Broadcasting on the Internet

An exploratory qualitative research into non-commercial internet radios' sustainability

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Master thesis 'Cultural Economics & Entrepreneurship'
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Date: June 12, 2018

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Abstract

This study explores the different attitudes of non-commercial/non-profit internet radios. First, it defines and analyses the development of broadcasting with a major focus on the impact of the digital revolution and the internet. Second, the research highlights the staff 'intrinsic motivations and the practices that they undertake to raise their finance.

As internet radios are becoming the more and more relevant in the global, underground culture, the aim of this research is to explore this phenomenon that has been almost ignored by the academic literature. Specifically, this study wants to find an answer to the overall research question: *How do non-profit internet radio stations stay economically sustainable, while the motivation of the people in charge is foremost intrinsic?* In order to do so, data has been collected from ten in-depth interviews with the staff of as many internet radios and analysed with a qualitative approach.

The results confirm that people working for non-commercial internet radios are intrinsically motivated. Thus, their stimulus to broadcast can be found in their willingness to be a space for experimentation and alternative content. They aim to be more than a broadcasting platform namely a community-hub for creative people and listeners, locally and internationally. Since they are advertiser free and non-profit, non-commercial internet radios earn their income by undertaking activities outside the mere broadcasting. As a consequence, they are paid by other cultural organisations for curatorial and programming services, they apply for public funding and they receive private donations. Beside this, non-commercial internet radios use online channels to promote their platforms and the artists that they represent. Thus, despite the countless opportunities that those channels provide to them, some concerns are arising in regards of their content protection and identity. Lastly, non-commercial internet radios are strongly connected to their community, in a relationship that is of mutual empowerment. On the one hand, individuals find in internet radios a place where to belong and voices to identify with. On the other hand, non-commercial internet radios are motivated by their listeners to continue produce their goods and services.

Key words

1. Introduction

Radio is the first broadcast medium to be developed. Its diffusion began in the 1920s and by the 1950s it reached the mass market and became a vital part of people 'life. In those years radio was an essential tool for communication and for the dissemination of news and culture. Moreover, it connected people together with the outside world, creating a sense of 'imagined community' (Lewis & Booth, 1989). When television and films arrived, radio lost part of its power. Moreover, in the 1980s the corporatisation of terrestrial radio caused a homogenisation and standardisation of its content, at the expenses of its diversity. Thus, as happened before with 'pirate radios', young people responded by bringing radio into their spaces and journeys (Lewis & Booth, 1989). Therefore, with the help of digital technology and the internet, many non-commercial/non-profit internet radios arose willing to be a place for freedom of expression and experimentation. Thus, in a culture that is becoming more and more mainstream and commodified, non-commercial internet radios are a source of diverse, alternative and experimental content.

Today many believe that radio is having a re-birth, whether it is digital, independent, audible, podcast and so on. Particularly non-commercial internet radios are having an impact on global culture and local communities. However, they are not noticed by the academic literature. Therefore, the aim of this research is to explore this phenomenon and to find an answer to the overall research question: *How do non-profit internet radio stations stay economically sustainable, while the motivation of the people in charge is foremost intrinsic?* As well as the study sub-questions: What motivates the staff of non-commercial internet radios? What are non-commercial internet radios sources of income? Which are the opportunities and constraints that the Internet offers to non-commercial radios?

Chapter 2 is dedicated to the background and theory applicable on non-commercial internet radios. However, since a lack of relevant theories on the topic has been acknowledge at the beginning of the research, the study takes an explorative approach. Furthermore, to the knowledge of the researcher, no similar studies has been conducted before. For this reason, the chapter starts with a general explanation of the evolution of radio regulation as well as theories on creative industries, intrinsic motivation and market failures. Next, chapter 3 presents the methodology applied in this research. Therefore, it discusses the research aims, the method and the sample, as well as the data collection. The sample consist in nine non-commercial internet radios and one commercial. Those were chosen by purposive sampling on the base of their recognition and relevance on the internet radio field. Moreover, the results and the analysis of the interviews are

presented and discussed in Chapter 4. This include topics addressed in the background and literature section but also additional insights that came out during the interviews. Last but not least, in chapter 5 are summarized the most relevant findings of the study and are presented the conclusions. In addition, limitations and the suggestions for further studies can be find at the end of last chapter.

2. Background and Theory

2.1. Introduction to radio

In 1993 Carl Malmud launched the very first Internet radio called Internet Talk Radio. This featured interviews manly about technology. Not long afterwards Internet radios started webcasting various live concerts, the first of which was performed by the band "Severe Tire Damage". Before addressing the importance of internet radios in the global culture, it is important to analyse its history and characteristics.

The Radio is the oldest broadcast medium (Towse, 2010). The diffusion of radio began during the 1920s and by the 1950s reached the mass market, first in the United States and after in the rest of the world. By this time music became a vital part of the culture and new job occupations specialised in selecting and playing sound recordings were introduced in the market (Towse, 2010). Thanks to technological innovation, new formats such as cassettes and CDs made possible for sound recordings to be accessible outside people's home, increasing music's usability, mobility and accessibility (Tacchi, 2000). In the '90s, technological development and the advent of internet revolutionized the production, distribution, and consumption of radio broadcasting offering an alternative for people to traditional, mainstream radio (Towse, 2010).

2.2. Evolution of radio broadcasting

The first way of broadcasting was 'on air'. This is made by a terrestrial transmission through bands of the electromagnetic spectrum (Towse, 2010), which delivered the signal from broadcasting stations to listeners (Glenn Withers & Katrina Alford). During this initial phase, the quality of the content was strongly dependent on the frequency of spectrum occupied and on the geographical reach. However, with the help of technological developments and the advent of the space age, these issues were solved at first by Satellite distribution and afterwards by cables (Towse, 2010). Finally, the digital revolution enabled to overcome the frequency spectrum limits, related to terrestrial radios and to greatly expands the broadcasting field and capacity. Furthermore, new technologies lowered the cost and scale of production, which resulted in more opportunities for firms to enter the market. This stimulated an increasing competition (Alexander, 1994).

The term digitization refers to the convergence process that initially was used to convert an analogue signal to a digital one (Henten & Tadayoni, 2011). Nowadays, this concept has expanded

and includes the whole system of digital platforms and standards (Henten & Tadayoni, 2011). The digital revolution and internet greatly affected the radio industry and its market structure, which shifted from a distribution model, characterised by controlled access, to a network one, where a plenitude of information is available to a growing number of users (Farchy, 2011).

Nowadays, sound recordings and broadcasting are produced, stored, and consumed repeatedly by a mass audience (Towse, 2010), which guarantees inclusivity and accessibility to a wider and more diverse audience (Tacchi, 2000). Indeed, today internet radios are accessible wherever there is Internet connection - which is why, for instance, it is possible to listen to a British station from Asia or America. Since internet has been exposing to a global audience any kind of broadcasting radio the concept of local radio station has been rethought (Tacchi, 200). In a certain way this trend goes in the opposite direction to terrestrial radios which offer global sound to a local audience.

