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Online radio and native projects in Catalonia. The risk and appeal of uncertainty

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Abstract

Digitalisation has transformed cultural industries in recent years. The radio industry is also being affected by these changes, although in Spain it's still largely based on an analogue transmission model. On the internet, radio broadcasters can diversify the range of content they deliver to the audience. At the same time, other audio projects are set up directly on the internet, being far removed from those of traditional broadcasters. This study of online radio and indigenous online projects allows us to examine and compare the strategies used to tackle the internet, a platform that challenges the traditional value chain of broadcasters. Based on a review of the literature and documents, a description of the sample and in-depth interviews, this paper explains how broadcasters see the dynamics of the internet and how this results in a certain kind of content and its impact on the value chain. Some trends in the radio market and related difficulties are also pointed out.

Keywords

Cultural industries, radio, internet, audio, value chain.

Resum

En els darrers anys, la digitalització ha anat transformant les indústries culturals. La radiofònica, malgrat que a Espanya continua sent de transmissió principalment analògica, no és aliena als canvis. A internet, la ràdio pot diversificar l'oferta més enllà dels continguts que difon a l'antena. Però, paral·lelament, s'hi desenvolupen altres propostes d'àudio nascudes a la xarxa al marge dels radiodifusors tradicionals. L'estudi de la ràdio en línia i els projectes nadius ens permet veure i comparar com afronten estratègicament internet, un espai que planteja nous reptes per a la cadena de valor tradicional de l'empresa radiofònica. A partir de la revisió bibliogràfica i documental, la descripció de la mostra i les entrevistes en profunditat, es posa de manifest el nivell de comprensió de les dinàmiques d'internet, com això es tradueix en una oferta de continguts determinada i com es flexibilitza la cadena de valor. Alhora, s'apunten tendències d'evolució del mercat radiofònic i les dificultats que hi influeixen.

Paraules clau

Indústries culturals, ràdio, internet, àudio, cadena de valor.

1. Introduction

Cultural industries have undergone a transformation in recent years due to the impact of digitalisation. The digital switchover has altered consumption habits but it has also led to changes in models of production, distribution and sales. Although this evolution is technological, it has a cultural and social dimension as well. As a cultural industry, radio is also going through this process although it has developed differently in Catalonia and Spain, with radio becoming an "analogue island in the midst of a digital ocean" (Bonet 2012, p.176).

Spain's radio industry began its digitalisation years ago in the areas of production, administration and documentation but this has yet to be completed in terms of its distribution. The current paralysis of digital terrestrial radio means that most radio is still broadcast via the analogue system. However, other digital options have gradually developed and have become integrated within the routines of professionals and listener habits. The internet allows radio to offer its content *a la carte* because listeners can consume radio via streaming, downloads or subscription to podcasts. As traditional broadcasters have gradually increased their exclusively online content, other unrelated agents have developed their own audio projects. Both are currently facing uncertain times.

2. Aims and methodology

This article is a comparative study of the different models of radio and/or audio projects on the internet carried out in Catalonia. It uses a basic typology that differentiates between:

a. Online extensions of existing broadcasters, of two types:
   - Online radio stations.
   - Exclusive online programmes.

b. Audio projects created online and not related to any traditional broadcaster.

The aim is to analyse and compare these projects, both those carried out by traditional broadcasters and those created separately from such organisations. The study focuses on the strategic approach; i.e. on how the presence and use of the internet is conceived. It also examines the online content offered as a physical manifestation of the strategy applied. The aims are therefore as follows:

a. Identify the criteria and goals justifying online radio stations associated with traditional broadcasters.
b. Identify the criteria and goals justifying exclusive programmes for the internet offered by traditional broadcasters.
c. Reveal the value chain of indigenous online projects that have no link with any traditional broadcaster, as well as analyse whether they can serve as a benchmark for radio broadcasters.

