# The Internet as A Conventional Radio Maker in Anticipation of Change Without Listeners

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***Abstract*— The aim of this study is to gain an understanding of the facts that show an essential element that emerges on the Internet and traditional radio in predicting audience growth. It is expected that the results will provide a clear and objective picture of how and why the Internet has replaced traditional radio in forecasting audience change. The scientific advantage of this study is to develop communication science, especially in the field of radio broadcasting. Radio stations are now starting to change their broadcasting to meet the changes in their audiences that are starting to use the new media of the Internet. It has been found that the audience of radio uses multimedia on radio broadcast websites in line with the changes in conventional radio transmission, not only related to radio content but also the form of media that is available for listening easily. On the other hand, internet technology is seen as a new medium, which refers to a variety of changes in the production, distribution, and use of media. The creativity of content generated easily can be distributed to the listener. Radio continues to look for the latest advances in broadcasting technology and broadcast material. According to this study, if Indonesia wants to keep up with the developments of the times, they must immediately switch from analogue radio to digital radio. Moreover, this study finds that modern radio needs to use digital systems to transmit data—not just voice but text, images, and visuals.***

***Index Terms- Internet, Digital Radio, Radio Audiences, Conventional Radio Maker***

## I. INTRODUCTION

Often referred to as one of the most significant components that affects society's lives, technology. Marshall McLuhan's theory of the influence of technology on the media, including radio broadcasting, is one theory that can be used to understand and interpret the relationship between technology and society. People's lives have been transformed by electronic media. (West & Turner, 2007) The emergence of new communication technologies has brought opportunities and challenges for conventional media. The presence of new media, especially the internet, has posed challenges for traditional media, such as radio broadcasting (Zhang, 2007). Basically, McLuhan argues that societies are heavily dependent on the mediation of technology and that the social order is shaped by the ability of societies to use technology. The media usually interact directly with culture, which is known as the media ecology theory or the theory of technological determinism. Social, economic, and cultural change have been caused by the rapid development and convergence of information and communication technologies. The main competitiveness factor is information technology, which increases global communication capacity and thrives in interactive and dynamic operations (Yunis, et. el., 2014) This development is heavily influenced by the adoption of technology and information at high cultural, social, economic, and technological levels. (Priestly, 2012). The factors that influence the digital and global business world should be an incentive for individuals, groups, and governments to develop effective strategies to take advantage of opportunities, face challenges, and become more competitive. Considered an essential component of economic progress and innovation, information, and communication technology (ICT) capabilities are defined as digital devices such as computers and their applications, as well as the basic infrastructure of the Internet, extranets, and intranets. (Faltinsky & Tokunova, 2018). Futurists Alvin Toffler (1981) and John Naisbitt (1984) stated that what they called "teledemocracy" would be crucial to solving the pressing problems in the Western world in the 1980s. It is the easiest thing for people to be online, so their opinions are heard by others. Several types of information and individual emancipation emerged because of the increased ease of access to information. (Gewirtz, 2019). The goal is to get media attention and create strong public opinion. As a result, IT and communications are seen as both a goal and a tool. In the end, many aspects of human life are significantly affected by information and communication