The shift from terrestrial to internet broadcasting raised the question if the latter one is indeed radio (Tacchi, 2000). This research agrees with the statement of Tacchi (2000), who said that radio has no clear essence and takes different forms. Certainly, internet provides to radio broadcasting a space for innovation and offers to a young audience a range of experimentation that terrestrial radio does not provide.

2.3. Regulation

Until the 1980, radio stations were owned by national/state-run broadcasting monopoly, financed by taxes (Towse, 2010). The first regulations were made under the assumption that airwaves were public resources and their use had to be addressed for the "public interest". Thus, the state used to provide broadcaster services. In the '80s, there were great technological changes: first, there was a major increase in the spectrum and, second, other forms of technologies delivery entered in the market (e.g. satellite and cables). For this reason, the number of views and the number of potential audience member increased exponentially. Hence, in the 1980s the broadcast market started a deregulation programme, following a 'marketplace model'. This allowed both demand and supply to determine how resources should be allocated (Withers & Alford, 2011). As a consequence, a great number of commercial and advertise-funded radios arose in the broadcasting market. This increasing number of commercial radios started to compete with the national and public service broadcasting (PSB) (Towse, 2010). As a result, the marketplace model and the affluence of commercial radios caused a corporatization and standardization of the broadcast industry. This is

the reason of the homogenization of playlist and similar programming channel: indeed, as the competitiveness among PSB and commercial radios arose, the goal of radios shifted towards an audience pleasing music-broadcasting (Towse, 2010).

As an example, one can look at the American broadcasting and radios panorama: the American broadcasting deregulation process terminated with US Telecommunications Act of 1996. This act completely erased any national limit to radio station ownership (Bednarski, 2003). Indeed, since then, the industry has witnessed the rising of larger corporation and a number of "mega-owners", such as Clear Channel. This phenomenon created a media concentration at the expenses of minor radio stations and content diversity. Indeed, sociologists Peterson and Berger (1975) stated that increasing market concentration "leads to a decrease in the diversity of products offered by the music record industry" (Alexander, 1996, p.171). In this situation, new entrants firm were unable to obtain national distribution. Therefore, since new smaller firms are a vehicle for product variety and innovation (Alexander, 1994), competition and diversity were limited.

As digitization and internet helped the broadcast industry expanding on new platforms, it was possible to solve issues like frequency scarcity and increasing competition (Alexander, 1994). As Alexander (1994) stated, new scale-reducing technologies have eroded the market structure and facilitated new entry. Indeed, many internet radios were born because they were willing to circumvent governmental restrictions on terrestrial broadcasting. For instance, Tacchi (2000), pointed out that the lack of innovation of local radio and the marginalisation of certain type of content motivated consumers and broadcasters to search for alternatives to terrestrial radio. Thus, many 'community-style' radio stations – who did not have any broadcasting license - moved on internet platforms. Indeed, internet radios seemed to be an easier way to broadcast since it can be accessed without a license and sustaining just copy-right costs (Tacchi, 2000).

The shift to internet was the last response against the radio's market trend of regulation and commodification. For instance, between the 1960s and the 1980s, this response was embodied by 'pirate radios'. One of the pioneers of pirate radio was Ronan O'Rahilly, who realized that the radio's airtime was "taken up by shows sponsored' by the same companies that controlled 90% of the record market. He also noticed that the BBC programming was almost entirely concentrating on established artists, so that the "the opportunity for innovation in the UK were severely limited (Lewis & Booth, 1989, pg. 84). For this reasons O'Rahilly funded a pirate radio station which broadcasted in international waters from a ship in UK. This was the solution to escape from the record companies 'control on popular music as well as to circumvent the BBC's radio monopoly. It was not long after that the number of pirate radios raised, becoming an international phenomenon,

giving a space to a large and important section of the audience who felt unrepresented by the public, national radio stations. Following this success, in August 1967, the Maritime etc. Broadcasting Act passed in the UK as an offence towards pirate's radios and their way of broadcasting without licenses (Lewis & Booth, 1989). Thus, nowadays, the terms pirate radio refers to those radio stations which broadcasts without a license.

Intangibility is an important feature of the radio. This is the reason why its content can be vulnerable to misappropriation (Towse, 2010). Indeed, Doyle (2011) states that the uniqueness of the media sector stands in its involvement in the supply of messages and ideas. Those have the characteristics to have symbolic values to consumers, which are "tied up in the messages they convey, rather than with the material of the information (the radio spectrum)" (Doyle, 2011, p. 274). Moreover, digitization strongly impacted the creative sector since "goods and services that were previously rival and excludable at least to some extent, have become in effect public goods for Internet users" (Handke, Stepan, & Towse, 2013, p.5). Thus, the Internet has enables the same output to be supplied repeatedly at no extra cost. This has resulted in an increase of unauthorized copying, illegal broadcasting and downloading. Hence, digitization required a set of copyright legislation to protect both the content and the content generators.

In conclusion, non-commercial internet radio found in digitisation and on internet a platform where to avoid regulation applied to terrestrial radios (Tacchi, 2000), in a way that remind the pirate radios of the 1960s. Because of the new technologies they can provide radio content in a much cheaper way, having to deal only with the cost of setting the radio and of copyright. Therefore, consumer who are quality oriented have an alternative way to experiment radio content. Indeed, internet radios are a vehicle for product diversity and a solution to terrestrial radio concentration and marginalisation.

2.4. Creative industries

From this point on, this research will consider internet radios as part of the cultural sector and, more specifically, it will consider them as creative industries, since they broadcast cultural content to a potentially global audience (Towse, 2010). According to the UNESCO definition of creative industries, these are those firms, which use creativity and cultural capital as primary inputs to combine the creation, production, and distribution of intangible and cultural content, inputs that are protected by copyright (Towse, 2010).

This research reduces its scope just to those internet radios that define themselves as non-commercial and non-profit. On the one hand, the difference between commercial and non-commercial radio stations relies on the fact that the first generate profit by airing advertising. Thus, commercial radio stations offer exposure to other companies in exchange of a payment. Since the advertiser aims to reach a large number of potential customers, commercial radio tends to choose an audience pleasing programming strategy, which is most likely to grab people's attention ("Commercial VS. Non-Commercial Radio," n.d.). On the other hand, non-commercial radios do not run advertisement. They are likely to be operated by a small staff, including volunteers and community members ("Commercial VS. Non-Commercial," n.d.), which are not mainly interested in monetary rewards. Whereas they have limited budget compared to the commercial ones, they can afford to be more risk-taking and niche-oriented. Thus, non-commercial radios are usually a platform for emerging artists.

