# WEBSITE IN INDONESIAN RADIO BROADCASTING INDUSTRY: LIVE STREAMING AND PODCASTING

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## ABSTRACT

The presence of new phenomenon of internet media has brought significant changes in the world of radio broadcasting in Indonesia.  Radio broadcasters continue to evolve with the development of audio transmission technology and its applications.  There are changers in any other situation of radio technology that constantly adapt an effort to maximize management performance, especially the work which is satisfying audience market share in line with changes in society. Radio broadcasting will never parish despite ongoing changes in broadcasting technology. The literature has incorrect perspective to internet radio that will be the competitor of broadcast media.  More appropriately, it can be called the internet as a partner, because radio broadcasters use the Internet as an additional service new media to extend the reach of a local broadcast in becoming global media.  Utilization of Internet communications technology by the radio broadcasters at the present time it is equipped with the advent of the website. The study recommends the live streaming and podcasting as radio website content.   This study used a qualitative approach.  It has not been done to examine the website on private radio broadcasters with qualitative data collection through field observations, interviews, and documentation. In this study, the researchers chose speakers who know about the website of radio broadcasts.  The determinations of the informants are interviewed by purposive, which are selected with consideration and specific purpose. The data analysis used qualitative data analysis, the data obtained from various sources, using the techniques of data collection (triangulation), and performed continuously until it saturated. Researchers also analyzed the data by the process of arranging the order of data, organizing it by interpretation, providing significant meaning to the analysis, as well as a description explaining the pattern dimensions. The process is carried out with data analysis techniques by performing three (3) aspects of systematic analysis of data reduction, data display, and conclusion.

This study confirms that the website becomes very important to improve the performance of radio broadcasting in the present and the future. In addition, the study found that the current radio broadcasting transmission over the air or (broadcast) in the form of sound or noise also distributes broadcast via live streaming or podcasts streaming on the internet (network) in the form of voice, text, pictures and video.

*Keywords:  website, radio broadcasting, live streaming and podcasting*

# 1. INTRODUCTION

The growth of radio broadcasts through the internet media in Indonesia has continued increasingly. In 2017, there were 1998 collaboration website online radios (www.erdioo.net, accessed on November 27, 2017). However, a large number of online radio, if it refers to the radio frequency channel allocation provided by the Indonesian government as much as 4380 FM channels, have not all broadcasted to the website or internet. The birth of Internet as a new medium innovate many new technological in all sectors. It includes the broadcasting communication technologies. Many people are predicting that conventional media will be buried by the development of information and communication technology. Reinventing is the right answer for the radio broadcasting industry in Indonesia if it still wants to be survived (Dwi Nuryanto 2010). Reinventing means rediscovering something new (Straubhaar & LaRose, 2000: 250). Looking at current developments of reinventing effective step is to realize and utilize the latest advances in information technology communications. As well as setting up services for the transformation of radio broadcasting that can be enjoyed by audiences through the website, either via personal computer and mobile live streaming or podcasting. All of the are also integrated to social media (Facebook, Twitter, Youtube, etc.).

Internet users in Indonesia within a short period of growth continues to increase. According to the Ministry of Communications and Informatics (Kominfo), the number has reached 112 million users, this data obtained from the internet access on computers and mobile phones, In 2014 the number of new internet users 83.7 million users. Overall, the number of internet users worldwide is projected to reach 3 billion people by 2015. Three years later, by 2018, an estimated 3.6 billion people on Earth will access the internet at least once every month. Mobile phones and affordable mobile broadband connections are driving the growth of internet access in countries that can not rely on fixed line. Developing countries like Indonesia still have room for growth in the number of internet users whose size can reach double digits every year. The number that applies to every person who access the internet at least once every month put Indonesia in the 6th largest in the world in terms of the number of internet users. (kominfo.go.id, accessed on November 27, 2017

The continuity of life of radio broadcasters is currently being discussed a lot. Several statements in each radio discussion are frequent complaints from radio broadcasters. "Now the radio broadcasting business is getting harder, because people are now" audio-visual "people. Unlike the previous decades where people are still the "audio" community. Based on Nielsen Consumer Media View survey conducted in 11 cities in Indonesia, Television penetration is still leading with 96 percent followed by Outdoor Media (53%), Internet (44%), Radio (37%), Newspapers (7%), Tabloid and Magazines (3%). The existence of the internet as a medium with a high penetration rate to be an indication that the people of Indonesia increasingly fond of accessing various content through digital media. Given current conditions, industry players need to consider what strategies or media are still relevant to the product while looking at the extent to

which this marketing method evolves through existing digital platforms. (www.nielsen.com, accessed on November 27, 2017)

It is undeniable that internet usage of new media continues to move up, and has not reached the culminating point. Therefore, the decrease in the number of listeners, television viewers, and newspaper readers in the world happened because of the rise of digital media. People leisure time which they used to listen to the radio, watch television or read a newspaper has changed into surfing in the cyber world. For example, as a new medium, the Internet can provide a preferred music community.  When the public need information or news, the just 'click' the news sites  over the internet.