To achieve these goals, the methodology used is based on a combination of various techniques to gather the data, using primary and secondary sources:

a. Review of the bibliography and documents of studies available on the evolution of radio as a cultural industry.
b. Description of the projects in question, in accordance with a brief basic analytical file that helps to reveal the main features of the sample and to produce the questionnaire for the interviews. This is a descriptive file containing the name of the broadcaster or project, the business or corporate group behind it (if there is one), its form of ownership (public or private), the type (according to the aforementioned typology: if it's indigenous or an online extension), the number of online broadcasters and the number of exclusively online programmes.
c. Semi-structured in-depth interviews, previously selecting the people according to their position and experience.
d. Extracting data from the interviews.
e. Analysing the findings and conclusions.

Projects produced in Catalonia have been analysed, with a specific sample resulting from a preliminary investigation and also supported by other studies carried out by the same researchers. Firstly, the study includes the proposals of traditional broadcasters. In order for the study to cover both public and private radio, and also in accordance with the radio audiences found in Catalonia, the study focused on Catalunya Ràdio and RAC1. According to the basic typology established as our point of departure, online radio stations and programmes broadcast exclusively on the internet have been grouped together under the name of *broadcaster internet extensions*. The group of broadcasters within Catalunya Ràdio has both cases: online stations (iCat and its specialised channels; CatClàssica) and exclusively online programmes (*Els spin doctors*, *MeteoMauri*, *Delicatessen* and *El celobert*, among others). RAC1 was chosen partly because prior studies had highlighted its leadership on the internet and its strategic capacity to exploit this medium (Sellas 2012a, 2013). Secondly, we also studied those projects set up directly on the internet without any connection with established radio broadcasters. In this case, the preliminary research identified a wide range of examples that differ in terms of their content, approach and size. The study focused on proposals defined as radio and those using this term to identify themselves, with the aim of restricting the study to situations comparable with traditional radio. The projects analysed are El Extrarradio, scannerFM and Ràdio Ciutat de Tarragona. These cases have also been because they are considered to be pioneers (scannerFM), because their content has been recognised at certain events as innovative (El Extrarradio) and because of their commitment to local radio (Ràdio Ciutat de Tarragona).

Regarding this sample, the research was based on a series of semi-structured in-depth interviews. The interviewees, related to the projects in question, were selected according to their position and experience (Table 1).

3. Cultural industries: theoretical approach or object of study

The approach known as the *political economics of cultural industries* (Millán Pereira 1993) is one of the theories included under the umbrella of the *information economy*. Some of its representatives have made contributions that have greatly helped to understand the changes occurring in this kind of industry over the past few decades. Of particular note are the contributions made by P. Flichy (1980) and his classification of the products of cultural industries; B. Miège and the Grenoble school (1986, 1992), for their early attempts at going beyond an analysis of the broadcaster; E. Bustamante (2003), R. Zallo (1992) and both together (1988) for the historical developments

Table 1. Interviews carried out

Broadcaster / project	Interviewee	Position / activity	Date
Catalunya Ràdio	Saül Gordillo	Director of Catalunya Ràdio and Digital Media CCMA	19/07/2016
Catalunya Ràdio	Ferran Auberni	Internet coordinator	19/07/2016
El Extrarradio	Olga Ruiz	Co-founder	30/08/2016
RAC1	Eduard Pujol	Director	14/07/2016
RAC1	Carles Miró	Internet coordinator	14/07/2016
Ràdio Ciutat de Tarragona	Quim Espinosa	Founder and director	4/08/2016
scannerFM	Bruno Sokolowicz	Founding partner	14/07/2016

Source: authors.

and classification (especially the latter); the Canadians J-G. Lacroix and G. Tremblay and the idea of *club logic* (1997); and others such as the British authors N. Garnham (1985, 2005), G. Murdock and P. Golding (2005) and also D. Hesmondhalgh (2002, 2008), a little more recently. This article does not refer to creative industries since, to date and apart from the odd exception, there has been no equally solid theoretical approach and this is a political commitment that would not be appropriate for the critical aim (in the broadest sense) of this study (Bustamante 2011).