It is important to notice that the internet radios used as samples in this research define and consider themselves as non-profit. Indeed, their main intent is to provide services for non-commercial purposes. The staff of the enterprise may not own or have economical interest in the organisation and any revenues access is reinvested in the organisation, in accordance with its mission (Towse, 2010). Because the staff cannot gain the surplus of the revenues, there is no incentive to go for profit oriented or an audience pleasing strategies (Netzer, 2011). In these kind of radios, the reward is not-monetary but mostly comes from intrinsic motivations (Netzer, 2011). On the contrary, for-profit firms aim to maximise gains and for this reason they are less likely to adopt a diverse programming strategy (Towse, 2010).

2.5. Artists labour market and intrinsic motivation:

Creativity is at the base of cultural supply. Whoever creates new work can be considered artists in a general sense (Towse, 2010). Scholars have long discussed about the artist's labour market and have come to the conclusion that it has different characteristics than the standard one. In a normal market, the higher the payment the greater the work supply is, since it has to compensate the person's cost opportunity of her leisure time (Towse, 2010). This is not the case for artist labour market. Indeed, Throsby (1994), in his 'work preference' model, suggest that many artists do not prefer leisure time to work, and so, they are willing to work even at a zero-wage rate if necessary (Towse, 2010). For this reason, artist's labour market is characterised by an excess of supply and low rates of payments (Throsby, 1994). Artists are therefore likely to undertake multiple jobs, both

art and non-art oriented. Namely, they may accept commercial work because of the necessity of monetary rewards to maintain their art production.

'Intrinsic motivation' is what Frey (1997) identifies as the real stimulus to good and service production inside a non-profit organisation. This is related to the person's inner conviction and it is "identified with work morale or work ethic" (Frey, 1997, p. 429). On the opposite, extrinsic motivation is to be found in 'outside stimuli', such as monetary rewards (Towse, 2010). In Frey's mind (1997), when intrinsic motivation is only compensated with extrinsic rewards – money – there is a crowding out where the person is discouraged to pursuit his/her work (Towse, 2010). This 'crowding-out effect' is "one of the most important anomalies in economies' (Frey & Jegen, 2000, pg.3) since it goes against the most central economics law. Indeed, this theory suggests that, under relevant circumstances, it is not advisable to use price mechanism to encourage a higher supply, but rather to rely on intrinsic motivation. Intrinsic motives were strongly emphasised by psychology scholars. For instance, Ryan and Deci (1971), define intrinsic motivation as "the doing of an activity for its inherent satisfaction rather than for some separable consequences", meaning that the motivation behind an intrinsic motivated activity, is to be found in "the enjoyment of the activity itself, rather than its instrumental value". (Ryan & Deci, 2000, pg. 56).

Throsby (2001, p.4) describes cultural provision as activities that involve "form of creativity in their production" and that relied on symbolic meanings. This concept was further investigated by Snowball (2011) who makes the distinction between intrinsic and extrinsic values of the arts. Thus, intrinsic values reflect the "purpose of producing art in the first place' (Towse, 2011, p. 172), whereas instrumental values are to be found in market transactions and are measured in terms of price. For instance, for non-commercial internet radios, intrinsic values may be artistic collaboration, experimentation and local identity.

In conclusion, it is possible to say non-commercial internet radios provide cultural content to a community, thanks to staff's intrinsic motivation. As their labour market is characterised by an excess of supply and low rate of payments, non-profit internet radios' workers often must hold multiple jobs in order to be economically sustainable.

2.6. Public goods and market failures:

Culture and creativity improve people's quality of life since they held symbolic values. For instance, internet radios - promoting non-established, local talents - provide a service to the

community. Whereas pure public goods are rather rare, many cultural services and activities have strong public good attributes, which are a source of market failures (Snowball, 2011).

Particularly broadcasting is an interesting example of a public good (Towse, 2010) because the signal is non-rival and it is non-excludable. This means that the enjoyment of the broadcast content by a consumer does not reduce the one of another and that no one can be excluded by the consumption of it (Towse, 2010). Nevertheless, broadcasting goods have the characteristic of 'not being used up or not being destroyed in the act of consumption" (Towse, 2011, p. 274). Thus, the broadcast content can be supplied multiple time with no extra cost, this violating the basic assumption of scarcity. Hence, this industry is characterised by economies of scale and of scope. The first one occurs when the costs of first production is high whereas the marginal one of reproduction and distribution is very low, often reaching zero (Doyle, 2010). For instance, the cost of acquiring radio's equipment is not affected by the number of consumers who are going to listen to the radio. The latter one occurs when a good produced for a specific market is easily reformatted and sold in another one, with no extra costs (Doyle, 2010). For example, an interview with an artist can eventually be packet into a documentary. Thus, the market often creates insufficient incentives to producers to supply a socially optimal level of output, making it necessary the intervention of public or private donations. Nowadays, many questions are arising about how broadcasting should be financed (Towse, 2010).

In most countries, the state has been typically involved in the provision of broadcasting (Doyle, 2010), with some exceptions such as the United States, where this has always been mostly privately financed and for-profit (Towse, 2010) The same situation can be seen in the funding of cultural organisations. Indeed, Europe has a much stronger tradition of public funding while other countries such as the United States are mostly financed by private donations and sponsorships.

In regard to non-commercial internet radios, state intervention applies mostly in terms of regulation. Indeed, digitisation and internet made possible for internet radios to broadcast their content for free targeting millions of users. This has resulted in a necessity for intellectual propriety law on the broadcast content. Lastly, state intervention may apply also in terms of public finance, for instance when non-commercial internet radios receive subsidies or tax exemption.

3. Methodology

3.1. Introduction

In the following chapter, a deep overlook is taken into the development of the empirical part of the research. First, the research method used in the study is described. Then, it follows the description of the sample selected and the data gathering. The chapter is divided into four sections, with the aim of justifying the decisions undertaken during the research development.

3.2. Research aims

The thesis is guided by the central question *How do non-profit internet radio stations stay economically sustainable, while the motivation of the people in charge is foremost intrinsic?*
The aim is to explore the different attitudes of non-commercial/non-profit internet radios. First, the study explores the development of broadcasting with a major focus on the impact of digitisation and internet. Second, the research sightsees the intrinsic motivation and the practices that non-commercial internet radios undertake to be economically sustainable. Moreover, the research aims to answer to other relevant sub-questions which are:

1. What motivates the staff of non-commercial internet radios?
2. What are internet radios source of income?
3. Which are the opportunities and constraints that the Internet offer to non-commercial radios?

3.3. Method

Despite the presence of academic literature regarding the broadcasting sector and the effects of digitisation on the music industry, it has been observed a lack of research and data regarding internet radios as cultural organisations. Therefore, since developing the research on already existing theories would not obtain relevant conclusions, the study will take an explorative approach. The aim is to rise familiarity with the internet radio phenomenon, in order to develop a relevant theory for the research.