Radio broadcasters keep continuing to seek a breakthrough innovation both in terms of technological development of broadcasting and broadcast material until now. Radio broadcasters should continue to look for innovation in order to compete with other media in the era of convergence.  The ontology in this study refers to a theory along with our ideas about knowledge.  It depends on who is doing and knowing the social sciences, natural existence of man, communication, centered on the nature of human groups and cultures.  Ontological question is especially important for the researchers, because it focuses on the interaction of communication. (Littlejohn & Foss, 2008).

Therefore, I interested in the ontological phenomenon which occurs in the radio broadcasting industry in Indonesia which "Radio websites" in its development can be an alternative medium of radio.  It happens because of the results of Information and Communication Technology (ICT) and Computer Mediated Communication (CMC) development.  So, it becomes an interesting phenomenon by generating a new paradigm in the medium of radio broadcasting.

## 2. LITERATURE REVIEW

The phenomenon of radio broadcasting in previous studies can be seen from several studies.  Radio has always been a part of human life. It has also become a lucrative business since the beginning of the broadcast. Today, all kinds of digital devices have joined forces to create a media environment in the face of new challenges. This study is based on a deeper understanding of radio broadcasting as a cultural industry and audience behavior that focus on innovative approaches to the radio in the context of cross-media, multi-platform and audience interaction with media content.

In this study, the changes in the field of broadcasting are done by analyzing the radio station's website, broadcasting platform, and radio transformation streaming in terms of the distribution.  By using this research and a key example of the Portuguese radio broadcasting industry, a new concept of presenting the streaming audio content, the understanding of radio as

r@dio, has presented a proposal that aims to put the radio in the context of severe competition to attract among all radio listeners (Cordeiro, 2012).

Changes in social media and the online world occurred in the last decade and became more influenced on traditional news media. The way we receive and digest the news has changed in the last decade. In this study, I will reveal about the new offer of radio internet that the information is endless in the universe, created and presented by anyone. Anyone who connects to an internet connection can create a blog and publish opinions in a democratic, equitable, through approaches infinity and the information flow between us. This study also alluded to the criticism of the news spread in the internet is often done without any fact checking or research subject, and need space to separate fact from fiction (Ginn, 2012).

The overview of radio 2.0 listeners interest and the idea of how radio broadcasting principle usage with the utilization of information and communication technology as well as the collaboration of existing elements, can be the inspiring business model for the radio managers by adjusting its infrastructure which already established by the Government. Provision of services that can be accessed by the public as a whole continuously, reliably and simultaneously are the form of embodiment in terms of public equally access services (Sari, 2011).

The rapid change and information technology convergence and communication have led changes in cultural, social, and economic. Global Communication Information Technology increased in capacity, interactive and operational development to be the major factor in the level of industrial company's competitiveness both nationally and internationally. It certainly will not be achieved without the effectiveness of technological development. To achieve a high level of cultural, social, economic and technological development is strongly influenced by the adoption of technology and information. (Scullberg in Prayudha, Harley, 2007).Many public accesses the internet to listen to the radio through computer in the early 2000s. Radio broadcasters site (web radio) can be directly accessed the audience. In addition to improve relations with the public radio broadcasters, it also promotes the broadcast program. Radio broadcasters currently looking at the internet as a viable complement to integrate with conventional medium mainly for promotional and research purposes as well as the audience in an interactive social network that describes the association as emotional support, instrumental, appraisal, and information as a growing reality (Furth, 2010).

Radio broadcasters are now realizing the need for a website to anticipate changes in the habits of listeners to consume internet media. The development of audio media for radio broadcasters is needed to make internet site. Internet sites on the radio are good and useful for the public to find out about the personality (personality) radio broadcasters, music, and programs. Internet radio web site or network in an internet-based information service system is designed and developed to support and encourage social interaction for the extension of cyberspace radio broadcasting, media space and information on the brand of radio broadcasting.

The website also enhances the interactivity of radio audiences and another source of income for radio broadcasters (Michael C., 2007).

The knowledge of social changes context, economic, legal, and technology is very important for radio broadcasters as their management plan would go well in the era of new media and competition associated with technological innovation which changed the face of mass media, especially the computers that have created development in the format media and its products (David and William, 1997).

The use of information and communication technology in implementing the management process of radio broadcasting is required new thinking on the phenomena that occur at this time. The power of technology in the radio affects the new changes in the nature of radio broadcasting management environment. Therefore, radio broadcasters must respond to these changes by developing superior radio management (leading) and creative (creative) quickly. The situation of broadcast radio management today is different after the presence of internet communication technology as a new medium that requires different management practices before. Advances in technology does not only result an alternative type of broadcasting, but also new media alternatives to listen to the radio (Fleming, 2002).

Media in many ways is making the relationship between production and audience. This relationship depends on the technology. It will shape the society and be the cause of social change. As a result of today's media continue to do technology innovation to anticipate changes in its development; the media continue to be the locomotive of change. (Burton, 2005)

The change was clearly seen when many radio broadcasters in Indonesia convey their broadcast messages via Internet. Almost all media now use the internet to present their products. Web has emerged as a commercial medium. Some sites are built around products and is designed to attract the attention of audiences with their content, such as 'news' products. The site sells the access to the public and advertisers. New media often use the content from conventional media to be applied on internet. The interesting one is that hyperlinks section of internet page can be clicked by the audience and moved to another part, both in the same document, the same site or in different sites of the web. (Vivian, 2005) Based on the above statement, the focus of this study is "website in Indonesian radio broadcasting industry: live streaming and podcasting". In this study, I will expand the focus of research analysis. Each case is examined, so the action research could lead to a broader context.

