy* and *Herrera en COPE* could be found, but not *Las mañanas* and *Más de uno* (only the weekly section "*La cultureta*" was uploaded). On the other hand, in the second and most recent period, *RNE* and *Onda Cero's* morning shows have been incorporated, yet *COPE's* morning programme has ceased to be included, as its presence has been limited to the playlist of the music section "*Radio Carlitos Deluxe*" (*RCD*). With regard to *Spreaker*, only *Más de uno* is present, as *Las mañanas* has never been seen there, and neither *Herrera en COPE* nor *Hoy por hoy* appear there as well. *Podimo* started operations in Spain in June of 2020. Moreover, it has joined the platforms, incorporating the programming of *COPE* and *Onda Cero*. On the other hand, *TuneIn* currently hosts all four radio stations. The same is true of *YouTube*, where each station has its own channel (with the exception of the morning shows, with lists or channels), including public broadcasting, which was limited to *rtve.es* in the 2019-20 season (see Table 3).

Agregadores	SER Hoy por hoy		Herrera en COPE		Más de uno		Las mañanas	
	Apple Podcasts	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Google Podcasts	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
iVoox	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Podimo	-	No	-	Yes	-	Yes	-	No
SoundCloud	No	No	No	No	No	No	No	No
Spotify	Yes	Yes	Yes	Yes	No	Yes	No	Yes
Spreaker	Yes	No	Yes	No	Yes	Yes	No	No
Stitcher	Yes	No	No	No	No	No	No	No
Tuneln	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
YouTube	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes

Table 3. Presence on platforms, aggregators and *YouTube* in 2019 and 2021

Source: Adapted from Rodríguez-Luque; Alonso-Fernández and Legorburu-Hortelano (2020, p. 19).

Finally, it should be noted that some of the radio stations under study were experimenting in 2021 with broadcasts on *Twitch*, although rather than using their morning shows they broadcast other programmes, as in the case of *Tiempo de juego (COPE)*, *Buenismo bien (Cadena SER)* and on *Clubhouse*, such as *A vivir que son dos días (Cadena SER)* and *Herrera en COPE*.

# 5. Discussion and conclusions

The research carried out shows that radio on-demand is nowadays an essential distribution channel for speech-based Spanish radio stations with national coverage, as pointed out by their digital product and programme managers. The study also offers a quantitative analysis of the activity they undertake in the specific case of their most popular programmes, which are the morning shows. Thus, radio broadcasters have found on-demand radio to be a useful tool for becoming more efficient in both the management and monetisation of their content, while at the same time responding to the new ways in which their regular audience listens, as well as trying to gain listeners among digital natives as well.

This practice has been used in Spain since 2005, and its importance has increased through the years, along with the evolution of the podcast, which is the audio format that underpins the discipline. Both formats underwent slow development between 2005-2015, gaining momentum from that year onward, and have decisively increased in the last three radio broadcasting seasons. One cannot envision on-demand radio, nor its upsurge, without the presence of podcasting. In fact, in day-to-day radio broadcasting the term "podcast" is more commonly used than "radio on-demand", yet there is still no consensus on the name.

In any case, such progress can be seen within the context of the strategy implemented by broadcasters, which is reflected in diverse, intertwined aspects, such as the transformation of organisational structures that carry out the tasks involved, in addition to a significant increase (and consequent improvement, season by season), of both the techniques of processing, measuring and analysing this type of audience, as well as the techniques of expanding broadcast dissemination.

Specifically, all broadcasters have implemented their own strategy that has been applied in a systematic, protocol-focused way, which is quite the opposite of what happened merely a decade ago, when there was no

"overall, strategic approach for integrating and exploiting content management" (Fernández-Sande; Rodríguez-Barba; Rodríguez-Pallares, 2013, p. 397).

Thereafter, the predominant management model has been one of coordination between the digital product area and the different programmes. It could be said that a mixed, decentralised approach has been imposed, which has thereby increased the number of teams dediThe time needed for uploading to the web has been reduced, mainly due to the automation of processes

cated to the digital sphere, while at the same time distributing part of the tasks among the entire editorial staff. In this way, one of the shortcomings that initially hampered its progress has been corrected (Sellas, 2012).