Since the theoretical framework is derived from the data gathering rather than being design from already collected ones, this study is of an inductive nature (Charmaz, 2006). Thus, an inductive

reasoning is typically linked to a qualitative research method (Bryman, 2015). Qualitative research emphasises individual's interpretation of the social world and for this reason, it provides a textual description of how they experience a given phenomenon (Bryman, 2015). It is especially appropriate for the identification of intangible factors ("Qualitative Research Methods," n.d.), and therefore, for the explorative intent of the research. The data are collected through semi-structured, in-depth interviews, as it will be described later.

3.4. Sample

The sample of the research was selected by purposive sampling. Thus, the interviewees were not chosen randomly, but with the purpose of maximising the quality of the research. This consists of nine non-commercial internet radios and one commercial. Those were selected intentionally because of their position as experts in the internet radio field. Hence, all the internet radios are recognisable and relevant in the sector. Thus, part of the tools used to select the radios is the website of Resident Advisor, an online music magazine and community platform, and the Mixcloud Online Radio Awards. According to Mixcloud website, this is the biggest online radio contest in the world, aiming to "celebrate the very best independent online radio" ("Mixcloud Online Radio Awards | About," n.d.). Moreover, the contacted internet radios were selected on the basis of at least one of the following requirements: being non-commercial and/or non-profit. Furthermore, the internet radios were chosen because of their geographical position, this to have a sample as much diverse and broad as possible.

A total of twenty-two renowned internet radios were contacted via e-mail and asked if they were interested in taking part in the research. In total ten internet radios have shown their interest and agreed to be part of the sample. Among the uninterested internet radios, three sent an e-mail explaining their reason for not participating, accordingly busy schedules and lack of time due to the research deadline. The remaining nine internet radios completely ignored the first e-mail. Overall the response rate is considered satisfactory for the research. However, even if the final sample represents a pleasing view on the non-commercial/internet radio sector, having fewer more internet radios from Asia and Africa would have permitted a more extensive analysis of the internet radio's functioning.

More precisely, the sample consists of ten co-founders and executive directors of internet radios. The internet radios taken into consideration are the followings: Dublab, Reform Radio, Radio Free Brooklyn, Netil Radio, Radio Raheem, Radio Quantica, Red Light Radio, Operator,

Radio Web MACBA, Bondi Beach Radio. In the next paragraph, there is a brief description of each of them.

1. **Bondi Beach Radio:** is an independent online radio station that broadcast live from EastSide Sidney since 2013. According to the interview held with the team, the radio is run as an artistic collective incorporated with a non-profit association, the Bondi Association of Arts and Music Inc. Bondi Beach Radio has the mission to integrate and enhancing the Eastside Sydney experience through independent music, arts, and associated community information. The radio was the 2015 and 2016 final 5 nominee for the Mixcloud Online Radio Station Awards, in the category 'Asia Pacific, Middle East and Africa'.

2. **Dublab:** is a non-profit music public broadcasting, internet radio station that broadcast from Los Angeles since 1999 and has affiliate stations in Germany, Japan and Spain. According to Dublab website, the radio mission is to "share freefrom radio transmission with an international audience" ("about dublab | dublab," n.d.) as well as providing a platform for the community and the creators (Appendix A). The radio programming includes art exhibitions, films, record releases and event production ("about dublab | dublab," n.d.). Furthermore, Dublab is the 2018 Mixcloud Online Radio Award winner for Best Online Radio Station in North America. The interviewee for Dublab is the radio executive director.

3. **Netil Radio:** is a non-profit internet radio station in the Netil Market, East London founded in 2017. Whereas the radio is relatively new in the radio field, it has already gained 'praise from all corners of the music industry' ("Netil Radio | LinkedIn," n.d.). According to the interview held with the staff, Netil Radio mission is to celebrate London culture and to give a platform to local talents. The radio is the 2018 winner for the 'Best Online Radio Station' award, of the Mixcloud contest, in the category of 'Rising Star'. The interviewee for Netil Radio is its founder

4. **Operator:** is a non-profit, non-commercial internet radio from Rotterdam that broadcast since 2017. The radio offers a variety of shows, from music to science and sports. During an earlier conversation with the founders of the radio, it was highlighted that their mission is to support emerging talents and to engage the local community with the goal of participating in cultural development. The interviewee for Operator is one of the radio co-founders.

5. **Radio Free Brooklyn:** is a non-profit and non-commercial internet radio station that broadcast from Brooklyn, New York, since 2015. According to its website, the radio's

mission is "to give a local and global voice to the diversity of Brooklyn's underserved communities and residents" and to provide "a commercial-free, freeform internet radio platform" ("About Radio Free Brooklyn," n.d.). Furthermore, the radio was a nominated for 'Best Online Radio Station' of the Mixcloud Online Radio Awards, in 2016 and in 2015. The interviewee for Radio Free Brooklyn's is the radio co-founder and executive director.

6. **Radio Quantica:** is a non-profit, non-commercial internet radio station from Lisbon, founded in 2015. According to the website, the radio mission is to be a safe, communal place for underground Portuguese artists and activists to make their voice heard (Quantica, n.d.). Radio Quantica's interviewee is its co-founder.

7. **Radio Raheem:** is an independent internet radio station from Milan that broadcast music since 2017. According to its website, the mission of the radio is to 'support and elevate a genuine and diverse local scene' ("Radio Raheeem," n.d.). The interviewee for Radio Raheem is its founder.

8. **Radio Web MACBA (RWM):** is a non-profit online radio, born as a promotional tool for The Barcelona Museum of Contemporary Art in 2006, now developed into an independent project. According to an interview with the radio program director, the mission of the radio is to be a "content-generator for specific projects, focusing on the exploration of sound art, radiophonic art and experimental music". The radio reached international praise for its innovation in the diffusion of artistic content, for which it won many awards. Furthermore, RWM it is part of Re-Imagine Europe, a four-year project by Creative Europe ("Exploring, Documenting, Archiving — MAP," n.d.). The interviewee for Radio Web MACBA is the radio director.

9. **Red Light Radio:** is a non-profit, non-commercial internet radio station based in Amsterdam that broadcast since 2010. Beside broadcasting local and international artists, the radio is involved in other activities such as events and concerts, and it lists many collaborations with festivals, museums and other cultural partners, in the Netherlands and abroad ("Red Light Radio," n.d.). The mission of the Red Light appears to be the one for celebrating underground music and to be an international music platform for talents. The Red Light Radio is the 2015 overall winner for 'Best Online Radio' of the Mixcloud award. The interviewee for the Red Light is the radio co-founder.

10. **Reform Radio:** is a non-profit internet radio station from Manchester founded in 2013. Aside from broadcasting music, Reform Radio has the mission to "support young adults into

employment" ("Reform Radio," n.d.). Thus, it delivers to the community a series of creative workshops and traineeships. Furthermore, the radio was nominated for 'Best Online Radio Station' in Europe of the Mixcloud Online Radio Award, in 2016 and 2018. The interviewee for Reform Radio is the radio co-founder and director.