technologies, including the way radio broadcasting companies are managed. With the advent of the Internet, human activities have brought new instruments and processes to the phenomenon of radio broadcasting. Radio technology is changing the way broadcasts, audiences, and regulations are conducted. Therefore, radio broadcasting agencies must urgently build superior and creative radio management. (Sompie, et. el., (2024). With Internet communication technology as a new medium, today's radio management is different than ever before. With technological advances, a variety of broadcast alternatives and new media sources have emerged for listening to radio. (Fleming, 2002). Nowadays, the media is linking production and audiences in a variety of ways that depend on technology. It is technology that will shape societies and trigger social change. As a result, today's media continues to be the locomotive of change as they continue to develop technology to anticipate development. (Burton, 2005) This change is becoming more apparent as many radio broadcasters in Indonesia begin to broadcast messages via Internet media other than conventional media (AM and FM waves). Currently, almost all traditional media use the Internet to display the results of their production. In the 20th century, added information technologies have the potential to influence the lives of people, including schools and governments. (Brynin, 2006), Because of their ability to overcome communication barriers in space and time, including national boundaries, modern technologies can be considered to help globalization. With the presence of Internet media communication technology, radio broadcasting will also change because the range of broadcasts is no longer limited by space and time. (McQuail, 2000) It is said that the invention of the Internet is remarkable; at least there are stories of it. The aim of this study is to gain an understanding of the facts that show an essential element that emerges on the Internet and traditional radio in predicting audience growth. It is expected that the results will provide a clear and objective picture of how and why the Internet has replaced traditional radio in forecasting audience change.

## II. MATERIAL AND METHOD

One hundreds of millions of people whose lives have been changed by technological innovations collectively known as the internet. First developed in the early 1990s, it made it easy to travel from one website to another. The web has changed and will still change the way information and entertainment are received and sent by users. The researchers therefore wanted to study the Internet as a complement to conventional radio to anticipate the changing audience of listeners. In this study, a qualitative approach is used to see the internet as a conventional radio alternative to predicting audience change. A case study approach, or qualitative data analysis, emphasizes the internet as an alternative to conventional radios for anticipating audience changes. Directed by collecting and analyzing data to gain a better understanding of the research case. The results describe the internet as a conventional radio alternative to predicting audience change. Radio in Indonesia is the subject of this research, and the Internet is used as a complement to conventional radio to anticipate the changing audience of listeners. Researchers have used several methods of collecting data: conducting interviews, listening to radio broadcasts, and searching for documentation.

## III. RESULT AND DISCUSSION

To anticipate the shift in radio audiences that are starting to use the Internet, radio broadcasters are beginning to think of new ways to broadcast. The use of this new internet medium can be done via mobile phones with various operators. Listeners are becoming smarter at finding what they need, be it information, entertainment, education, or advertising. As a result, if the radio broadcasters do not supplement their services on the Internet platform, the audience listeners will probably leave the radio with the spectrum of analogue radio receivers fading.

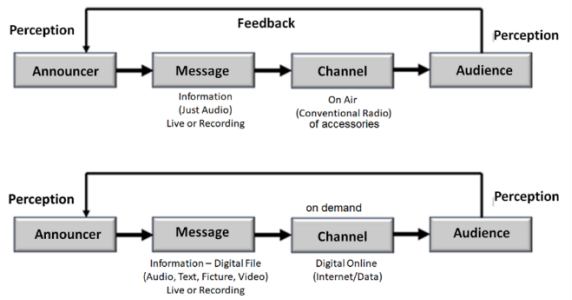
### 3.1. The Challenge of Conventional Radio and the Internet

To date, radio broadcasters have been searching for new innovations in terms of broadcasting technology and broadcast material. Radio broadcasters are anticipating the presence of the Internet by changing media technology to boost audience interest in listening to radio. With media convergence, the broadcaster has merged service to the audience with two media: conventional media and the internet, so they must continue to look for innovation to compete with other media in this convergency era. As the Internet becomes a new medium, many technological