From that point on, there has been a steady increase in processing work. The guidelines established in 2008, which consist of separating full hours (except for "Más de uno" on Onda Cero), sections, and highlighted events (Moreno-Moreno; Martínez-Costa; Amoedo-Casais, 2009), are still in force, and even stronger than before. From a quantitative point of view, the number of segments of a single morning show is nearly twice the total number produced by an entire radio station each day (Sellas, 2012). Moreover, between the 2019-20 and 2021-22 seasons, only in the case of morning shows (with the exception of Onda Cero, which has remained unchanged), the rate of growth has been between 20.2% and 71.1%. Furthermore, the time needed for uploading to the web has been reduced, mainly due to the automation of processes. Moreover, in terms of quality, additional processing by the technical staff has been established in the case of Cadena SER. There has also been a widespread effort to include text and images in the inserts, provide a date and metadata for all items, and to fine-tune the search engines as well. As such, radio operators have made a strong effort to adapt the content they broadcast to the new, diverse ways of listening to programmes, and to the different devices and means of access offered by digital technology, with the aim of improving the user experience.

Furthermore, the distribution of content through the web has been complemented by the use of audio platforms and aggregators. In this regard, there have been some noteworthy developments. On the one hand, Prisa Radio is a pioneer in dividing its on-demand content among two different websites: the Cadena SER site (Complete programmes) and another one called SER Podcast (Segments); on the other hand, broadcasters are increasingly selective in the placement of their content, filtering out certain aggregators in recent seasons. The progress made in measuring and analysing this type of audience, both inside and outside their own domain, is striking. There is widespread awareness of the need to become familiar with the listener/user in depth. One of the main objectives of this task, which now differs in comparison to the 2019-20 season, is to increase the potential for monetisation of this content, thereby progressively dispelling the uncertainty that existed at the beginning of the 2010s (Sellas, 2012).

Finally, broadcasters have attempted to expand the dissemination of their content by using social networks and notifications. Regarding the former, even though the presence of broadcasters was limited to Facebook and Twitter, and not all the news programmes had their own profile (Peña-Jiménez; Pascual-García, 2013), all of them had their own profile in the 2021-22 season, not only on the two networks mentioned, but also on Instagram, which are profiles that coexist with those of their respective radio stations. Regarding the latter, broadcasters regularly and extensively use in-app alerts.

In summary, it can be affirmed that like so many other situations this medium has faced over its century-long history, radio has once again found an opportunity rather than a threat with Internet and the podcast, the latter of which is a new tool for distributing its content, thereby providing new life beyond the live broadcast.

# 6. Note

1. There are no audios available for this programme due to Cadena SER's having suffered a serious computer attack that altered all of its processes.

# 7. References

AIMC (2021). Estudio general de medios. Madrid: AIMC.

Amoedo-Casais, Avelino; Moreno-Moreno, Elsa; Martínez-Costa, María-Pilar (2021). "Oferta y consumo de podcast de los medios digitales". In: Salaverría, Ramón; Pilar Martínez-Costa (coords.). Medios nativos digitales en España. Salamanca: Comunicación social, pp. 213-232. ISBN: 978 84 17600 60 0 https://doi.org/10.52495/c14.emcs.7.p92

Bardin, Laurence (1986). Análisis de contenido. Madrid: Akal. ISBN: 978 84 7600 093 9

Berry, Richard (2014). "The future of radio is the internet, not on the internet". In: Oliveira, Madalena; Stachyra, Gràzyna; Starkey, Guy (eds.). Radio: the resilient medium. Papers from the third conference of the ECREA Radio Research Section. Sunderland: University of Sunderland, pp. 3-16. ISBN: 978 0 9929805 0 4 https://sure.sunderland.ac.uk/id/eprint/5288/1/Radio\_The\_Resilient\_Medium\_-\_electronic.pdf

Berry, Richard (2016). "Podcasting: considering the evolution of the medium and its association with the word 'radio". Radio journal: international studies in broadcast & audio media, v. 14, n. 1, pp. 7-22.

