

Digital Diversification to Expand the Indonesian Radio Industry: A Case Study of PRFM, Delta, and Dahlia Stations

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ABSTRACT

Digitization has made radio stations the business of news portals, global aggregator platforms, programmed journalism or algorithm journalism. How does the radio broadcasting business retain an audience and grow listeners across borders via Facebook, Twitter, Instagram, Youtube, TikTok, WhatsApp and Website? How does the radio broadcasting business disseminate information and promotions more intimately, personally and widely? How the radio broadcasting business is accessible to audiences, fun and mobile: pocketable, openable on mobile phones, computers, iPads and more? How do listeners interact and communicate anytime and anywhere? The answer is digitalization that has changed radio technology, social culture, economy and generations. These changes affect the management, production, distribution, and reception of radio broadcast listeners. The governance of the radio broadcasting business has been mandated, commissioned, and inspired by a unique public service. This research uses a "Case Study", and Single Multi-Level Case Analysis, to confirm the theoretical proposition, of digitalization technology, in practice communication technology, which is used to develop radio broadcasting governance. How is the digitization of radio broadcasting governance used as an information technology tool, as a tool for developing marketing, and as a tool for information business diversification? Qualitative data were coded from observations, open interviews, Focus Group Discussions, and detailed documents to assess the views and experience of digitizing radio broadcast managers in managerial and business development.

Keywords: *Digitization, digitalization, diversification, business, radio broadcast.*

INTRODUCTION

Digitization has made radio more accessible. This process of converting non-digital information into digital means that radio can be stored in your pocket, and listened to on your cell phone, computer, iPad and more. Radio is now a more mobile medium than ever. Digital technology makes interactive radio broadcasts possible anywhere and anytime, without being hindered by anything or anyone (Geller, 2011). The metamorphosis of radio broadcasting occurs in the current development of digital technology and social media such as Facebook, Twitter, Instagram and WhatsApp (Achmad et al., 2021). Radio "streaming" broadcasts change the listener's experience when using media (Mohamad, 2023).

Digitalization is happening in the radio broadcasting business world. The digital information is used in the process of developing a radio broadcasting business. Managers broadcasting radio broadcasts increase their revenue not only in world broadcasting but also

in online business information. The management of a radio broadcasting company is diversifying. Radio tried to diversify into the internet in 2001. The visibility of online radio broadcasts is considered to reach global markets around the world. The radio industry is finally offering the concept of convergence. The development of quality radio is one of the solutions for the sustainability of the radio industry (Medina et al., 2022). The development of the digital radio industry is related to technological advances, such as the use of IP-based networks: 4G and 5G mobile broadband (Jauert et al., 2017).

In addition, business media diversification takes into account market development and penetration strategies, as well as product development (Wegwu, 2020). The failure of media companies, when entering the market industry, is due to the inability to build partnerships (Villi & Picard, 2019). Therefore, various media successes are now owned by various individual media owners, and small companies, but have the agility in building partnerships (Sabatier, 2019). They are digitizing the media business in the audio-visual realm, in several countries, including broadcast radio companies (Martínez-Costa & Prata, 2017; Ofcom, 2019).

The radio broadcasting industry has indeed changed compared to the previous era. Radio stations are still required to serve the public's needs in information and entertainment (Sauls, 2011). For the community, broadcast radio stations are still considered important in disseminating information and promoting social development (Hermansky, 2022). Some people still like to listen to the radio to get news or information and listen to music, and some even make it their daily routine (Krause, 2020). However, the world of radio broadcasting is currently undergoing a fundamental digital transformation (Hirschmeier et al., 2019). Indonesian radio stations are struggling to survive global capital flows and declining advertising revenues. (Rachmiatie et al., 2020). They have expanded their broadcasting technology development and diversified their radio broadcasting operations. The world of radio broadcasting in Indonesia is changing: both in business and broadcasting formats.