innovations are taking place in various fields, including radio communication technology. (Wessels, 2019). The Internet phenomenon has transformed Indonesia's radio industry. The owners of private radio broadcasting agencies know that there will be changes due to the current development of radio broadcaster technology. The situation of radio technology is constantly changing to improve management performance, especially in developing market share and meeting the needs of the audience. Radio broadcasting has a long history of changing for the better, especially in terms of broadcast technology. Starting from SW to AM, AM to FM (conventional media), and now facing the development of internet technology, (Mayer, 2009). The Internet is a collection of worldwide computer networks that are interconnected using the standard Internet suite protocol (TCP/IP). It functions as a single virtual network that can be accessed via a mobile phone. (Sunaryo, 2013) The Internet is used by radio broadcasters in addition to conventional media to extend their broadcasting range from local to worldwide, so it is more appropriate if the Internet is considered a media partner for radio broadcasts. In addition to being able to listen to radio broadcasts through a frequency receiver, audiences can also stream radio transmissions over the Internet. (Keith, 2007). In real time, audio and video information is sent over the Internet, and audiences can access the web to view, listen to, or download music content and program production. Podcasting also allows the delivery of several types of visual data, such as photos, text, and networking. (Mirabito, et. el., 2004). Podcasting is part of a communication revolution that has changed the way radio communicates with its audience. This content production is phenomenal because it builds audiences and shares with the world. Audiences are unlimited in time; they can enjoy it anytime and anywhere with an internet connection, either via computers or phones. (Cangialosi, 2008) Internet-based social media applications, such as Facebook and Twitter, can also be used by radio broadcasters. Social networks are a new way to communicate that allows you to connect with friends or acquaintances. Twitter is one of the most popular social networks because it shares the latest news globally and allows people to interact with people around the world using older media communication technologies like SMS and telephone. (Weber, 2009) Radio broadcasting is a constantly evolving medium. Through the last century, it has adapted to cultural and technological changes to remain popular and typical media, although other media such as television, cinemas, cable services, satellites, music recordings, and even the Internet are constantly growing. The current radio broadcasting environment has changed. (Fleming, 2002) With the emergence of streaming and podcast technologies on the Internet, radio broadcasters and radio practitioners are faced with increasing competition from conventional media broadcasting at the local, regional, national, and now global levels. These changes are happening rapidly, posing new challenges to the management of radio broadcasting, and needing to be anticipated. (Cocorocchia, et. el., 2016). Audiences can now listen to radio anywhere in the digital world via satellite or the internet. Radio broadcasting globally often brings interesting political, economic, and social issues. Therefore, the scope of radio broadcasting is becoming wider, and there are some core areas that need special attention, such as business and legality, radio products or programs, marketing and promotion, engineering, finance, health research, etc. If we look at the basic concepts of management of conventional radio broadcasting agencies from the perspective of the radio industry, we will see today's growing implementation in the management of radio broadcasters in the computer, digital, and internet era. (Zhang, 2007) The development of computer-based information systems technology, the Internet, and the web are the causes. Computer software, called program systems, is responsible for managing computer hardware. Program systems can also allocate computer system resources for various tasks and uses. (George M., 2001). One of the main reasons why the Internet and the Web have been accepted with open hands by computer users around the world is because they both work together as a single system that can be used by all types of computers. Simply put, the Internet can be applied to any business application that requires data communication, including communication inside and outside the company. (McLeod Jr., and Schell, 2008) Life in a rapidly changing media environment is also affected by this new era. Audiences have only begun to become acquainted with and develop along with the remarkable social change a few years ago. Following the trend of a society that has begun to use a lot of new

internet media, developments in modern technologies, including radio broadcasting, bring about major changes. Once-separate convergence theories can now be combined with new technological developments. According to the theory of convergence, convergence is a model of communication described as the process of sharing or exchanging more than one way of transmission between two or more speakers. The goal is to resolve the chaos between information, knowledge, message, symbols, and meaning. In addition, the feedback process is corrected, and the dynamically formed network allows for the goal. Because more media content is digitally formatted in bit form, this media convergence is a technical problem. A browser, known as the world wide web or part of the Internet multimedia, makes the Internet more attractive to users. Besides, web browsing applications are growing, and the number of sites is growing rapidly.