https://doi.org/10.1386/rjao.14.1.7\_1

Bonet, Montse; Sellas, Toni (2019). "Del flujo al stock: el programador radiofónico ante la gestión del catálogo digital". *El profesional de la información*, v. 28, n. 1, e280109. https://doi.org/10.3145/epi.2019.ene.09

**Bonini, Tiziano** (2015). "La 'segunda era' del podcasting: el podcasting como nuevo medio de comunicación de masas digital". *Quaderns del CAC*, v. 41, n. 18, pp. 21-30.

https://www.cac.cat/sites/default/files/2019-01/Q41\_Bonini\_ES.pdf

*Cadena SER* (2021). "En la *Cadena SER* estrenamos *SER podcast* con un catálogo de 65 podcasts". *Cadena SER*, 16 marzo. *https://www.sercomunicacion.com/en-la-cadena-ser-estrenamos-ser-podcast-con-un-catalogo-de-65-podcasts* 

*Cadena SER* (2022). "La *Cadena SER* lanza su nueva web audio first". *Cadena SER*, 31 enero. https://cadenaser.com/2022/01/31/la-cadena-ser-lanza-su-nueva-web-audio-first

**Chan-Olmsted, Sylvia**; **Wang, Rang** (2020). "Understanding podcast users: Consumption motives and behaviors". *New media & society*, v. 24, n. 3, pp. 684-704. *https://doi.org/10.1177/1461444820963776* 

Chignell, Hugh (2009). Key concepts in radio studies. Thousand Oaks: Sage. ISBN: 978 1 4129 3516 6 https://doi.org/10.4135/9781446269060

Comscore (2021). MMX Mutiplataforma. Madrid: Comscore.

**Fernández-Sande, Manuel; Rodríguez-Barba, Dolores; Rodríguez-Pallares, Miriam** (2013). "La gestión de contenidos como actividad estratégica en empresas de radiodifusión. Estudio de casos en la radio comercial española". *El profesio-nal de la información*, v. 22, n. 5, pp. 392-398. https://doi.org/10.3145/epi.2013.sep.03

Galán-Arribas, Rafael; Herrero-Gutiérrez, Francisco-Javier; Vergara-Fragoso, Martha; Martínez-Arcos, Cruz-Alberto (2018). "Estudios sobre el podcast radiofónico: revisión sistemática bibliográfica en WoS y Scopus que denota una escasa producción científica". *Revista latina de comunicación social*, n. 73, pp. 1398-1411. https://doi.org/10.4185/RLCS-2018-1313

Gallego-Pérez, Juan-Ignacio (2010). Podcasting. Nuevos modelos de distribución para los contenidos sonoros. Barcelona: UOC. ISBN: 978 84 9788 857 8

**García-Marín, David** (2019). "La radio en pijama. Origen, evolución y ecosistema del podcasting español". *Estudios sobre el mensaje periodístico*, v. 25, n. 1, pp. 181-196. https://doi.org/10.5209/ESMP.63723

**Gutiérrez-García, María; Martí-Martí, Josep-María; Ferrer, Iliana-Esther; Monclús, Belén; Ribes-Guàrdia, Xavier** (2014). "Los programas radiofónicos españoles de prime time en *Facebook* y *Twitter*: Sinergias entre la radio convencional y las redes sociales". *Revista latina de comunicación social*, n. 69, pp. 418-434. *https://doi.org/10.4185/RLCS-2014-1018* 

Hilmes, Michelle; Loviglio, Jason (2013). "Making radio strange". In: Hilmes, Michelle; Loviglio, Jason (eds.). Radio's new wave. Londres: Routledge, pp. 7-13. ISBN: 978 0 415 50976 3

**Hirschmeier, Stefan**; **Tilly, Roman**; **Beule, Vanessa** (2019). "Digital transformation of radio broadcasting: An exploratory analysis of challenges and solutions for new digital radio services". In: *Proceedings of the 52<sup>nd</sup> Hawaii international conference on system sciences*, pp. 5017-5026.

https://core.ac.uk/download/pdf/326834486.pdf https://doi.org/10.24251/HICSS.2019.602

IAB (2022). Estudio anual de audio online 2021. Madrid: IAB-GFK.