Below there are two tables that show some aspects of the sample.

Table 1. – Internet radios 'location and year of foundation

Respondent	Occupation	Country	Year of foundation
Bondi Beach Radio	Co-founder	Australia	2013
Dublab	Executive Director	United States of America	1999
Netil Radio	Founder	England	2017
Operator	Co-Founder	Netherlands	2017
Radio Free Brooklyn	Executive Director & Co-Founder	United States of America	2015
Radio Quantica	Co-Founder	Portugal	2015
Radio Raheem	Co-Founder	Italy	2017
Radio Web MACBA	Director	Spain	2006
Red Light Radio	Co-Founder	Netherlands	2010
Reform Radio	Co-Founder	England	2013

3.5. Data Collection

The data for the research are obtained through ten in-depth, semi-structured interviews with members of non-commercial/non-profit internet radios. Semi-structured interviews are particularly appropriate for the explorative intent of the research since they permit to acquire new insight about the topic in question (Bryman, 2015).

The interview process is designed to be flexible so that the questions do not follow a precise outline, but rather serve as a guide for the coverage of specific topics (Bryman, 2015). As a result, often is the researcher that follows the direction of the interviewees, who is encouraged to depart from the scheduled questions, in order to place awareness to topics that he sees as relevant and important (Bryman, 2015).

In total eight interviews were conducted either via Skype, Face Time or telephone. One interview was held face to face and another on through e-mail. The duration of the interviews varies from thirty minutes to one hour and twenty-five minutes. The list of questions served more as a mental framework than as a rigid questionnaire. Thus, interviewees were left free to talk and encouraged to emphasise what they believed was relevant and significant. Consequently, the responses collected provides information about the interviewee's personal experience and belief (Bryman, 2015). During the interviews procedure new, interesting topics were introduced to the research as a consequence of the explorative and inductive approach that this study undertakes.

Due to the qualitative approach of the research, coding of the interviews derives from the transcriptions. Therefore, the codes are a result of the information gathered through the data collection. Coding was first to conduct by the definitions of relevant topics and afterwards with colour coding.

4. Results and Analysis

The interviews provide interesting insights to the non-commercial internet radio industry. Some of the themes that arise are related to the topics covered in the theoretical section. However, additional patterns emerge consistently with the explorative approach to the research. This broadening is due to the differences between the theoretical approach and the explorative one: indeed, the first one takes in to account academic literature, articles, and essay on the matter, whilst the second consider the singular interviewee's experiences and opinions. Finally, the aim of this research is answering to the overall question: *How do non-profit internet radio stations stay economically sustainable, while the motivation of the people in charge is foremost intrinsic?*

4.1. Intrinsic Motivations

The subject of the research is non-profit/non-commercial internet radios. According to the theoretical section, the staff of this type of organisations is not motivated by economic rewards but rather by what Frey (1997), refers to intrinsic motivation. This is the real stimulus to good and service production that is to be found in the enjoyment of the activity itself rather than its economic reward. This theory is confirmed by the interviews. As Respondent 5 state: *"This job must be done by people that are truly passionate about it, otherwise it is easier to change job, and go back to the old one".* Therefore, the next section aims to answer to following sub-question: What motivate the staff of non-commercial internet radio? Thus, the interviews highlighted the following main motivations.

4.1.1. Freedom

According to the background and theory section, the deregulation programme of the 1980s greatly increased the number of commercial-radios in the broadcasting field. This caused the homogenisation of radio programming at the expenses of content diversity: "*A lot of the programming was [...] the kind of music that you would hear the same top 20 kinds of tracks played multiple times during the day, so there was no variety, there was a personality issue, every tune you tune in was very formulaic and very repetitive*" (Respondent 4).

Therefore, the totality of the radio interviewed saw internet as a platform that could allow them to "*Put the power in our hands. [...] because of the freedom that if offered.*" (Respondent 1). The reason behind this is quite simple: internet does not require any regulation in terms of content,

except for music rights: "*You can curse, you do not have to watch your language, you do not need to obey by the FCC rules*" (Respondent 1).

For this reason, non-commercial internet radios are free to broadcast content that is "*More niche and specific*" (Respondent 1), and experimental: "*We are very happy not to have to check which are the shows that have more audiences and works better.*" (Respondent 6). Hence, they are artist-oriented as opposite to commercial-radios which tend to serve the advertisers: "*I used to work in broadcast media for about 15 years, and I do not ever want to […] have a media company that relies on the traditional media model […] in which the advertiser pay you and then basically […] the advertiser become your costumer as opposite to the public, which is what you should serving*" (Respondent 3).

4.1.2. Discovery

Most of the respondents argue that terrestrial radio, being highly regulated and dependent on funding, "*Has lost the potentiality that it had in the beginning, to be something about discovery, research.*" (Respondent 9). For this reason, non-commercial internet radios aim to be a platform for artists 'experimentation and discovery, where to introduce "*New narratives that you cannot find in the more mainstream traditional media.*" (Respondent 10).

The discovery part is about people who are interested in new ideas, which they might not have exposure in terrestrial radio. Indeed, most of the respondents define their listeners as people looking "*For something new, and looking for world music, looking for emerging artists, looking to find new things, and I think that FM is a little bit more mainstream, people get it in the car, and those type gives you kind of more a casual listening, rather than eagerly searching something else.*" (Respondent 2). This is possible since non-commercial internet radios are free to expose their listeners to alternative content "*That do not follow the lines with their own confirmation bias.*" (Respondent 3).

As expected, discovery is crucial to all the respondents. The concept also represents the idea of not being pre-packaged but rather to learn by doing and experimenting. "*One of the most crucial thing for us is […] this notion of laboratory where you try things that do not necessarily obey ab economic reason, many times we try things that take us longer, that we do not know if the results scores are going to be good or bad or if it will work. But it Is about learning together with this community of artists and sound artists that we are building*." (Respondent 9).

4.1.3. Community

Most of the radios interview see themselves as offering a community service. Thus, from the interviews, it results that non-commercial internet radios serve three communities: the broadcasters, the local community and the global community.

4.1.3.1. The Broadcasters

As mentioned before, non-commercial internet radios aim to provide a platform and a community hub to those who create their programming, namely both established and emergent artists. This, with the final goal of making an impact in their local music and art scene.

As expected, most of the respondents have in their missions the development of local talents. Therefore, their platforms are often the place where artists make their firsts steps and are first promoted: "*We try to make sure that the shows throughout the week, especially in the daytime, and bringing in those emerging artists and musicians and try to circulate putting their music out there and putting spotlight on this […] and it is really working, it is amazing to see that we are helping to get people to make their firsts steps into a platform that can promote them to lots of other people.*" (Respondent 4).