The questions in this study are:
1. how is the radio broadcasting website technology?
2. how is the content of radio broadcasting website program?
3. how is the law enforcement on radio broadcasting website?

**The picture below is a framework of this study:**
**Figure 1.  The Reasearch Framework**
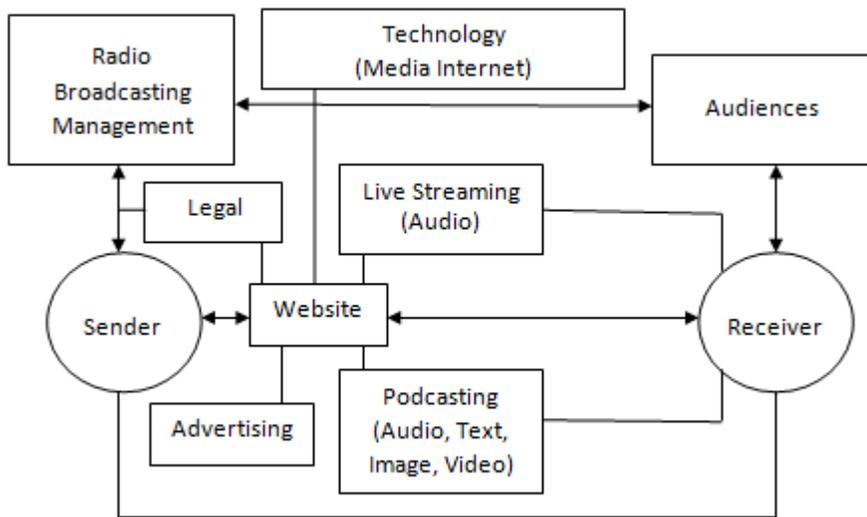


# 1. RESEARCH MODEL

This study uses a case study approach, which is the method of qualitative data analysis that emphasizes the cases of radio broadcasting website. It is directed to collect and analyze the data in gaining and understanding the case study to be flexible. The object of this study is the technology of radio broadcasting websites, content of radio broadcasting program website, and radio broadcasting website law enforcement.

The subjects in this study are three radios broadcasting in several major cities in Indonesia.  There are Hardrock 87.6 FM Jakarta, Ardan 105.9 FM Bandung, and Surabaya Sound 100 FM.  I selected the informants who understand about the management of the radio broadcasting websites.  The determinations of informants are interviewed by using purposive sampling.  They are selected with consideration and a specific purpose. The informants have special characteristic in becoming a leading radio broadcasting station and their uniqueness.  The informants characteristics in this study are those who have high credibility and authority to the radio website and aware of all forms of radio corporate activity. For that reason, it is important to make them as the informants.

This study has collected the data through interviews, visiting the radio stations, listening to the radio and searching the documentation data.  In conducting the interviews, the researcher uses qualitative interviewing.  It is a kind of field research with active investigation and conducting the interview by asking questions that have been prepared to the resource.

In the interview session, their answers are recorded based on a series of topics which covered in depth questions.  The researchers also observed the problems in the field related to the

research problem, belief and the values.   In addition, I collected and examined the data related to writing a good research problem of source documents, books, journals, magazines, internet, etc. I use qualitative data analysis. The data obtained from various sources, using the technique of triangulation of data collection.   The processing of data is done by organizing, analyzing, explaining the pattern description dimensions between technology website radio broadcasting, radio broadcasting program content websites, and the law enforcement of radio broadcasting website.   I conducted the study with the framework of case study by using the reduction of data analysis, data display, and conclusion.

a. Data reduction. During the data collection, I summarize while taking the essential and important data.  The unimportant data is wasted.  I conducted a process of induction thought to rely on experience of professional host radio broadcasting.  I reduce or summarize the data, choose the basic things, focus on the things that are important, and look for themes and patterns.  I refer to the process of selecting, editing, and modify the information data from field or interview lists.

b. I present the data in the form of descriptions, images, and tables.  The presentation of the data in the study use text and narrative.

c. In conclusion and verification, I acted as the analyst and interpreter.  The findings in this study are description radio broadcasting technology websites, content of radio broadcasting websites programs and law enforcement of radio broadcasting website.

I conducted four steps of validity and reliability data.  There are: Credibility.  I conducted the observations to the website activity, which covers the radio broadcasting technology websites, content of radio broadcasting websites programs and law enforcement of radio broadcasting website of three radio broadcasters (Hardrock 87.6 FM Jakarta, Ardan 105.9 FM Bandung, Suara Surabaya FM 100).   Besides that, I conducted interviews with informants and did the observation continuously for one month in the field after the abstract is approved.

Triangulation. I conducted the data analysis by collecting the data technique and reviewed all data.  I discuss with communication experts, radio broadcasting expert and information technology expert  about the management of radio website.  In this study, I use the tools like laptop with cool edit application, note record, and Smartphone cameras (Black Berry and the Samsung Galaxy Note II).