Flow and stock. The product explains a lot

Regarding the classic segmentation, we highlight two classifications. Firstly, P. Flichy (1980) divided the products of cultural industries into *marchandise culturelle* (cultural goods) and *culture du flot* (flow culture). The former is often known as *production of stock*. Albums, films or videos and books are examples of this: products in which the creative component is fundamental and which are sold on a market. Flow culture, however, concerned (concerns) products that move between culture and information, characterised, as their name suggests, by continuity, by flowing over time, such as the press, radio and television. This classification was continued by Zallo (1988, 1992) in his work. According to the author, there are various kinds of culture, one of these being industrialised culture, within which we find industries of discontinuous publication (Flichy's cultural goods), two representations of the flow culture, namely continuous publication or editing (press) and continuous distribution (radio and television), as well as advertising and video production.

These typologies are useful when analysing the transformation of cultural industries. For example, at the end of the 1980s and early 90s, authors such as Miège, Pajon and Salaün (1986) and Zallo (1992) suggested that flow-type characteristics were starting to be seen in industries traditionally of discontinuous editing, although they had not lost their specific features. This adaptation, according to Fernández Quijada (2007), is present in all editing-based cultural industries from the time intangible media are developed (e-books, audio and video downloads, video-games...). Similarly, a certain degree of editing started to become evident in continuous distribution industries through the multiplication of TV programmes on offer and the possibility of consuming them on-demand (*op. cit.*). In other words, the beginnings of a clash could be seen between the flow model and the editing or stock model (Miège 1992).

In its most classic definition, radio as a cultural industry is related to continuous distribution, representative of the *culture du flot* or flow production, with ephemeral content it disseminates prototypes, controls the flow by structuring itself via a programming grid and functions via an indirect financing system (be it advertising or state subsidies). As in other cultural industries, it has high production overheads (the prototype), low or zero marginal costs of reproduction and distribution, and uncertain demand (Zallo 1988; Garnham 2005).

Flow and value chain in digital environments

We find more similarities than differences among the many definitions of *value chain*, related or not to audiovisuals in general and radio in particular (e.g. Porter, 1998; Communications Management Inc., 2012; ITU, 2013; OECD, 2013; Knowledge Center Mexico, 2015). This is largely due to the fact that almost all are based on Porter's early work, which defines the production phases of a product or service and the value it has, both in terms of production and also market. One of its virtues is that it helps to detect a company's competitive advantage but is also a useful tool since it subdivides production into phases or activities.

The concept of value chain has been developed since this original work, more or less quickly or deeply depending on the type of company. For example, the value chain in the ITU report

(2013) includes two additional phases (or actors): *multiplex operators* and *device creators* (the creators of different devices which can be used to consume and which, we add, are also often able to create at the same time). In this new scenario we cannot forget some actors that are producers but also suppliers, at least of networks to access content. Specifically, Apple with iPhone (and therefore iTunes) and Google with Android (and therefore Google Play Music).

According to the consultancy Knowledge Center Mexico, which works for PwC (PricewaterhouseCoopers), in a report produced in 2015 on the situation and future outlook of the Mexican radio industry (p. 27), "The conventional value chain for radio broadcasters consists of four broad components: content creation, content aggregation, content distribution and consumption". Applying their proposal, for each stage there are therefore changes can have a small or big impact:

1. Regarding content (*content creators*), technological universalisation has resulted in *user-generated content*; anyone with the minimum resources can create content and, even more importantly, can make it available to everyone via the internet. Consequently there are new actors, potential new intermediaries between content and audiences. In this phase, in general in cultural industries, creation, copyright, who is the creator of this content and how it's managed are key points not only because they help to achieve a competitive advantage but also because they can represent a source of expenditure.
2. Regarding aggregators, the authors of the report continue to include radio broadcasters in this group. This point is debatable although it's true that the report focuses on a very specific type of company in a specific country and previously defines what they understand as *radio broadcasting*. What has become evident in the last few years is that traditional radio broadcasters are no longer the only ones that package and aggregate audio content.
3. The issue of consumers is clearly very closely related to the emergence of new devices and also to the fact that, in addition to consuming, they can also produce (Ribes, Monclús and Gutiérrez 2015). There are increasingly more options open to listeners regarding when, how and where they consume the content they're interested in. The programming grid, traditionally the instrument used to order the flow of radio broadcasting, has become secondary to autonomy and the audience's capacity to establish their own personal menu of audios.
4. And, finally, the distributor. This is where we can see a battle between *broadcast* and *broadband*, between traditional and new companies, including those with the infrastructures. And they all want to use the radio bandwidth. Some of the people interviewed have voiced their concern about how strong certain social media are becoming (especially Facebook), at the cost of content generated by their companies (radio). They believe it's crucial to be present on social media but, at the same time, this "need to be there" or "we can't not be there" means losing control over the content, to a small or large extent, and enhancing the social medium while it's impossible or very difficult for the broadcaster to monetise its own product. Nevertheless, this battle is more evident and tougher in the case of television than radio (Bonet 2016).