In addition, few radios are actively engaging to provide inclusivity and representation of the communities that are usually marginalised by radio programming. One radio, in particular, emerges for their agenda of "*Emancipation for the most outcasts intersections of societies. So, we have lots of queer people, and women and non-white people doing their shows, so we obviously prioritize their representation agenda.*" (Respondent 6).

4.1.3.2. Local community

Most of the radios actively engage with their local community by providing social and educational services. In order to do so, they collaborate with many local organisations. Therefore, several radios work closely for the promotion of LGBT, equality and inclusivity rights. Among those, one respondent specifically focusses on youth unemployment by encouraging young adults to be part of the radio and improve their skills.

In addition, four internet radios out of ten are currently collaborating with schools and universities: "*We place a strong value on media educations, […] we do it as providing an educational service for people to be more involved in media literacy, simply to the act of active learning. sense*". (Respondent 3). This collaboration often takes places in the form of partnerships,

since many students volunteer for the radio, which can provide both parts with a mutual exchange of knowledge.

4.1.3.3. Global Community

The most peculiar feature that comes out from the various interviews is the respondent's feeling of being local, but globally. Indeed, as discussed in the background and literature section, the internet has reshaped the concept of local radio station: "*On one hand radio it is still considered much about local because obviously, the antenna has her reach that makes it automatically local, but when you go online you are speaking to the entire world*". (Respondent 7). In other words, this means that internet radios deliver local content on a global scale.

On the one hand, the staff of non-commercial internet radio often travel and broadcast from other cultural organisations and radios around the world: "*When we travel somewhere we always want to get into the local scene there and provide them with the platform that we have. In that sense, there is an exchange between different global scenes*". (Respondent 7). On the other hand, they get foreign shows that they broadcast in their platforms " *We have a show that comes in regularly from a girl in Brazil, one in South Africa, one in Turkey one in Amsterdam, so they send in pre-recorded shows and then we boost them out […] for when we are asleep and they are awake, so we are reaching Brazil when we are asleep that's going on the station and is being promoted to Brazil, to a certain age group, to a certain type of music at like four in the morning here when is the afternoon there*". (Respondent 2).

4.2. Artist labour market

In the background and theory section, the differences between the artist's labour market and the standard one has been discussed. Accordingly, the staff of non-commercial internet radios do not prefer leisure time to labour (Throsby, 1994), and so they are willing to work at a zero-wage (Towse, 2010). This is confirmed by the results of the interviews. Seven respondents out of ten stated that their staff member is formed completely by volunteers and community members, founders included. For this reason, they undertake multiple jobs in order to be economically sustainable and continue to run their organisation.

"*Until this moment we are all volunteers 100%, including the management […] I teach for a living, I teach in a university in New Jersey, and I also have a part-time job for design form in Connecticut that I do remotely from home. So, there are other ways that I make money.*" (Respondent 3).

As expected, most of the new entry are aware of the economic difficulties that having an internet radio could provide. Thus, they show to be risk-taking: *"Nowadays I have nothing to lose because I left my job, I put myself on this boat." (Respondent 5).* Thus, most of the respondents invested personal money in the initial phase of the project and now they are struggling to: "*Step up to the next level*" since they *"Do not have anybody working on it full-time and not even part-time.*" (Respondent 4).

Therefore, this section aims to answer to the sub-question: What are non-commercial internet radios source of incomes?

4.2.1. Non-profit

The respondents of the sample define themselves as non-profit internet radios. According to the theoretical section, these organisations provide services for non-commercial purposes. Thus, any earned revenue is reinvested in the organisation, in accordance with its mission (Towse, 2010). This definition is confirmed by the respondents:

"*As a non-profit, the organisation will always be led by a board of directors who, by definition, are not paid, so is their job to make sure that we stay on mission. And that is another real benefit of being a non-profit, is that you almost, you cannot let profits drive you, because your mission must be, in order to maintain your status, must be as a community service."* (Respondent 3).

Thus, the earned income is redirected to cover costs like the upgrading of the radio equipment and the website manutention: "*The equipment we have is beginning to break and some we borrowed from people that need to get them back.*" (Respondent 4). Hence, as for now, it appears that only a few respondents can afford to pay the DJs and artists, whilst being able to economically survive. Lastly, the sample confirmed that the staff of non-profit organisations is not motivated by economic rewards and do not gain the surplus of the revenues. As the Respondent 5 stated: "*Want just to survive, to have the minimum that allows us to keep the station run, we do not have the necessity for a big amount of money, we are not businessmen, we are not here to make money but rather to survive.*". Thus, several interviewees state their willingness to invest their future revenues in monetary rewards for everyone that is actively involved in the radio, namely the artists and the volunteers: "*My goal in five years it to have [...] enough funding to pay everybody a reasonable fair amount for their time that they are involved.*" (Respondent 4).

4.2.2. Source of income

As results from the interviews, the activity of broadcasting does not provide income to the organisation. Indeed, non-commercial internet radios rely on other, external sources of income: "*We have to continue sort of coming up with*" other sources of income "*as well because we need to be sustainable over the long-run. As at this moment, we are just about breaking even and that without paying anybody so, we are continuously looking for ways to make money.*" (Respondent 3). Therefore, the respondents generate their profit by collaborating with other cultural organisations and by private and public funding.

4.2.2.1. Collaboration with other cultural organisations

Most of the respondents actively collaborate with other cultural organisations, both on a local and an international scale. "*We collaborate with pretty much all the cultural community, non-profit and cultural organisations.*" *(*Respondent 1)*. Indeed, the respondents define collaboration as one of their key components in their internal culture (Respondent 10). Those take places either with other radio stations either with other non-profit organisations. Thus, most of the respondents undertake curatorial and production services for festival and events, from which they get paid: "*People come to us from all of the organisation and pay us saying 'will you run this project for me?'*" (Respondent 2). However, there are some exceptions where the collaboration does not provide monetary rewards but rather take place as a partnership: "*We might do a medium partnership*" to "*exchange promotion through us to do stuff on the radio for them, so it is a win-win for both of us, it is really a partner situation rather than money changing hands.*" (Respondent 3).

4.2.2.2. Private funding

The respondents receive private funding in forms of fundraising, private donations and investments from brands and sponsors. As expected, internet radios that are in US are more inclined to receive funding from private donations. This because the U.S. financial support to the arts takes place mostly through philanthropy and private giving.

Unlike expected, only a few of respondents have concerns to be financed by sponsors and brands. Thus, the clear majority aim to secure their finances through brands and sponsors that they consider in line with their mission and "*Are 100% aligned to our core principals.*" (Respondent 10). However, this sort of sponsorships must be done discretely in a "*Non-commercial setting.*" (Respondent 2) since the priority remains the protection of their artistic content and the freedom to broadcast whatever they decide to. As result, the aim is to "*Arrive at the brand with your radio belief and values.*" (Respondent 5) so to redirect the revenues towards the improvement of the organisation itself. As it is for artist's labour market discussed in the background and literature

section, non-commercial online radios may be inclining to accept commercial work to maintain their art production.