Transferability.  The results can be applied by the other researcher, especially in the field of radio. I also hope that the results of this study can be understood by the reader.

Dependability. It is done to an audit trial form of communication with the experts and media or radio broadcasting to discuss related cases about technology website data, advertising, and the management of radio broadcasting field.

## 4. DATA ANALYSIS

This paper is based on three radio websites. The sites continue to develop the architecture application. From the data result processing, many radio managers are still being confused about the radio broadcasting system model of Internet-based radio management. The radio business manager is still less aware that all systems will find its maturity form. The radio broadcasting artist can produce "simulcast" output through "radio website" or "internet radio".

**Figure 2. The Radio Website**
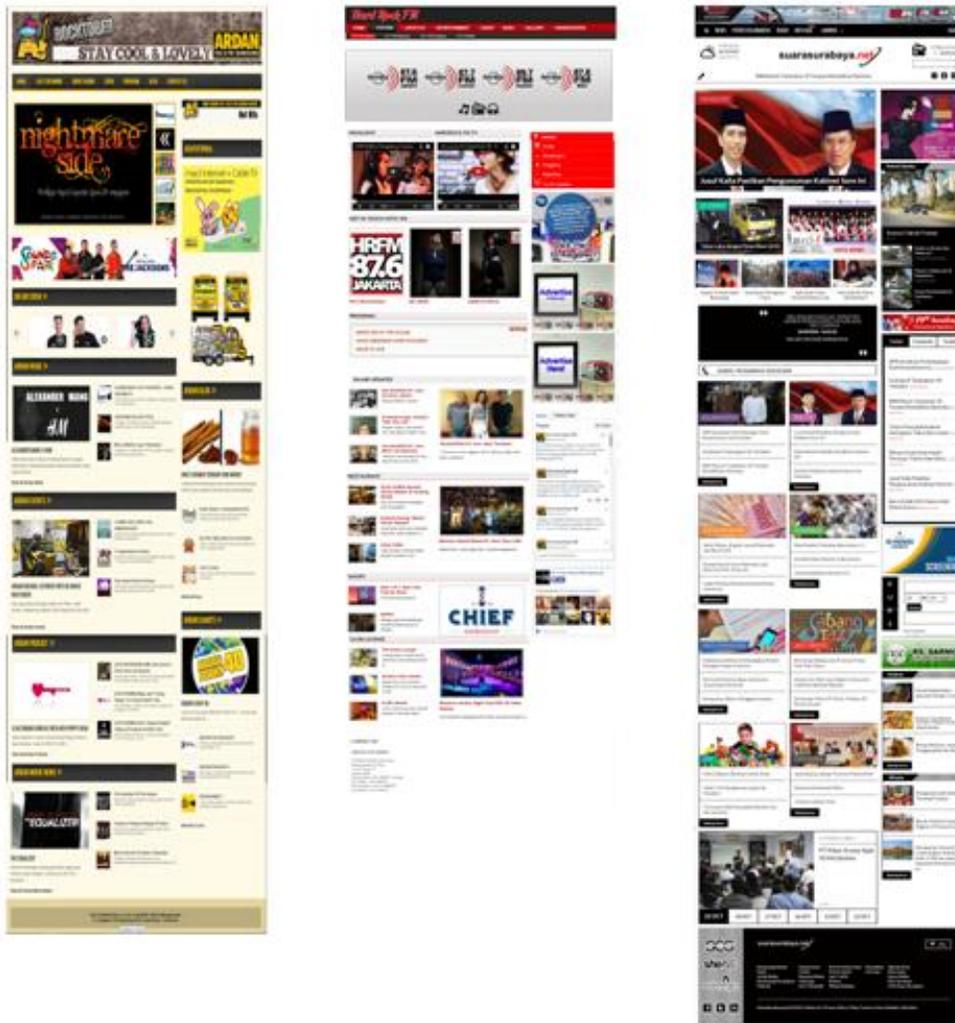


Internet radio through radio's website in Indonesia has continued to grow along with the development of information and communication technology. It began to start the broadcasting innovation continuously in anticipating the changes to radio listener who started to use Internet.

The usage of this new media is not only through the 'personal computer', but it can be accessed on cellular phone by the variety of 'operator'. The media audiences are getting 'smart' to find what they really want and need by their own taste and interest. It could be for the purpose of information, entertainment, education and advertising. As it is seen in Figure 2, the function of radio broadcasting in the conventional media is adapted to the internet medium.

Internet radio through the website offers new ideas and insight, especially for internet users along with the development of convergence technology era and social changes that start to enjoy the music program content and information ("podcasting") through personal computer and mobile phone.