Another example is provided by the Canadian consultancy firm Communic@tions Management Inc. (2012), which uses two simple models to explain the changes occurring in the radio value chain since 1975. As in other cases, the differences are obvious and show a more complex value chain, not lineal as to date, highlighting a factor that is almost always present but not always represented: advertisers.

Some doubts have arisen regarding this cultural industry and its value chain due to digitalisation and the evolution of internet radio. With the digital switchover, radio has entered the business of content creation and distribution, not only broadcasting (Berry 2015), and is adopting characteristics of industries of discontinuous distribution (Bonet 2012). These changes call radio's business model into question and even its concept, to the extent that some authors propose new, more generic terms which include radio and other audio extensions (Taachi 2000). All in all, there has been a reduction in advertising investment (in spite of a certain recovery over the last two years, InfoAdex 2017) the audience is ageing (AIMC 2017) and radio no longer monopolises sound communication (Sellas 2012b). Given this situation, the various models of internet radio, whether connected to broadcasters or created from scratch on the internet, appear to be a future possibility for radio regarding its content, business model and response to audience demands. Internet radio is going through a period of trial and error, without any absolute certainties and with a lot of questions that have yet to be answered.

Flow and financing

The main source of income for a radio company in Spain is largely advertising as listener quotas have disappeared, along with the sale of magazines, charges for using a radio receiver, tax on the sale of radio material and other forms of income.

Consequently, at present:

- Private broadcasters survive almost exclusively on advertising revenue.
- Radio stations for the autonomous regions accept advertising and combine it with subsidies from their respective governments.
- Radio Nacional de España doesn't accept advertising, which it was denied in 1993 after signing its programme contract, to avoid duplicated funding.
- Municipal broadcasters accept advertising, also combined with council subsidies.

But some other forms of revenue have also been tried, with more or less success, such as the sale/exchange/joint production of programmes; shares held by a radio company in other companies; capital increases; member fees; lotteries and concerts in the case of free radio stations (related to associations, cultural stations, the terminology is not unique); in the case of Antena 3 for a period, being listed on the stock market; and also 906 telephone numbers... And, as we will see in this article and as a result of the interviews, other options have emerged on the internet, such as: donations, member fees, premium services, paying for content, sponsorship or micro-patronage. Some of these options have been effective for starting up radio projects but there are doubts as to whether they will last long (Fernández Sande and Gallego 2014). Many are still in the trial stage and the interviewees have expressed quite a few reservations and have not wished or been able to provide any firm figures.

4. Analysis

The strategic value of the internet

First of all, the internet is seen as a way to provide access to content, either live or on demand, so the audience can decide what they want to listen to, when and how. But the evolution of the internet, of audiences, uses and consumption is forcing those involved in online audio to go a step further. Saül Gordillo, director of Catalunya Ràdio, states that the internet helps them to reach a young audience and serves a lot of Catalans living outside the country, and it provides them with detailed information on the audience's habits. He also notes their responsibility as a public medium. The interviewees agree that the internet is key to both the present and future of radio but requires a change in mindset that's not easy for traditional broadcasters, which are often restricted by complex structures and a financially-focused management approach.