Laor, Tal (2022). "Radio on-demand. New habits of consuming radio content". *Global media and communication*, v. 18, n. 1, pp. 25-48.

https://doi.org/10.1177/17427665211073868

**Legorburu-Hortelano, José-María; Edo-Bolós, Concha; García-González, Aurora** (2021). "Podcasting as an opportunity to recover and renew the audio feature genre in Spanish. A case study of Cuonda and Podium Podcast". *Radio journal: international studies in broadcast & audio media*, v. 19, n. 2, pp. 311-326. https://doi.org/10.1386/rjao 00046 1

**Legorburu-Hortelano, José-María; García-González, Aurora; Dorado-Colmenar, José-Vicente** (2019). "Condicionantes de la programación radiofónica digital". In: Pedrero-Esteban, Luis-Miguel; García-Lastra, José-María (eds.). *La transformación digital de la radio. Diez claves para su comprensión académica y profesional.* Valencia: Tirant lo Blanch, pp. 59-82. ISBN: 978 84 17973 26 1

Linares-Palomar, Rafael; Neira-Borrajo, Elena (2017). "Serial, el programa radiofónico que resucitó el podcasting". Área abierta, v. 17, n. 1, pp. 73-82. https://doi.org/10.5209/ARAB.53356 **Markman, Kris M.** (2015). "Considerations-Reflections and future research. Everything old is new again: podcasting as radio's revival". *Journal of radio & audio media*, v. 22, n. 2, pp. 240-243. https://doi.org/10.1080/19376529.2015.1083376

Martí-Martí, Josep-Maria; Monclús, Belén; Gutiérrez-García, María; Ribes-Guàrdia, Xavier (2015). "La radio, modelo de negocio en transición: estrategias de oferta y de comercialización en el contexto digital". *Quaderns del CAC*, v. 41, n. 18, pp. 11-19. *https://www.cac.cat/sites/default/files/2019-01/Q41\_Marti\_et\_al\_ES.pdf* 

Martínez-Costa, María-Pilar; Legorburu-Hortelano, José-María (2020). "Audio digital e interfaces de voz: una nueva era para la sonosfera". En: Pedrero-Esteban, Luis-Miguel; Pérez-Escoda, Ana (eds.). *Cartografía de la comunicación post digital: medios y audiencias en la sociedad de la Covid-19*. Madrid: Aranzadi, pp. 303-330. ISBN: 978 84 1345 824 3

Martínez-Costa, María-Pilar; Moreno-Moreno, Elsa; Amoedo-Casais, Avelino (2018). "Mapa de la radio online en España: tipología y caracterización en el contexto de los cibermedios". *El profesional de la información*, v. 27, n, 4, pp. 849-857. *https://doi.org/10.3145/epi.2018.jul.14* 

Martínez-Costa, María-Pilar; Prata, Nahir (2017). "La radio en busca de su audiencia: hacia una escucha diversificada y multiplataforma". *Intercom*, v. 40, n. 3, pp. 109-127. https://doi.org/10.1590/1809-5844201737

**Martínez-Otón, Laura**; **López-Schlichting, Cristina** (2022). "La influencia de las redes sociales en la transformación de la radio: de la creación a la difusión en las narrativas digitales". En: Pérez-Escoda, Ana; Rubio-Romero, Juana (eds.). *Redes sociales, ¿el quinto poder? Una aproximación por ámbitos al fenómeno que ha transformado la comunicación pública y privada*. Valencia: Tirant lo Blanch, pp. 155-178. ISBN: 978 84 18802 89 8

McClung, Steven; Johnson, Kristine (2010). "Examining the motives of podcast users". Journal of radio & audio media, v. 17, n. 1, pp. 82-95.

https://doi.org/10.1080/19376521003719391

McHugh, Siobhán (2022). The power of podcasting. Telling stories through sound. Sydney: UNSW Press. ISBN: 978 17 42237 02 2

**Moreno-Moreno, Elsa**; **Martínez-Costa, María-Pilar**; **Amoedo-Casais, Avelino** (2009). "Radio and the web: communication strategies of Spanish radio networks on the web (2006-2008)". *Observatorio (OBS) journal*, v. 3, n. 3, pp. 121-137. *http://obs.obercom.pt/index.php/obs/article/view/288* 