**Figure 3. Internet Radio Schematic**
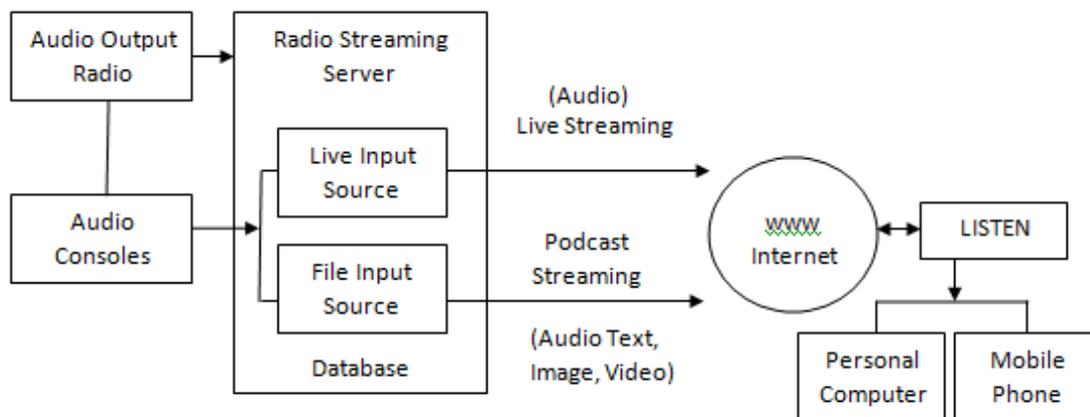


In Indonesia, there are not many people use internet because its connection is not too good. If they want to use it, the connection should be selected on streaming software that does not use large bandwidth resource. The encoder setting also should be as small as possible, such as the encode setting of 16-24 kbps (mono). Some Internet radio servers have medium size, such as Shout cast server with only 136KB size. There are several advantages of Internet radio, such as: unlimited broadcast range for internet access, and digital sound quality. Indonesian radio broadcaster in Indonesia apparently use radio streaming with birate 24, Encoder Type AAC plus, Ice cast Server Type, and can be accessed on mobile phone in Android and Black Berry. The listeners just install the application on Google Play or Black Berry World.

The listener of internet radio can enjoy information program and music (podcasts streaming and broadcast live streaming) through an online database of internet radio. The forms of live streaming broadcast service are programs that have been compiled (playlist) and can be enjoyed just like a conventional analog radio media. The only difference is only the using of internet media. The step is easy; people just click on the radio live streaming on web pages. The direct sound can be heard. While podcast service can be easier to use, because the internet user

can listen anytime or anywhere they want.  When they access to the pages of this internet radio, they free to choose the information program and music.

Some of the internet radio benefits are: 1). Web audio files can be listened at any time, 2). Net casts can be seen from anywhere in the world, regardless of their own places, 3). Online Radio can be heard and seen like the song lyric of a rock band in the concert, 4). News can be viewed as text, graphics, or video, 5). Internet radio support multitasking or listener can listen to the audio program while doing other things on the computer, such as typing the assignments and even surfing on web.

While the barriers of internet connection today are: 1). Along with a slow connection, the transmitting might be unclear when listeners are listening to music or tone.  The high treble and low bass sound reduced due to the available bandwidth, 2). Without external computer speakers, the quality sound is similar to AM radio or FM mono radio, 3). Needed a high speed internet cable modem access or by the increasing of bandwidth to require audio quality FM stereo and even CD quality, 4) .There is a delay when downloading audio files.  Many online radio stations and audio sites cannot accommodate hundred of simultaneously internet radio listeners. (Medoff,. & Kaye, 2011).

The arrangement of radio products in the website cannot ignore the basic foundation which is set by radio company policy to create correlative relationship.  If the radio broadcasters have their broadcasting vision and mission, so the arrangement of product or the website's content will be based on the vision and mission themselves.  This is known as a triangle relationship approach among Radio-Audience-Advertiser.  Radio broadcasters can achieve their social and commercial functions when they start to get their listeners in terms of quantity or quality in accordance with the audience target.  The successful of capturing listeners started from the broadcast content, such as to answer things that able to answer the interest, needs and desires of the radio website content.