Indigenous internet projects have the advantage of beginning directly within the digital environment. This is also the case of RAC1, which started broadcasting in 2000. By 2016 it was the leader throughout Spain for internet consumption from 12:00 to 14:00 and from 16:00 to 21:00. According to its director, Eduard Pujol, this is an anomaly that can only be explained because "in Spain, at radio stations, in certain offices, they must still be thinking in analogue". Thinking in digital at companies and generating audio culture in a digital environment among listeners are basic challenges that we've observed in this research. The potential of the internet has been known for several years (Sellas 2012a) but the sector has taken a long time to make up its mind. Now most broadcasters offer exclusive content for the internet. "We have the limitation of a traditional programming grid which very often forces us to take refuge in the digital grid and we need to test things on the digital grid, like a test site for what, after a period of time, might move to the traditional grid", notes Gordillo.

Indigenous projects have no doubts regarding the internet's strategic value as a window of opportunity. "There's a hole in traditional radio in terms of the attention it pays to the city. More than a gap, I think there are orphan listeners. We also find another hole: the ease of placing audios", explains Quim Espinosa (Ràdio Ciutat de Tarragona). That's why the project focuses on what's happening in the city and from the city's point of view. There's room on the internet for a wide range of projects. And it's not only a question of dissemination, content and experimentation. Olga Ruiz, from El Extrarradio, states that radio stations are starting to realise the situation: "I think radio is an artisan activity and very often we should shift our focus back onto the medium and believe in the potential and creativity of its people. Radio stations are now starting to realise that the paradigm needs to change and that almost all the "cake" has gone".

Indigenous projects provide this alternative viewpoint. This was, from the start, the approach of scannerFM. As explained by Bruno Sokolowicz, the idea was to "prove that an alternative music radio format was possible, unlike the commercial radio formulas, and that we could aspire to live off the market rather than subsidies". At scannerFM they were pioneers in a terrain where, today, finally, an extensive, diverse and complementary range of content and services is starting to be offered. In the digital environment, radio companies come up against new competition with an alternative supply. According to Olga Ruiz, because of this, "the industry must rethink how it can continue to make money by offering good quality content of interest to the people listening to them. Ultimately, this is a necessary combination". The question is whether there's enough room for everyone.

Production and the digital distribution of audio

The digital environment is a place where innovative, experimental things can be done, aimed at minorities, and it even provides the opportunity to carry out tests which would not be possible in the rigid flow-based production system of traditional radio. The mere fact of being able to broadcast on the internet without the need for a licence granted via a tender is a big advantage, especially for those who can't afford the cost of going in for what is known as a *beauty contest*, but also for those who realise that broadcasting is still available for those areas that broadband doesn't reach, and vice versa. "On the Internet, one of the first advantages we saw is that everyone can do it. Without a permit, without a licence, or big investment. This DIY spirit was great for us, not only because we didn't need capital or a very powerful group behind us but because of our alternative spirit" (Bruno Sokolowicz, scannerFM).

Digitalisation extends the range of distribution formats and also, and very importantly, the *points of sale*, i.e. the points of reception, which are now various devices that can receive and decode zeros and ones, wherever they come from. In the interviews, what is obvious to everyone is the fact that the value chain has been enhanced, at the same time as becoming more complicated, because of this. In the traditional value chain, aerials and repeaters were required, as well as a certain broadcasting power, to reach a wide range of towns. An audience on the move could also be reached thanks to transistors and car radios. But now reception points can be thousands of kilometres from the production point and the product can be received in different ways. This complexity requires considerable know-how and investment in technology.

Radio stations tend to use various platforms (iVoox, Soundcloud, iTunes, Facebook, Twitter…) and here everyone recognises, to a greater or lesser degree, that at the same time as this benefits them it also create dependence. When large private radio stations started to sell off the management of high frequency equipment and public networks were privatised, everyone started to depend on external private networks. This isn't new but now it's more complex and requires more dialogue in an attempt to reach agreements, while in the case of aerials this was in the hands of just a few companies. Carles Miró, from RAC1, describes it using this simile: "If the internet were a repeater, it would be the second most important one for this company. The first is still Collserola but, unlike a few years ago, now it's the second".