**Napoli, Philip M.** (2011). *Audience evolution. New technologies and the transformation of media audiences*. New York: Columbia University Press. ISBN: 978 0 231150347

**Newman, Nic; Gallo, Nathan** (2019). *News podcasts and the opportunities or publishers.* Oxford: Reuters Institute for the Study of Journalism.

https://www.digitalnewsreport.org/publications/2019/news-podcasts-opportunities-publishers

**Novaceanu, Marta R.** (2020). "From the traditional radio to podcast or to the à la carte". *World journal of research and review*, v. 11, n. 1, pp. 17-21. https://doi.org/10.31871/WJRR.11.1.8

**Nuzum, Eric** (2019). *Make noise: a creator*'s guide to podcasting and great audio storytelling. New York: Workman Publishing. ISBN: 978 1 523504558

Nyre, Lars (2015). "Urban headphone listening and the situational fit of music, radio and podcasting". *Journal of radio & audio media*, v. 22, n. 2, pp. 279-298. https://doi.org/10.1080/19376529.2015.1083155

**Pedrero-Esteban, Luis-Miguel**; **Barrios-Rubio, Andrés**; **Medina-Ávila, Virginia** (2019). "Adolescentes, smartphones y consumo de audio digital en la era de *Spotify*". *Comunicar*, v. 60, n. 27, pp. 103-112. https://doi.org/10.3916/C60-2019-10

**Pedrero-Esteban, Luis-Miguel**; **Herrera-Damas, Susana** (2018). "La notificación *push* como estrategia informativa de la radio en el entorno digital". *El profesional de la información*, v. 26, n. 6, pp. 1100-1107. *https://doi.org/10.3145/epi.2017.nov.09* 

**Pedrero Esteban, Luis-Miguel; Legorburu-Hortelano, José-María** (2021). "La medición de audiencia en radio y audio: realidades y retos". En: Quintas-Froufe, Natalia; González-Neira, Ana (eds.). *Los estudios de audiencia: de la tradición a la innovación*. Barcelona: Gedisa, pp. 135-156. ISBN: 978 84 18525 87 2

**Peña-Jiménez, Palma**; **Pascual-García, Alberto** (2013). "Redes sociales en la radio española. *Facebook, Twitter* y community management". *Zer*, n. 35, pp. 123-144. https://ojs.ehu.eus/index.php/Zer/article/view/10677 **Pérez-Alaejos, María-Peña-Mónica**; **López-Merayo**, **Alejandro** (2013). "Entre ondas y bits: el podcasting en las redes nacionales de radio españolas". *Comunicação midiática*, v. 8, n. 3, pp. 181-202. https://www2.faac.unesp.br/comunicacaomidiatica/index.php/CM/article/view/219

**Pessoa, Sonia C.**; **Prata, Nair**; **Avelar, Kamilla** (2017). "Rádio em ambientes digitais: experiências de segmentação em aplicativos para dispositivos móveis". *Logos: comunicação e universidade*, v. 24, n. 1, pp. 160-175. *https://doi.org/10.12957/logos.2017.28604* 

**Piñeiro-Otero, Teresa** (2015). "Información, multimedialidad y personalización en las radioapps de España y Portugal". *El profesional de la información*, v. 24, n. 4, pp. 463-471. *https://doi.org/10.3145/epi.2015.jul.13* 

**Piñeiro-Otero, Teresa**; **Terol-Bolinches, Raúl**; **Vilà-Talleda, Pere** (2019). "Nuevos sistemas y soportes de distribución radiofónica". In: Pedrero-Esteban, Luis-Miguel; García-Lastra, Juan-María (eds.). *La transformación digital de la radio. Diez claves para su comprensión profesional y académica.* Valencia: Tirant lo Blanch, pp. 107-130. ISBN: 978 84 17973 26 1

*Prodigioso Volcán* (2022). *III Estado de la voz y el audio en España*. Madrid: Prodigioso Volcán-SEIM. *https://www.prodigiosovolcan.com/sismogramas/informe-voz-2021* 