**Figure 4. Product Content Website Schematic**
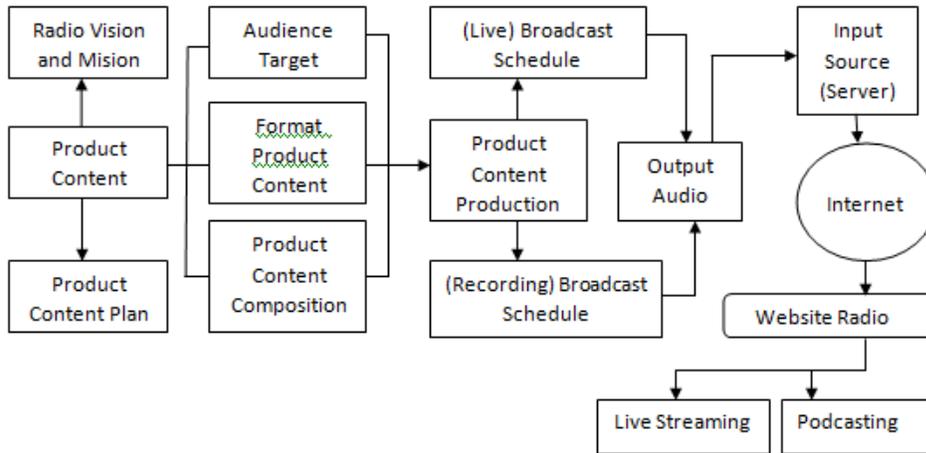


Due to the interesting, need and will of the radio website products content, the listeners will give responses in the form of accessing the websites. The response indicate the advertisers and marketing team radio that the website products content can successfully invite listener, and deserve to be used as a place to broadcast advertisement. The content or products always be the reason for the success or failure of radio website. From the results of field observations at website manager of Hardrock radio 87.6 FM Jakarta, Ardan 105.9 FM Bandung, and Suara Surabaya 100 FM, they fill the content based on the on air broadcasting at conventional radio. The live broadcast can be heard in the broadcast studio through the medium of live streaming, because the output broadcasts is input to Internet streaming server. While podcasting is in the form of files, music shows, talk shows, and other inserted program. They especially created for radio website, completed with information in the form of text, songs, pictures and video. People can access this website radio anywhere, anytime as long as they are connected to internet.

As the Internet and mobile phone technology grow simultaneously, the social network also grows rapidly. Nowadays, the popularity of social networks such as Facebook and Twitter are growing fast, becoming part of the people lifestyle and even becoming people's daily needs. They can also be accessed through Facebook or twitter by simply using a mobile phone.

The telecommunications operations in Indonesia experienced a very significant change with the enactment of the Constitution Law Number 36, in 1999 about Telecommunications on September 8, 2000. This gives business space competition and more oriented to consumer's interest and telecommunications users. The evolution of telecommunications regulation in Indonesia is started by the Constitution Law Number 5 in 1964 about the establishment of Government Regulation Substitution Law Number 6 in1963 about Telecommunications which is followed by Telecommunications Constitution Law in 1989.

The fundamental changes and its perspectives of telecommunications and broadcasting are driven by the global environment changes and the development of information technology. Government role is lead to the development of policies, regulation, and supervision and controlled by public roles. The increasing of role of the public in the implementation of telecommunications based on Article 33 Paragraph (3) on the Constitution of 1945 is that the earth, water, and natural resources contained are controlled by the State and used for the greatest welfare of the people. Therefore, the relating matters to the use of radio frequency spectrum and satellite orbits which are limited natural resources, still controlled by the State.

Legally, the development of radio broadcasting through the internet must abide the existing broadcasting regulations. Now, they will also deal with the realm of new law, particularly in the technology and information activities. The legal aspects of cyberspace are internet law, information and technology law, telecommunications law, and informatics law. Cyber law as a new legal order is seen from the specific forms of regulation activities in cyberspace, like: copyright, trademark, slander or libel, privacy, awareness of duty, criminal, electronic contracts, electronic commerce, government electronics, pornography, and theft.

People in the 21st century are very possible to depend on computer technology, both on hardware and software, network communications, and multimedia technologies. But behind the benefits and the advantages of computer technology, they raise new problems such infringement of intellectual property, fraud in electronic transactions, electronic commerce and taxation in cybercrime. Therefore, Indonesia needs to think more seriously on all activities in cyberspace. Indonesian government attempted to support the development of information technology, especially in information management and electronic transaction, with its legal infrastructure and the regulatory. The use of information technology can be done safely by pressing the minimum negative consequences. Finally, the Constitution Law of Information and Electronic Transaction (ITE Law) is determined by the President of Republic Indonesia at the suggestion of the Ministry of Communication and Information Through the Directorate General of Telematics Applications, enacted the Constitution Law Number 11 in 2008 about the Information and Electronic Transactions. It is ratified since April 21, 2008. It consists of 13 chapters and 54 articles that constitute the realm of law in regulating the cyberspace in Indonesia.

**Figure 4. The Law Enforcement Of Radio Broadcasting In Indonesia**
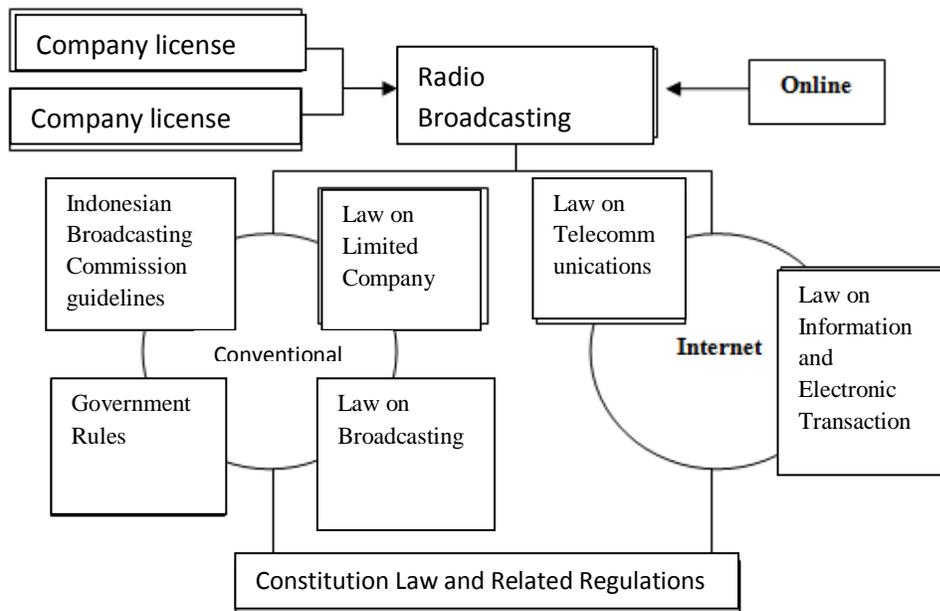


The study found ten propositions after I conducted the data analysis and observation in the field related to the integration of conventional and internet radio broadcasting. The four propositions are:

- Not all radio broadcasting operators in Indonesia do the broadcast on internet
- Not all radio broadcasting operators in Indonesia maximally manage the website through internet media.
- Not all radio broadcasting operators in Indonesia have loyal internet media listeners who spend their times listening the live streaming websites via personal computer or mobile phone.
- If the radio broadcasting operators using the internet, they can reach their broadcasting region globally.
- Every operator of radio broadcasting has a website, so the subscribing internet and broadcast content services are completed with streaming and podcasting audio service, and social media for the interaction with the audience.
- All goals and the objectives of a radio broadcast program need to cover the radio vision and mission, the radio business planning, the target audience, and the marketing target.
- Every radio broadcasting operator through the Internet media can impact positively or negatively to the society.
- If the definition of a program carried out holistically, like: grabbing the listener as much as possible according to the target audience, programming based on the

strengths and weaknesses of radio, allocating the exact broadcasting time, formatting and forming broadcasting program that the listeners interest with, effective pattern and the approach of communication to establish intense relationship with the listeners, elements associated with the broadcast content which needed by the listeners (music, information, sounds, and journalistic, and other materials), so the programs are appropriated with the rules of radio broadcasting.

- All the internet radio broadcasting provider can broadcast a radio program with wide range of various topics routinely, both live streaming and podcasting.
- All the internet radio broadcasting provider is regulated by the Ministry of Communication and Information through the Directorate General of Telematics Applications, ratify The Constitution Law Number 11 in 2008 about the Information and Electronic Transactions, and the Press Law.

## 5. DISCUSSION

The emergence of new Internet communication technologies has raised an opportunity and new challenges for conventional radio. The presence of Internet started to impact on the pattern of the changes in radio broadcasting pattern, especially for radio broadcasting operator and the listeners. Internet is a challenge that can be used as new innovation for radio broadcasting (broadcasting) by adding radio broadcasting services on the internet (networking).

It is also reflected on the research findings that Hardrock 87.6 FM Jakarta, Ardan 105.9 FM Bandung, Suara Surabaya 100 FM presenting their broadcasting in the electromagnetic waves and internet. The broadcast product or content that is generated by three radio broadcasters are also distributed to the internet. Radio broadcasting is a kind of many mass media to deliver news, information and entertainment. Previously, the form of broadcast programming is done on two ways communication between radio broadcasters and the listener is in the form of a voice over the phone. Today, it becomes one to one way services through internet in the form of text, images, and videos, website and social media such as Facebook, Twitter, and Instagram.

Nowadays, radio broadcasting has been able to reach broaden and universal listeners. This is because the internet has made the radio broadcasting going online. Radio broadcasting has begun to spread many online radios as a new broadcasting media. Now, they have opened their own broadcast website to connect directly to their broadcast studios. The development of media broadcasting that has been converged will not be separated from the role of Internet as information and communication technology that effect communication media.

Generally, most of the radio broadcasting in Indonesia has created websites to promote their radio broadcasters by providing news and information services, and through on-air programs and music for the cybercast. By providing this web sites for the radio broadcasting, it gives confidence to anticipate radio broadcasting industry in the future has no longer needed by

the listener.  It is assumed by the organizers of radio broadcasting that listeners are still able to access radio programs through cybercast in the Internet.  This also has been done by Hardrock 87.6 FM Jakarta, Ardan 105.9 FM Bandung, Suara Surabaya 100 FM.

The appearance of radio broadcasting through internet is a technological innovation and reflects the development of conventional radio broadcasting.  Its history developed since the Real Audio in 1994 was introduced.  In United States, thousands of radio broadcasters have made radio broadcasting service for audio cast online.  By using Real Audio technology, the radio broadcasters affect the custom of conventional media listeners migrate to the radio internet.  It only provides audio clips recorded which transmitted to real-time audio through the internet continuously.  This also happened to Hardrock 87.6 FM Jakarta, Ardan 105.9 FM Bandung, Suara Surabaya 100 FM.  They have started broadcasting for the audio cast on line in the era of 2000s.

Internet streaming technology through which flowed continuously has encouraged listeners to get podcasting or its file by downloading it to their computer.  They can listen directly without waiting for the downloading files.  Podcasting can be interpreted as digital recording of radio broadcast or programs which available on the internet to be downloaded.  The listeners are personal audio player. Since the Real Audio introduced, other several software development companies have developed audio on-demand applications and new protocols to increase the band width streaming faster.

Online audio has actually been around since the beginning of the internet until now.  Today, it can be easier to be used with computer and Internet technology to provide better sound quality.  Nevertheless, the radio online from World WideWeb is not too popular compared to conventional media of radio broadcasting.  The result related  to Hardrock 87.6 FM Jakarta, Ardan 105.9 FM Bandung, Suara Surabaya indicates that the radio broadcasting through the internet has not been very popular for local listeners.  They still listen to the radio broadcasts in conventional media, especially while driving the car, at home and workplace.