LITERATURE REVIEW

Commercial Radio

The radio industry produces entertainment, information, and advertising that directly addresses the audience. It broadcasts recording industry music, music videos, publications, and promotions (tours, concerts). Radio provides information through talk shows, news, sports, and other productions, whether local (news, features) or syndicated national news or talk shows. Local, national, and network advertising categories directly reach audio audiences. As a consequence of digitalization, the emergence of internet radio and digital satellite radio created competition for consumers and advertisers (Šulentić & Vukić, 2022).

In this regard, radio broadcasting requires a substantial budget to finance the production of its transmissions. For this, radio stations require advertising, among other things. Since the 1920s, radio broadcasters have sought advertisements to finance the production of radio transmissions in terms of apparatus, audience, programming, and sponsorship. These advertisements served as the radio industry's entry point (Spalding, 1963; Muela-Molina et al., 2016).

In the 1970s, radio broadcasting entered a niche middle market with an expanding and diverse audience. As a form of entertainment, broadcast radio has a niche in the US market with music formats such as Top Forty, Beautiful Music, Middle of the Road, and Automated Rock. Each format has a distinct audience (Lull et al., 1978). During the 1990s, there was a change in the emphasis of the music. The ageing of the Baby Boom generation,

among others, changed the focus of music away from the country genre and toward alternative rock and adult album alternative songs. The audience that preferred 70s Favorites, 70s Rock, Smooth Jazz, Country, Adult Contemporary, News/Talk, and other older formats were joined by a new generation of broadcast radio listeners. On the other hand, the democratization of mass media, which has diminished the overall influence of mass media, has not marginalized broadcast radio among the American mass media audience. Neither did the fragmentation of radio audiences diminish Americans' daily reliance on radio as a source of information (Macfarland & Shane, 1995). During this phase, the proprietors of hundreds of broadcast transmitters consolidated their radio companies. Numerous radio stations compete for the ears of ethnic descendants residing in the United States. There is a reason why broadcast radio accounted for 33 per cent of Hispanic income in a 1997 report. Radio is in the top 10 per cent of broadcast advertising revenues compared to other media in the media market constellation (Shane, 2016). The radio industry's deregulatory efforts increased competition. Radio stations compete for the fealty of their listeners (Jauert et al., 2017).

During the 1990s, a variety of radio formats demonstrated new developments. In the United States, broadcast radio was regarded as the most lucrative media enterprise. In the context of the media industry, broadcast formats shifted. In addition to musical entertainment, popular radio formats came to include news and talk. Radio "news" talk shows are the second most popular format. According to Geller (2011), its listeners are individuals who are curious about "their city, their country, their world." The program is both personal and anonymous, in the sense that no one will recognize who is speaking. This enables free conversation between listeners and callers (Geller, 2011). In the 1930s, radio stations began producing "bulletin" broadcasts of breaking news to compete with newspaper "extra" editions (Willis & Aldridge, 1992; Powell & Ibelema, 2000). In 1961, a variety of "news" radio stations flourished, and by 1995, News radio, Talk radio, and news talk radio formats had emerged (Frankel, 1995; Powell & Ibelema, 2000). The public preferred "Talk radio" as a local news source (Powell & Ibelema, 2000; Brewer & Pritchard, 2008).

Digitization

In the 1980s, it was anticipated that digitalization would give Europe's radio industry a competitive advantage. The advent of digital communication technology spawned a new content dissemination system with numerous venues. This resulted in the development of the digital media industry and the emergence of media as a multifaceted institution with multiple functions: as an institution for the production, dissemination, and interchange of messages across multiple platforms and within networks that enable interaction and collaboration. As a consequence, the media system has changed, and the function of journalism has been redefined (Edosomwan et al., 2011; Owen, 2018, 2019).

The media are becoming increasingly diverse today. Old media (newspapers, radio programs, and television news programs) have emerged alongside new media (the Internet), which consists of websites, blogs, video-sharing platforms, digital applications, and social media. Messages from mass media blend with general media, combining mass audiences with various users. Each individual can interact and communicate independently of institutional gatekeepers (Edosomwan et al., 2011; van Dijck, 2013).