In spite of the doubts and headaches caused by these platforms, Ferran Auberni (Catalunya Ràdio) reminded us of "the need to be much more across the board and to talk a lot more about content and not so much about technology. We need to explain to people that content can be used in many different ways and they can make it their own". But although the internet is a provocative and more creative space regarding content, digitalisation also means that the production structure needs to be redesigned. In the radio industry, there are companies that are clearly committed to having a department or even a new company outside the group that's in charge of digital, while other companies try to handle this across different areas and departments. At Catalunya Ràdio there's a digital area but the management team aims to gradually get the whole team to think digitally. At RAC1 they are helped by the fact that they were set up in the 21st century and have a team that has, on the whole, not needed to switch over to digital (Sellas 2013). Structures have an effect but, as we have already found in previous research, innovation often depends on individual willingness and mindsets (Bonet, Fernández-Quijada, Suárez Candel, Arboledas 2013).

But the factor of structure changes considerably when we look at other radio stations that are not well-established traditional channels. In cases such as El Extrarradio and scannerFM, the structures vary over a short period of time, they're made up of very few people and without any supporting group behind them. They define themselves as *alternative projects* and their approach is based on a very different starting point. This is made clear by Olga Ruiz. "At the beginning, El Extrarradio was our way of remaining active while looking for something else but, in the end, it became our home, our way of approaching and doing radio and sound". And Bruno Sokolowicz (scannerFM): "We've come from the Master in radio company management, at UAB-SER-Santillana, in 2002-2003. The first generation. The aim of the project was to prove that an alternative music radio format was possible, different from commercial radio formulas, and that we could aspire to live off the market rather than subsidies". There are a dozen journalists at El Extrarradio although, recently, they've lost part of the team to the Podium Podcast project by Prisa Radio. scannerFM had also reached a dozen but now there are maximum four.

On the other hand, the structure of Ràdio Ciutat de Tarragona was altered by the agreement they reached with La Xarxa. There are two journalists working part-time, a collaborator to take part in the *La tarda* programme by La Xarxa and five people to cover [the football team] Nàstic. Espinosa explains that, like a traditional broadcaster "we were forced to have a studio, something we didn't have and I didn't want, but we had to do it because of this relationship, which we're interested in having".

Content production also involves the people that create it and their profile. Training and retraining is being carried out in some cases but the specific dynamics of the digital environment must be understood, as well as how to make the most of the content. Now, whenever possible, people with up-to-date digital training are recruited. It is noticeable when indigenous internet projects are led by someone who's worked in traditional radio for years. Apart from profiles, the interviewees all complain about one thing: they need more people, more resources and more training for the digital environment.

The content on offer: the what and the how

From the interviews with representatives from the radio industry we learn that the internet is a good resource to attend to specific audience segments using niche content that doesn't fit on the traditionally broadcast grid, especially in the case of generalist radio. This is a proposal for the present but, looking to the immediate future and the likely type of consumption: "We'll be relevant and healthy in the future if we're able to look after very specific, theme-based communities that are small (or small at first but then grow), provided it's all related to a brand" (Saül Gordillo, Catalunya Ràdio).

This idea is shared by both public and private radio, traditional broadcasters and indigenous internet projects: specific content for segmented audiences, with experts and with a community of like-minded people. In this way, radio is no longer forced to offer a single type of programming, increasing its potential to reach more people. The challenge is having a cohesive, global strategy that helps to find new audiences without neglecting the existing ones.

Some of the interviewees note that, on the internet, you also have to offer products with some kind of revolution in sound aesthetic. Olga Ruiz stresses the professional dynamics, attention to sound and time factor: "Above all, how sound is worked on, the time devoted to it, for radio pieces, and the little depth we work with. [...] If we also add in the factor of creativity, of sound production, of fiction... we reach the conclusion that there's a gap which, possibly, no conventional broadcaster will buy from us and that we could perhaps try it out for ourselves". Production dynamics and the fact that radio is closely associated with news make it difficult for this *other radio* to find a foothold within today's radio industry.