At the present time, information technology has the potential to affect radio broadcasting business in Indonesia.  The majority of radio practitioners and listeners are already using personal computers as their information technology.  In Indonesia, the phase information and communication technology/ICT is strongly influenced by the development of information and communication technology that has changed many radio broadcasters operational activities.  It includes the internal and external communications.  The technology such as computers, internet and mobile phones, are part of a new society and human environment.   The availability and growth in mobile phones, personal computers, internet, and the expansion offering of many communications services have led to the changing in organizational and economic life, as well as radio broadcasting. This technology is used in variety ways to make the activity more efficient, more convenient, or more fun.

Website and podcast radio broadcasting have become an additional source of income in many stations, although not all radio broadcasters use them. Until now, the radio website is still only regarded as supplement to promote the internet radio. Besides that, the presence of radio web site is another way to add the values in buying commercial at conventional media. This also applies to podcasts radio broadcasting. Podcasting and streaming allow local clients to have the opportunity promoting their products nationally and globally with no extra cost. Radio broadcasting and podcasting website are very helpful to market the products that enable the listeners to click on the advertiser's logo which placed at the websites. The logo will bring listener to the advertiser's web page. In addition, radio broadcasting with immediate access to the website can determine the data to be given to advertisers about the number of users streaming. It can also download specific podcasts which have been created by the radio with the sponsorship from radio advertisers. Website and podcasting are one of the radio broadcasting business managers which made to retain conventional media listeners who have penetrated into internet media.

Radio broadcasting operators in Indonesia, including Hardrock 87.6 FM Jakarta, Ardan 105.9 FM Bandung, Suara Surabaya Sound 100 FM where they integrated conventional media broadcasting and the internet, will be bound by the rules and regulations governing broadcasting related to the frequency spectrum, wireless and radio broadcasting services. This Regulation aims to facilitate the orderly tool, communication content (broadcasting), telecommunications and multi-media with its frequency spectrum and wireless. The rules and regulations are: The Constitution Law of the Republic of Indonesia Number 40 in 2007 about Limited Liability Companies, and The Constitution Law Number 32 about Broadcasting in 2004, Government Regulation Number 50 in 2005 about Private Broadcasting Institutions, KPI Regulation Number 01 / P / KPI / 5/2006 about the Implementation of Broadcasting Licenses, KPI Regulation Number 02 in 2007 about the Broadcasting Code of Conduct (P3), and KPI Regulation Number 03 in 2007 about Broadcasting Program Standards (SPS). There are several articles in the Criminal Code (KUHP) that could potentially give the sanction to the radio broadcasting when they carry out their function as social control and information, the Constitution Law Number 39 in 1999 about Human Rights, and the Constitution Law Number 8 in 1999 about Consumer Protection, the Constitution Law Number 40 in 1999 about the Press. While the relevancies of technology, cyber development, and legal instruments in Indonesia are in the Constitution Law Number 11 in 2008 about the Information and Electronic Transactions and the Constitution Law Number 36 in 1999 about Telecommunications.

## 6. CONCLUSION

Until now, Internet radio continues to seek many innovation breakthroughs, both in terms of technology development and content services with the creative programs in the form of information, music or songs. The radio internet needs to anticipate the changes by creating creativities to grow information program management and music to internet radio listeners

continuously.  It can be integrated through media convergence by integrating multiple services to the internet radio listeners.

There appears new technologies and distribution methods that has deeper effect to the way of how listeners listening to internet radio.  These will lead to new opportunities and new challenges. The radio broadcasting institution with its services is available in the conventional media.  Nowadays, it is all facilitated through the internet in the form of file-sharing, podcasting, downloading, and streaming audio.  There are many conventional media of radio broadcasting institution that offers newer flexible alternative to listen to the traditional media practices and can be listened also to the internet radio.  The implementation of radio broadcasting through wireless is an effort to develop communications sector in a competitive environment and for the public interest.  It is done to improve the access to the radio broadcasting service which is more modern and effective.  Internet brings changes to the way of radio broadcasting, especially on radio broadcasting management and its listeners.

Radio broadcasting is a local media.  In addition, it is not only as the mass media, but also as a business.  The current study said that audio broadcasting still become the alternative to promote things.  Through this wireless service, the radio broadcasting does the effort to increase the selling of program and creative radio sector in a competitive broadcasting environment.  With this service provides opportunities for radio broadcasters to add more values to the advertisers.  It can also be promoted through frequency spectrum, website radio, live streaming, podcasting and viral marketing at Facebook or Twitter.  The radio broadcasting today is multimedia, multi-platform, convergent, has sound and pictures, more interactive, participatory, shareable, hyper-textual, not linear, and convergent.

All information can be disseminated through the medium of internet radio broadcasting simultaneously and can reach the listeners locally, and globally. They can receive radio broadcasting locally through conventional media, their personal computers (PCs) and internet-based mobile phone (cellular).  Globally, the listeners can receive radio broadcasts from their personal computer (PC) and internet-based mobile phone (cellular) with no limits of space and time, anywhere and anytime as long as they connected to the Internet.

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