Figure 1. Communication Process: Radio Broadcasting




Sources: Handled by Researchers (2024)

The current development of the Internet has enabled the emergence of innovative ideas about radio broadcasting that are more than just sound. Reinventing, or searching for new value or making new things, starts with internet radio (Straubhaar & LaRose, 2000). In today's practice, there are many kinds of software that can be used to stream radio over the internet. One type of software is known as "radio broadcast presentation media" and is distributed over the Internet using streaming media technology, which allows the distribution of content to the audience simultaneously. The ability to use technology has enabled the development of conventional media through the Internet. With current developments, creative content such as information and music can be distributed regularly and independently online. Perception Patterns of Internet Radio Listeners All radio content produced by the audience is accessible online and can be accessed through streaming, downloads, and podcasts. This service is a combination of terrestrial FM broadcasting with online streaming, so that the audience can choose between broadcast/FM or internet/web platforms and content formats: if listening to FM, voice is the only content available; if using a website, voice can be accessible. (by streaming, downloading, and podcasting). (Pollitt, 2010). In short, not only is the content different, but also the discourse and format of the content, because the visual discourses are different from the audio. Therefore, entertainment content broadcast on the radio will be re-formed through the influence of a unique radio broadcasting medium by combining various online discourses and integrating through a culture of media participation. (Astuti & Harliantara, 2021) A cultural convergence approach that focuses on humans and computers is found in a variety of remarkably interesting media forms. However, the concept of life lived by the media can be understood when you think about broadly distributed radio shows and how they are consumed by people in many ways. (Summers, 2017) Radio broadcasting helps audiences run their daily routines by providing information, news, and entertainment. Evaluating public relations with radio broadcasting through online social networks like Facebook can enable media. (Nagamalai, et. el., 2011) Radio broadcasting is not only used conventionally but also allows people to participate in virtual communication and interaction structures. The audience continues to listen to radio broadcasts as well as participate in activities, meetings, content, and discussions in a virtual context. This approach is suitable for changing the behavior of media consumption due to the logic of social networking sites in convergence environments where viewers can serve as consumers and media producers. Radio, like other media, has become a habit or part of everyday life as we spend more time listening to media on those platforms. The integrated audience, which is actively engaged in creating and sharing content in the social context of the Internet era, has been shaped by the digital shift in media consumption. This audience consists of Internet users who are engaging in social networks and browsing radio websites, as well as audio audiences involved in FM and online broadcasts. The new audiences formed by online radio

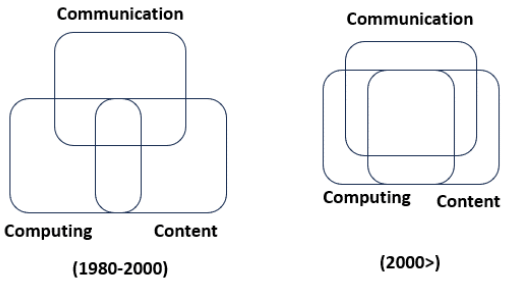
broadcasting are called e-listeners in this respect. audiences online, depending on the method they choose (or interaction) to understand patterns of listening to radio. Audiences listen to conventional radio (FM), which is also an audience online; listen to online radio for convenience; and participate in social networks. E-listeners receive audio in the form of digital and analog music. E-listeners mainly combine radio and other types of multi-platform audio media; their choice between radio and web-based audio media is largely dependent on the content available. E-listeners pay more attention to web-based audio content or services and look for the most convenient ones to listen to. E-listeners are more than just radio audiences; they are consumers across media and various platforms, performing interactive practices when interacting with media and generating content. The results show that with the change in conventional radio broadcasting, radio audiences now use multimedia on the radio broadcaster's website. It has a direct connection to radio content, as well as the type of media available and the convenience of listening. While e-listeners can be part of the cross-media audience by using radio and other media according to their motivation and needs, they are also mostly cross-media audiences. In addition to listening to conventional media, they can also change the use of other media, such as listening to audio content on the Internet through several types of services. Audiences can also listen to audio content through various sources, like podcasts (podcasts produced by radio broadcasters or user-generated content), web radio, online music playlists (web-based music services), and music portals.