4.2.2.3. Public funding

As discussed in the background and theory section, the state may intervene by giving funding to non-profit organisations that produce content and services with strong public goods attributes, such as broadcasting. Thus, the non-profit internet radios interviewed receive public funding in the forms of tax reduction or grants from city halls.

As expected public financing are more consistent in European countries rather than in the US: "*We are good friends with a radio in Switzerland and they get 75% of their funding from the government and they are able to be much more of a community station and to determine their own programming than what you would be in the US.*" (Respondent 3). However, there is a certain range of scepticism towards it since it is considered to be an insecure source of income: "*In Switzerland, they just had a big vote in March […] they were under real threat of having their funding taken away. They would have just close up if they lost their government funding.*" (Responded 3).

Moreover, a few respondents have concerns that subsidy or any other type of government funding could reduce their scale of freedom and experimentation: "*At this moment we are completely free to do whatever we want and if we did get support from a larger institution, that might restrict that.*" (Responded 4). On the opposite, one respondent rejects the idea of collaborating with brands and sponsors because: "*We do not want to have advertisers, we do not want to pass the message of consumerism.*" (Responded 6), therefore they only consider the possibility of applying for public funding.

However, it resulted from the interviews that non-commercial internet radios generally struggle to get recognised as cultural organisations on an institutional level. Hence, for them being eligible for public founding is difficult and time-consuming: "*We just been giving our first kind of recognition […] it takes a long time to get that, they just recognized us as a cultural part of Manchester, it took time to build our reputation.*" (Responded 2). For this reason, many internet radios undertake educational and community service to achieve the institutional recognition: "*Although we are passionate about it, adding things like an educational initiative to our mission is helpful to us, because it shows that we really are a valuable community resource. *". (Responded 3).

4.3. Internet and new technologies: opportunities and constraints

The aim of this section is to answer to the sub-question: Which are the opportunities and constraints that the Internet offer to non-commercial radios?

As discussed in the theoretical section, digitisation and the advent of internet has greatly altered broadcasting and its capacity. This has resulted in greater opportunities for new entrants into the market. On the one hand, internet enables to overcome the frequency spectrum limits of terrestrial radio. On the other hand, new technologies lowered the cost and scale of production: *"You just needed a laptop and a reliable internet, and some software and you could go live so"* (Respondent 2). However, digitisation has opened its door to a series of potential issues. Indeed, as mentioned in the theoretical section, the internet is characterised by economies of scale and scope and its content is particularly vulnerable of misappropriation.

In this section, there is an analysis of the opportunities and constraints perceived by the sample, namely around topics such as social media and convergence.

4.3.1. Social Media

In the interviews, part of the questions focused relies on the ever-increasing relevance of social media on internet radios. Therefore, in the following part, it will be examined whether the respondents perceive them as opportunities or constraints.

All the respondents use professionally at least one social media. Many interviews admit they upload most of their content on the social platform, whereas a few others use it only as a tool to redirect people to the radio website.

Most of the radios in the sample use Facebook actively and see it as a useful tool to increase their listenership and promote upcoming projects and artists. For instance, respondent 4 say that Facebook is helping his radio to drive traffic into the website: "*We actually kind have increased resources through social […] Social media is the tool, the most effective way to do that, getting into people consciousness.*"

However, many respondents show concerns towards the ever-increasing amount of information and content that circulate on social media platforms. As respondent 5 say "*Communication through socials is a sort of imprisonment, you produce content for Facebook […] you feed a business model that benefits Facebook. You are a content maker for it*".

Mixcloud is another popular platform for internet radios. On the one hand, it is seen as a great opportunity for them to host on-demand shows, as respondent 4 summarise: *"We upload every show up there and people can listen back, I guess we wanted to give also that ability it is very much*

tabbing to the listen back culture, the on-demand culture that we wanted to have all of our archive available online, available to people to listen to if they miss it going on live." On the other hand, again, a few respondents are concerned for the amount of information and content that is uploaded on this specific platform by other internet radios: *"We try to adapt but we are also very worried on third party platforms such as those […] you see that even on the way we archive things. Most stations these days would put an archive everywhere, such as Mixcloud or Soundcloud, and things like that, well we are still upload everything on our own servers. You can only imagine the size of our servers, it is hours and hours for almost 18 years of programming that is sitting there."* (Respondent 1).

4.3.2. Convergence

On interesting insight of the interviews is the concept of convergence of media. Indeed, the content of internet radios is more and more becoming a visual experience (e.g. Live streams). Respondents opinions differ when it comes to the impact of this development. For a big part of the sample, video content has to be used carefully, mostly as a tool to promote the radio. Hence, the radio must remain a radio experience because this is the essential feature of its identity: "*Do you video stream your program? if you do so, is that radio? […] Radio does that comes in a format of audio only, and how, the mental picture you build in your head, on what you are hearing, so the moment you start really making it a visual experience, in the formal of photos or video it stops being radio*" (Respondent 1),

However, several respondents are not concerned by the enlargement of radio's features. As Respondent 2 summarize: "*I think radio is starting a re-birth and is starting something big, and I include things like audiobooks, podcasts and all of those things they go hands in hands since they are all audio and TED talks, and all of that, you can play them through a speaker, and all of that to me is what you call radio*".

Therefore, the idea of radio is in a continuous transformation: first it was terrestrial now is slowly redirecting towards the internet. Whereas this is seen with concerns by some respondents, several others perceive it as an opportunity. As responded 5 say radio "*Has to be a snake, it has to transform. If you never change, trends move on, and people will get bored by live streams […] eventually on the tape will remain only the content and the people who make the community in which people recognize themselves."*

4.4. The power of radio

As Tacchi (2000) says radio has not a clear essence and takes different forms. Thus, as mentioned before, respondents have different opinions as regards the future of radio as a medium. However, all the respondents agreed that the key to sustainability is to be found in the community.

As result from the interviews, this is the main difference with other Internet-based platforms. Thus, most of the respondents consider Spotify and Pandora pre-packaged experiences as opposed to internet radios that have to function as being social hubs: "*Ultimately whatever offers a human connection is what will prevail. We like to pretend that we can dictate on robots or algorithmic, no one else in the world, but we are social animals and ultimately, we are looking to find our community, our tribe, and a way to grabbing against each other, because this is what we are as people. Why go to a club at night, when you can play the exact same music in your bedroom and dance like crazy? but you find yourself in a club on the weekend, and this is kind of the same. Yes, you can use Pandora and Spotify and all of that, but ultimately you will go to an organisation or a community to hear voices that you can identify with.*" (Respondent 1).