Digitization was anticipated to replace analogue AM and FM radio in the 1990s; among others, Canada established a digital transition policy for all radio broadcasting (O'Neill, 2007). Digital Audio Broadcasting, or DAB, aims to improve the way radio services are delivered on

a large scale (national, regional, and more local) by using a network of digital terrestrial transmitters that are connected to an international satellite (Eureka-147 S-DAB) (Hallett & Hintz, 2010).

Internet radio emerged in 1999, despite limited bandwidth, within the scope of online streaming terrestrial radio stations and internet-based radio stations. Internet connectivity enhanced the quality of radio transmissions across geographic boundaries. The Internet's ability to increase the personalization of radio transmissions necessitated the radio industry's pursuit of more competitive avenues. Radio stations have utilized websites ever since. Strategically, terrestrial radio stations are primarily information providers, whereas internet-based stations are primarily communication (Glantz, 2016; Criticos, 2021).

Radio broadcasts shifted towards multi-platform, cross-media, and multimedia strategies. These developments in radio digitization have increased the complexity of media technology in radio broadcasting (Fernández-quijada, 2017). By 2002, it was reported that 10,000 online radio stations were broadcasting, and over 4000 offered streaming content. Audiences have begun to recognize Internet radio as an additional facet of broadcast radio. Internet radio stations offer online content that includes interactive spaces, including (1) virtual information space, (2) virtual promotion space, (3) virtual distribution space, (4) virtual communication space, (5) virtual sponsorship space, and (6) virtual transaction space (Ren & Chan-Olmsted, 2004).

Audiences are no longer reliant on traditional analogue radio programming; instead, they have access to satellite radio technology. In the online communication process, a radio broadcaster must now account for his or her broadcast format. Despite this, radio remains a medium for local connections. In 2008, radio was still a prominent news source in the United States (Ferguson & Greer, 2011).

Media Industry Diversification

Since the 1990s, competition in the radio broadcasting industry has shifted (Jauert et al., 2017; Xu, 2015). This has implications for the structure, behaviour, and performance of the radio industry (Bates & Chambers, 1999). The post-consolidation decade brought competition to efforts to form monopolies (Schiffman, 2017). The merging of radio stations resulted in a decrease in the number of broadcast programs and a decrease in local news services (Ferguson & Greer, 2011). To maintain listener satisfaction and loyalty, radio stations diversify the content and format of their services as well as their business. From here, broadcast radio services and businesses penetrated the realm of popular web content (Steinfeld & Laor, 2019; Laor & Steinfeld, 2018).

This change also incorporates technological, sociocultural, and economic factors, as well as the transformation of production, distribution, and audience reception across multiple interconnected generations. The interactive media era represents a new era. During the streaming era, digital goods created new service spaces. Changing paradigms result in distinct public service mandates, missions, and aspirations (Cwynar & Fauteux, 2020). The causal relationships between ancient media and new media are merging. To investigate content and reach a broader audience, administrators of legacy media employ new media tools. Old media must provide legitimacy and credibility to new media. Old and new media are intertwined with information and news. Additionally, they complement one another's content (Owen, 2018; Mitchell et al., 2016).

For radio broadcasting, digitization introduces an increasingly complex set of media technologies, including both competing and complementary options for digital audio delivery. The public, their institutions, and radio station administrators are presented with both a challenge and an opportunity. The future of media is digital radio with increasingly complex distribution (Loeser, 2012; Lowe & Maijanen, 2019).

In addition, the introduction of digital media introduces a new degree of competition. Radio firms will have to inject significant innovation into their markets. Various invention and innovation concepts result in the production of a variety of goods, including technological transformation and manufacturing exploitation (Lokshin & Knippen, 2013). New media invites audiences to expand access to information that was previously restrained, closed, and difficult to reach. Consequently, the presence of new media expands the audience's reach through personalized channels, such as Facebook and WhatsApp. Through the interactive channels of new media, old media administrators can create communities based on the networking patterns of new media (Owen, 2018). Traditional media companies diversify their operations.