3.3. Digital Opportunities and Creativity

Nowadays, it is quite easy to create creative content to spread information about a particular topic. Internet technology can be called the new medium. The term "new media" refers to various developments in the production, distribution, and use of media. Technology, text, conventional, and culture are undergoing transformation; some of the main terms in the discussion about this new media are digital, which allows an understanding of the various processes involved in text making, such as symbolic and interactive calculation. (Saydam, 2001) Digital is more interacting. One way to contact a lot of files, including text, which usually contains hypertext with a bottom-line mark, is through digital. Just click on the text or virtual, which allows the computer program to use the primary memory. (McQuail, 2000) They are interconnected because of the system network, also known as the whole network, which connects various parts and models or replicas of systems. By understanding the concepts and techniques of digitization, we can understand how its application transforms media production from text to a symbol of the computing world. With technological advances, there are many new broadcasting alternatives and new ways to listen to radio. As a result, whenever a radio broadcaster tries to attract more audiences, competition increases in the number and type of competitors. (Mitchell, et. el., 2009 The creative and media industries, including radio, face increasing competition at the local, regional, national, and international levels. Because of intense competition, radio broadcasting has become more important in this market segment. As a result, radio broadcasting management can no longer rely on the use of old methods. When radio broadcasters plan their management to survive the era of new media competition, they must understand the social, economic, political, and technological changes that are taking place. This is especially true of technological innovations that are changing the face of mass media, especially computers, which have helped develop media formats and products. (Croteau, & Hoynes, 1997), Since the public now has control over their own private media space, it is important for the radio broadcaster to continue to study the concept of radio personalization. In the twenty-first century, radio management relied heavily on the ideas of the public to create content and receive it. Radio broadcasters must remain alert to economic, social, political, and technological changes. Technological developments in the last ten years have caused society to change, and some have been using the internet to give audiences access to various events. In Indonesia, internet technology began to be used for radio in the early 2000s. Previously, Internet technology in the form of a web (www) was used by companies, but in the beginning of the 2000s, a lot of audiences used the Internet to listen to radio broadcasts via computers. Today's radio broadcasters see the Internet as a worthy complement to be combined with conventional media, primarily for promotion and public research purposes as well as to promote their broadcasting programmers.

(Furth,2010) To survive this era of convergence, radio broadcasting must continue to innovate. In connection with the problem being investigated, the research that the researchers are going to do will focus on ontological concepts that provide a specific perspective on the world. (West and Turner, 2007)

Figure 2. New Industry: Convergence

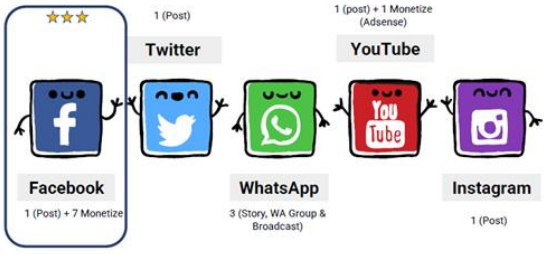



Sources: Handled by Researchers (Harliantara, 2024)

3.4. Advertiser and Public Benefits of Media Integration

By combining radio broadcasting with conventional media and the Internet, all information can be disseminated simultaneously through frequency (electromagnetic) and Internet media, so that audiences are accessible both locally and internationally. The audience can receive local radio transmissions via conventional receiver radio, personal computers (PCs), and internet-based mobile phones. In other words, the audience can receive broadcasts globally via Internet-based PCs and mobile phones, wherever and whenever they have access to the Internet network. (Bouças, & Perez, 2022). For the promotion of conventional radio companies, broadcast radio advertising is the main source of revenue. Internet radio advertising for conventional broadcasting companies, on the other hand, is still an integration of additional media over the distribution of traditional radio broadcasts through live streaming. Ads broadcast through conventional media in the form of voices will also be heard through the Internet. These ads can be uploaded to the radio's website in the form of voice, text, images, or video in podcasting or file form, which can be accessed by the public anytime and wherever they have access to the Internet. In addition to websites, radio stations can promote advertising through internet media, i.e., through social media apps such as Facebook, Twitter, Instagram, and Linkin, by interacting with listeners.