In addition, most of the respondents think that is essential to have a proper studio mostly because people have the needing to see that the community is something tangible, where they can go and where they can recognise themselves. As respondent 5 says: *"Things goes fast, but communities remain, the need to be part of a community stays and this is what people need."*

5. Conclusion

In this section of the thesis, the most relevant conclusions of the research are discussed to answer the overall question *How do non-profit internet radio stations stay economically sustainable, while the motivation of the people in charge is foremost intrinsic?* As well as the following sub-questions: What motivates the staff of non-commercial internet radios? What are non-commercial internet radios sources of income? Which are the opportunities and constraints that the Internet offers to non-commercial radios? For this reason, the most relevant and interesting insights from the in-depth interviews has been summarised as it follows.

Firstly, the results of the interviews confirm that the staff of non-commercial/non-profit internet radios is intrinsic motivated. Accordingly, to the background and literature section, Ryan and Deci (1971) state that individuals are intrinsically motivated when they undertake an activity for their inner satisfaction rather than for its instrumental value. More precisely, the interviews show that this satisfaction is embodied in the staff willingness to be a space for good content, freedom of expression and experimentation. A space where to promote emerging artists and underground tastes rather than trends. Thus, non-commercial/non-profit internet radios are strongly engaged with their global and local community to whom they provide social and artistic services. Particularly, they provide a platform to local and international talents where to learn and experiment. Then, they provide a series of education and social programs to the community where they belong. Finally, they provide alternative content and values to the global community that tune into their radio.

Secondly, being intrinsically motivated, the staff of non-profit internet radios are willing to work at a zero-wage because they are not interested in economic rewards. However, since the simple act of broadcasting does not provide economic security, they undertake multiple-jobs and rely on external sources of finance. Whereas systematic differences have been highlighted between the different radios attitudes, the results show that the main sources of income for non-commercial internet radios come from the collaboration with cultural organisations and from private and public funding. Thus, one interesting result illustrates that most of the sample work with brands and sponsors. This may seem contradictory to the nature of the radios since they are non-commercial and non-profit. However, the radios are careful to collaborate only with whom they perceive as aligned with their values and arts orientation. Moreover, public funding is sensed by some radios as an insecure source of income and a potential threat for their scale of freedom and experimentation. Other source of incomes come from activities such as fundraising and curatorial projects that they are asked to undertake by other organisations.

Thirdly, the internet brings to non-commercial radios both opportunities and constraints. On the one hand, new technologies and the internet have greatly expanded broadcasting capacity and field. Thus, internet is a platform for all the radios that are excluded from the frequency spectrum. On the other hand, new technologies lowered the cost of production and distribution so that nowadays is relatively cheap to set up a non-commercial internet radio. All of this has increased the competition and consequently the content diversity. Moreover, internet offers a series of online platforms. On the one hand, non-commercial internet radios use social media as a tool to increase their visibility and to get into people consciousness. On the other hand, this ever-increasing amount of information shared on those platforms can be vulnerable to misappropriation. Furthermore, the relationship between social platforms and internet radio are resulting in what the research refers as a convergence of media. This means that radio content is more and more becoming a visual experience. On the one side, some respondents perceive this as an opportunity to keep their listeners entertainment. On the other side, they are concerned this would eventually change the experience of radio to something that is not allied with its true identity, which it has always been only audible.

In conclusion, several factors ranging from the collaborations with other cultural partners, the donations from private and public finances and the tools available on the internet, determine the way non-commercial internet radios are economically sustainable. However, internet radios key for sustainability is to be find in their capacity to engage with the community. To embody values and belief that people can identify with. Indeed, nowadays non-commercial internet radios are competing with platforms such as Spotify and Pandora. Those have the similarity with internet radios to allow people to choose whatever they want to listen. However, those platforms are aseptic and pre-package. Listeners are driven, alone, by the algorithmic towards content that is most likely similar to their taste. On the opposite, non-commercial internet radios are community-hub where individuals are encouraging to be outside their comfort zone. This human feature of online radios, this tangible community, is the key for their sustainability. This because ultimately things evolve fast and trends follow each other, but communities remain.

5.1. Limitations of the research and suggestions for further research

Although the research was prepared carefully and has collected new interesting insight relating to the internet radios phenomenon, there are certain limitations that must be addressed.

Since the initial phase of the research, it was acknowledged a lack of previous studies and data related to the internet radios. Indeed, many scholars have long discussed the impact of digitisation on the music industry and the terrestrial broadcasting. Again, there is a rich literature focusing on

cultural organisations and the tension that they may face. However, those were never linked to the internet radio phenomenon.

Moreover, whereas the sample size can be considered relatively satisfactory, a wider representation of internet radios in terms of geographical origin would have allowed a more accurate analysis of the internet radio functioning and the perceived differences from country to country.

For these reasons, rather than providing fully comprehensive answers, this research should be seen as the starting point to further studies on internet radios. Thus, some suggestions for further research include: (1) the deepening of issues such as regulation and copyright regarding the social media platforms; (2) paying attention on the convergence of media phenomenon and its effect on radios as a medium; (3) how internet radios functioning differ from country to country.

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Appendices

Appendix 1: Interview guide

1. Introduction about your online radio.
2. What is your personal background?
3. What made you decide to work for an internet radio?
4. To what extent is internet radio different from the terrestrial one?
5. Why did you choose to be a non-commercial/non-profit radio?
6. Which are your radio values, mission etc?
7. Don you think that radio can use traditional AM/FM and Internet technology together to reach a broader audience, or is that listener gap widening?
8. How would you describe your core audience?
9. How important is the local scene for your radio?
10. Do you think internet radio is a tool to increase cultural diversity? If yes, How?
11. How important is for your radio to collaborate with others cultural organisations?
12. How is regulated internet radio broadcasting in your country?
13. Do you have full-time employees?
14. How do you stay economical sustainable?
    a. Do you get any financial support? If yes, how?
15. Other source of income? e.g. volunteer, merchandising…
16. Would you think that being subsidized/sponsored would limit your scale of freedom?
17. What is the impact of social medias (e.g. Facebook) and new platforms (e.g. Mixcloud) on internet radios?
18. Do you think these platforms are shaping/changing the way internet radios are done nowadays?
19. Do you think that the convergence of medias (e.g. Facebook lives provides both video and images) is changing the nature of radio in a way that radio will eventually provide not only sound in the future?
20. What is the future of internet radios?
21. What is your internet radio goal/mission for the future?

Appendix 2: Coding schedule

CODE THEME	CODE DEFINITION
INTRINSIC MOTIVATION	Values Mission Motivation of working for an internet radio Differences between FM and Internet radios Local scene
FINANCE	Radio internal organisation Public funding Private funding Collaborations Radio expenses
FUTURE OF RADIO AND INNOVATION	Internet platforms Social Media Convergence Future expectation
REGULATION	Copyright Licensees