The management of radio stations is diversifying their businesses. Digital media portals have become an expanding industry. The World Wide Web was recognized by radio managers as a solution to a persistent problem in broadcast radio. They have finally discovered a means to sell a substantial amount of advertising without interfering with the broadcast signal using interconnected computer systems and servers (Medina et al., 2022). The development of radio has also given rise to a new business strategy: websites. To enhance branding and promotion, radio stations are currently utilizing Internet frequencies through their websites. Numerous radio stations use the Internet to create social networks, including Twitter, to penetrate the market. Audiences are encouraged to interact with radio stations via Twitter, a social network that provides a window into the lives of individuals (Medina et al., 2022; Ferguson & Greer, 2011).

METHODOLOGY

This study seeks to identify the convergence of the broadcast radio media industry's, revenue structure and digital technology. This research employs a constructivist paradigm, a case study research method, and multilevel analysis. The case study research method can characterize observed phenomena based on multiple analyses to answer the following research questions:

- How digitalization evolved in Radio PRFM, Radio Delta, and Radio Dahlia as radio in Bandung, West Java, Indonesia
- How digitalization impacts the business diversification of Radio PRFM, Radio Delta, and Radio Dahlia in Bandung, West Java, Indonesia

This study aims to find out the influence of digitalization on the broadcast radio industry in Bandung, West Java, Indonesia. This study employs a qualitative methodology. Case Studies research is used because it adheres to the requirements of this study, namely qualitative research that is comprehensive, holistic, and in-depth, to examine problems that are complex and contain numerous variables (Harrison et al., 2017). In addition, the Case Studies Research method can be used to examine problems involving temporal changes and to explore a case's contextual conditions (Yin, 2014). This study's Case Studies Research is of the Single Case type, which identifies a strong, specific case with rich data content (Leavy,

2017), in the Single-Case (Holistic) Designs type (Yin, 2018). This case study research employs Yin's "descriptive case studies" (Yin, 2018). The focus of the problem is "single" (single case-multi-level analysis), which describes the digitalization of broadcast radio management. The description has numerous facets, including:

- The evolution of radio broadcasting.
- The application of digitalization in radio management.
- The use of digitalization to expand the information business managed by broadcast radio.
- The use of digitalization to diversify the broadcast radio business.

This research seeks to "confirm or expand" the theoretical hypotheses regarding digitization technology in communication technology practice as a means of advancing broadcast radio governance. The "uniqueness" of this research study is evidenced by the use of digitalization not only as a tool for broadcasting but also as a tool for information technology and marketing, as well as the diversification of information enterprises. In this study, the "typical" nature is seen in the use of (digital) communication technology, which is no longer employed as a tool for disseminating communication sophistication but rather as a tool for information and business expansion.

This "single" case study research requires multiple units of analysis due to these factors. This research examines "how" and "why" digital technology is used in the management of broadcast radio by analyzing "raw" data through coding, which is then converted into conceptual categories and interpreted into themes or concepts that answer the "research question". Observations, open-ended interviews, or detailed documents were used for coding qualitative data. Various interviews were conducted to collect information regarding the perspectives and experiences of broadcast radio managers regarding the utilization of digital technology for broadcasting activities and business growth. Three radio stations were observed as they managed their broadcasts and implemented digitalization for radio broadcast management. Textual data, such as management policies, social media platforms, informational materials, and other information, were obtained through document searches (Creswell, 2014).

Interview data came from interviews with key informants:

1. Achmad Abdul Basith Patria, Deputy Chairman of KPID Jabar.
2. Jiwa Perdamaian, Vice President (VP) Operation PRMN
3. Januar P Ruswita, Business Director of Pikiran Rakyat
4. Priyadi ZM (PRFM Radio)
5. Irfan Budiawan (PRFM Radio)
6. Sandra Kurnia D (PRFM Radio)
7. M.Aziz Nufalah (PRFM Radio)
8. Iqbal P (PRFM Radio)
9. Feisal Tri Septiana (PRFM Radio)
10. Agus Ridwan (PRFM Radio)
11. Rian Firmansyah (PRFM Radio)
12. Asep Yusuf Anshori (PRFM Radio)
13. Gilang Pambudhi (Radio Delta)
14. Helsa Sukasah (Radio Dahlia)