The alternative is to try it on the internet. Radio is also based on a "star model", big names leading the main programmes. But radio has always been a prime example of teamwork. The internet is a possible channel for the potential and talent in each company: the "digital grid" as a new stimulus for professionals. And, at the same time, the radio industry could use the internet as a source of audio archives, which is an asset whose potential cannot be fully utilised via the conventional grid. The digital environment now allows greater experimentation with audio. Recently there have been several initiatives in internet video by broadcasters and their YouTube or Instagram channels. This allows them to offer complementary content but also to reveal the everyday work of the radio station, apart from its live programmes.

Also notable in the interviews carried out were the views regarding local content. Ràdio Ciutat de Tarragona was clear about this from the start: "We drew up a map and said: the niche market, on radio, is local. [...] We started working on the radio concept. With three types of content:

1. News, for the prestige it gives the project.
2. Sports, because of the potential represented by Nàstic.
3. The social part; i.e. reaching all organisations and corners of the city" (Quim Espinosa). A window of opportunity that doesn't only exist in local radio but is also present in some large networks, which are now thinking of giving back more leeway to their regional broadcasters.

Digitalisation has help to provide many options to people who want to listen to audio and, according to the conversations held with the interviewees, the audience has taken advantage of this. In other words, listeners/users know what they want. The key is content and, accordingly, it's crucial for whoever wants to listen to content to be able to find it and choose the most appropriate way to hear it.

Radio as a cultural industry: editing the flow

As we've seen, cultural industries have a clear theoretical definition based on different elements, one of these being the value chain. Digitalisation has introduced quite a few features of editing in radio programming, such as the possibility of consuming it "piecemeal", the need to catalogue audio correctly, split up and divide the flow (and skilfully), handle more rights or take more advantage of the archive. In practice, audio needs to be approached as more than just a programmatic flow: "I have the audio piece in just one place. So I don't care if they get it from me via the internet, via a mobile phone or iTunes, it doesn't matter, they come and look for it, I count the times they've asked me for the audio and I've provided it" explains Carles Miró, from RAC1.

In practice, indigenous internet projects are a good example of this editing process. They also make it possible to consider certain audio proposals as forms of non-industrialised culture. Remember that, although he's better known for his definition of cultural industries, the definition provided by Ramón Zallo (1988, 1992) also covered non-industrialised industries. Such projects skip stages in the value chain and intermediaries to reach the end user directly, making them different within the industry. This fits totally with what Zallo (2016, p. 69) presents in his comparative table between analogue and digital culture. According to him, when talking about the value chain, in the digital era "stages become shorter and overlap and some collective generative forms are implemented via Networks". But perhaps the best point was made by Bruno Sokolowicz when asked whether they feel like an industry: "The truth is, as a feeling or identity, I don't. I don't know if we all have the same opinion. I think we should be part of the industry but that, to some extent, we're like a kind of peripheral anecdote to the industry more than part of the industry".

Whether projects are more or less artisan or industrialised, the fact is that they exist side by side with proposals by the traditional radio industry. A situation that is indicative of how the market might change. In this respect, Olga Rodríguez commented on the future of the El Extrarradio project and how they themselves might be defined: "One of the most viable options I've thought about is transforming El Extrarradio into a producer of sound documentaries. Very often conventional broadcasters don't have the time or the staff or the means the make documentaries like we do". Ràdio Ciutat de Tarragona has reached agreements with some FM broadcasters to transmit some of the programmes they produce (Nàstic football matches). In fact, Quim Espinosa himself explains why, as a result of this interest by others, he set up the Ràdio City Group: "We're a 21st-century radio company that has a platform, has created automatic programs to easily access different podcasts and audios, has a mobile app that allows you to live stream from the broadcaster or any of the programmes recorded, and all this is a platform that has cost us a lot. So we think: what if we offer the same thing to others? Can it be adapted? Yes. So we explain to people what Ràdio Ciutat de Tarragona is and, whoever's interested, if they think it might work in their city, they can set up it".