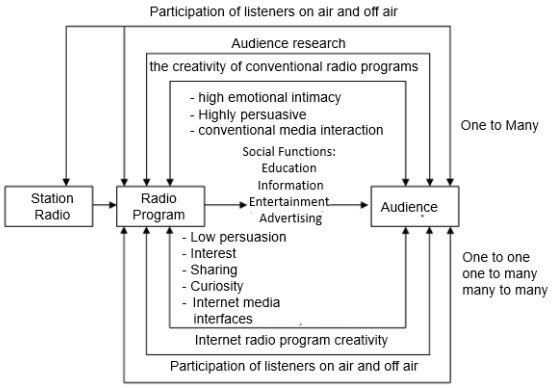
Figure 3. Digital Asset (Monetize)




Sources: Handled by researchers (Harliantara, 2024)

If conventional media radio broadcasting is combined with internet media, researchers will find some features that can still be used, such as Personal (radio media capable of touching audiences personally), At Once (radio medium can be accessed quickly and instantly), Secondary Medium Half Ears Media (media radio can be friends in activation), Mobile/Portable (radio multimedia can be taken anywhere), and Speed (speed level). The audience can use the radio as it functions—educating, entertaining, informing, and as an effective media promotion—if we look at the characteristics and strengths of this medium when integrated with it. Advertising on the radio could convince the audience, which makes it a valuable tool in advertising. For most advertisers or producers, making ads on the radio is an interesting option because, in addition to serving as a source of information, ads can also be used as an effective entertainment and communication tool. For a hundred years, from the middle of the nineteenth century to the present, people who think of mass communication tend to associate it with the size of the audience. Talking in the mass media always has a large audience. But no matter what technological developments happen in conventional media, despite the pressure from the presence of new media technologies on the Internet, radio broadcasting media communication remains unique because the content of the message remains interesting. Communication patterns have changed because of the shift from conventional media to new forms of online media. (De Valck, et. el., 2009).

Figure 4. A combination of the Internet and conventional media




Sources: Handled by researchers (Harliantara, 2024)

Online media can now make long distances close and unhindered by time because the internet can be accessed at any time for 24 hours. Not surprisingly, audiences are beginning to enjoy the new media known as the Internet today. Advertising on the radio could convince the audience, which makes it a valuable tool in advertising. For most advertisers or producers, making ads on the radio is an interesting option because, in addition to serving as a source of information, ads can also be used as an effective entertainment and communication tool.

## CONCLUSION

To date, radio broadcasting agencies are constantly looking for new innovations in terms of broadcast technology and broadcast material. Radio broadcasters anticipate the presence of the Internet by changing media technology to increase audience interest in listening to the radio. They do media convergence, that is, combine service to the audience with two media, both through conventional media and the Internet. Along with the change in conventional radio broadcasting, radio audiences use multimedia on the website of the radio broadcaster, which not only relates directly to radio content but also has a direct connection to the internet. While e-listeners can be part of the cross-media audience by using radio and other media according to their motivations and needs, they are also largely cross-media audiences. In addition to listening to conventional media, they can also change their usage of other media, such as hearing audio content on the Internet through several types of services. Because of the digitization of all kinds of data delivery services in the future, the use of data content in one format will be highly strategic in information and telecommunications technology. In information technology, convergence is the fusion of telecom, print, electronic, and broadcasting, computer networking, and other information technologies. Regardless of the technological developments that happen in conventional media, radio communication remains unique because the content of the message remains interesting. Communication patterns have changed because of the shift from conventional media to new online media. Online media can now make long distances close and unhindered by time because the internet can be accessed at any time for 24 hours.

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