**Quah, Nicholas** (2019). "The 10 essential fiction podcasts that shaped the genre". *Vulture*, 3 October. *https://www.vulture.com/article/best-fiction-pocasts-all-time.html* 

**Ribes-Guàrdia, Xavier**; **Monclús, Belén**; **Gutiérrez-García, María**; **Martí-Martí, Josep-María** (2017). "Aplicaciones móviles radiofónicas: adaptando las especificidades de los dispositivos avanzados a la distribución de los contenidos sonoros". *Revista de la AE-IC*, v. 4, n. 7, pp. 29-39. https://doi.org/10.24137/raeic.4.7.5

**Riffe, Daniel**; **Aust, Charles F.**; **Lacy, Stephen R.** (1993). "Effectiveness of random, consecutive day and constructed week sampling newspaper content analysis". *Journalism & mass communication quarterly*, n. 70, pp. 133-139. *https://doi.org/10.1177/107769909307000115* 

**Rodríguez-Luque, Cristina**; **Alonso-Fernández, José-Antonio**; **Legorburu-Hortelano, José-María** (2020). "De la fonoteca al pódcast: análisis de los magacines 'estrella' de la radio generalista española en los repositorios abiertos". *Documentación de las ciencias de la información*, n. 43, pp. 15-22. *https://doi.org/10.5209/dcin.67234* 

Sellas, Toni (2011). El podcasting. La (r)evolución sonora. Barcelona: UOC. ISBN: 978 84 97884 47 1

**Sellas, Toni** (2012). "A two-dimensional approach to the study of podcasting in Spanish talk radio stations". *Radio journal: international studies in broadcast & audio media*, v. 10, n. 1, pp. 7-22. *https://doi.org/10.1386/rjao.10.1.7\_1* 

Sixto-García, José (2018). "La radio española en las redes sociales: cross-media en el escenario convergente". Communication papers, v. 7, n. 14, pp. 181-203.

https://raco.cat/index.php/communication/article/view/339948

**Soengas-Pérez, Xosé** (2013). "Retos de la radio en los escenarios de la convergencia digital". *adComunica*, n. 5, pp. 23-36. *https://doi.org/10.6035/2174-0992.2013.5.3* 

Spinelli, Martin; Dann, Lance (2019). Podcasting: the audio media revolution. Londres: Bloomsbury. ISBN: 978 1 501328688 https://doi.org/10.5040/9781501328671.0007

Suing, Abel; Ordóñez, Kruzkaya; Herrero-Gutiérrez, Francisco-Javier (2020). "La coexistencia de la radio y las redes sociales en el proceso de convergencia mediática en España". Anàlisi: quaderns de comunicació i cultura, extra. https://doi.org/10.5565/rev/analisi.3206

**Sullivan, John L.** (2019). "The platforms of podcasting: past and present". *Social media + society*, v. 5, n. 4. *https://doi.org/10.1177/2056305119880002* 

**Terol-Bolinches, Raúl; Pedrero-Esteban, Luis-Miguel; Pérez-Alaejos, María-Peña-Mónica** (2021). "De la radio al audio a la carta: la gestión de las plataformas de podcasting en el mercado hispanohablante". *Historia y comunicación social*, v. 26, n. 2, pp. 475-485. *https://doi.org/10.5209/hics.77110* 

Vallés-Martínez, Miguel S. (2014). Entrevistas cualitativas. Madrid: CIS. ISBN: 978 84 74763 42 3

Videla-Rodríguez, José-Juan; Piñeiro-Otero, Teresa (2013). "La radio móvil en España. Tendencias actuales en las apps para dispositivos móviles". *Palabra clave*, v. 16, n. 1, pp. 129-153. https://doi.org/10.5294/pacla.2013.16.1.5

**Videla-Rodríguez, José-Juan**; **Piñeiro-Otero, Teresa** (2017). "La radio online y offline desde la perspectiva de sus oyentes-usuarios. Hacia un consumo híbrido". *Estudios sobre el mensaje periodístico*, v. 23, n. 1, pp. 1437-1455. *https://doi.org/10.5209/ESMP.58054*