Bruno Sokolowicz (scannerFM) expressed similar thoughts: "We aspired to and stated this in the business plan we had to produce for the Master: to live off advertising. But basically, advertising has never reached even 40% of our income or provided us with the budget we need to survive, not even close. We've almost always survived as a production house that has used its medium, scannerFM, as an example or business card to carry out projects mainly for brands with communication needs, which are the main clients we've had and who've paid our expenses, essentially salaries". And he concludes: "So that's the dilemma, as they say, "what do you want to be, a medium or a producer?". And, ultimately, we wanted to be a medium but we earn our living as a producer. Our brand is stronger than our company".

5. Conclusions

As a cultural industry undergoing a transformation, thanks to digitalisation the sector combines radio as a discontinuously distributed flow with projects that edit their production. This is not new but some changes can now be seen regarding production and the content supplied, resulting from the fact that broadcasters now have a better understanding of the dynamics and opportunities provided by the internet and have realised that they need to experiment and try out new things. For several years now the internet has offered different options for consuming audio on demand, at the same time as giving broadcasters a way to diversify their supply, although not much advantage has been taken of this option. But now they're thinking of exclusive proposals with specialised content, designed for targets of segmented audiences, with a good sound design and long shelf life, as well as exploring other genres. A digital catalogue that's more in tune with the mosaic model than with the large blocks that still characterise the programming of generalist radio. Indigenous internet projects have obviously played a fundamental role in this evolution because they've taken risks, have carried out alternative proposals (regarding content and approach) and have revealed a path that is now also being explored by the radio industry.

The simplicity of the binary code has complicated the value chain but it has also made it more flexible. But this flexibility, this possibility of skipping some of the stages in the value chain, seems (according to some interviewees) to be more the case for indigenous internet projects than radio stations that form part of what has historically been called the *radio industry*; i.e. they could be considered as expressions of non-industrialised culture. Cases such as scannerFM, El Extrarradio or others reveal a market that's filling up with people from the radio acting as producers and displaying their products on the internet, in a kind of fair, so that large groups can, if they wish, hire them, their products or themselves, as has happened with part of the team from El Extrarradio which has joined Podium Podcast. In other words, an increase in production outsourcing. With more choice, the risk and uncertainty inherent in any cultural product are transferred since the initial effort of creativity does not fall on the shoulders of the large broadcaster.

Demanding a change in mindset while the analogue business is still up and running is no easy task and requires directors, managers and audio professionals in general not to be dazzled (or worried) by technology but to focus once again on content. Thinking digitally is not merely a technological skill; thinking digitally means that strategy, decision, processes and content must be focused in line with this environment, even though radio in Catalonia and Spain is still broadcast via analogue radio waves. This research has shown that such a change in mindset is difficult in the traditional radio industry and that some are migrating to digital more successfully than others. But, in general, production processes, complex structures and a financial mindset among management look like factors that complicate this migration. On the other hand, indigenous internet projects are more agile, have started out within the digital environment and already have a digital mindset. In spite of the difficulties, however, the internet is a reality and radio realises it must be online, be it due to conviction or need. That's why some of the interviewees expressed their confidence that the digital environment will act as a stimulus and speed up the evolution of the radio industry.

The traditional value chain has become richer but more complicated, and intermediation between producer and receiver now has more agents, both technological (platforms) and cultural (content creators). That's why, in addition to positioning, the battle is also to become the benchmark; in short the gatekeeper. In this battle to become the benchmark, radio in Catalonia has a particular factor of competition between public and private radio. And public radio (as with almost all radio in Europe) has long debated whether it wishes to be a benchmark, to have a big audience, or both.

In just a few years radio has demonstrated its characteristic ability to adapt but, without being apocalyptic, the transformation it is undergoing is one of the most important in its history. Some of the interviewees have spoken of the need for a change in mindset resulting from a lack of vision and certain fear of committing to the future. But if it doesn't look to the future, if it doesn't have a plan or map to guide it, then the uncertainty that is so typical of a time of transition runs the risk of becoming chronic.

Endnote

This article results from the research entitled "L'àudio a Internet: de la ràdio en línia als projectes nadius" (Audio on the internet: from online radio to indigenous projects), which received aid from the Audiovisual Council of Catalonia in the 9th call for aid applications for research projects into audiovisual communication.

Notes

1. Do It Yourself.

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