RESULT AND DISCUSSION

Radio Delta

Radio Delta is a networked entertainment radio that evolved from Radio Prambors, which started in Jakarta in 1972 as a youth radio station. Radio Delta was set up in 1995 in Jakarta, under the Delta Insani company, to meet the needs of young adult listeners. It developed the concept of network radio across numerous Indonesian cities, including Jakarta, Bandung, Medan, Manado, Makassar, Surabaya, Yogyakarta, and Semarang. Since its inception, Radio Delta has positioned itself as an entertainment radio, providing its listeners with a variety of the best and most pleasant songs and inviting them to enjoy life through easy-listening music from the 1990s and early 2000s.

Radio Delta FM Bandung was launched in 2002, choosing the frequency 94.4 FM, with a program that follows the current policies in Jakarta while still directing the interests and needs of the Bandung populace. Radio Delta FM Bandung, for instance, changed its slogan from "the bridge side of Bandung" to "100% Lagu Enak." Radio Delta FM Bandung operates with the vision to be the most popular radio station in Bandung and its goal is to be an entertainment radio station that serves the needs and desires of 30-39-year-old listeners.

Gilang Prambudhi, Operational Manager at Jaringan Delta Female Indonesia at the Radio Delta FM Bandung Office in Bandung, West Java, Indonesia (personal communication, January 26, 2023), stated that digitalization has been used by Radio Delta as a means of broadcasting since the early 2000s. "Internet as a feature in our audio broadcast," Gilang clarified. Internet is utilized by Radio Delta as an online terrestrial radio transmission device. This streaming device is utilized to expand broadcast coverage and the network of its audience. Internet is utilized by Radio Delta to enhance radio broadcasts

Table 1: Usability implication digital devices on Delta Radio

Type of Digitization	Moneymaker/ Advertising	Approaching Listeners
1. Streaming Radio		√
2. Facebook		√
3. Twitter		√
4. You Tube	√	
5. Instagram	√	
6. WhatsApp		√

Source: Data processing from Radio Delta interviews and documents (2022)

In 2018, Delta Radio changed the audience segmentation from 30-39 years old to 25-34 years old to attract more advertisers. To achieve this, Delta Radio engages in off-air and online activities that complement its on-air broadcasts. To retain consumers, social media is used as a strategy (social interaction and social integration) (Hendarto & Ruliana, 2019). When developing online media digitization, actual information content is intended to supplement services provided to loyal consumers. As an act of service to the characteristics of social media followers, various likes, remarks, and audience feedback are tracked. Therefore, Radio Delta uses Internet digitization as a reinforcement for entertainment broadcasts in the form of varied content inserts. Radio Streaming Delta, for instance, inserts information about entertainment around the globe, beloved songs, and broadcast schedules. For example, YouTube, Instagram, Twitter, and Facebook become additional reinforcement instruments for Radio Delta listeners. WhatsApp is an additional method of communication

with broadcasters. Radio Delta uses Internet digitization as an additional feature for its broadcasting facilities, such as through mobile phone applications and live website streaming.

Radio Dahlia

In 1968, Radio Dahlia began as an amateur radio. In 1970, PT Radio Dahlia Flora began operations as an entertainment radio station on short wave (SW), and a few years later, the station migrated to Middle Wave (MW). In 1994, Radio Dahlia moved to Frequency 101.6 Fm, and on May 3, 2004, it moved to Frequency 101.5 Fm. Since the beginning, Radio Dahlia has been identified as an entertainment radio that strives to meet the needs and satisfy the desires of its audience. By adopting a "typical Bandung" context, Radio Dahlia incorporates Sundanese characteristics and elements of the Bandung community into its programming. Its target demographic is the lower-middle class.

From there, dangdut music broadcasts became their trademark. Dangdut music is an Indonesian popular music genre that combines elements of Hindustani, Malay, and Arabic music and is characterized by the tabla (an Indian percussion instrument) and drums. In the 1970s, it attained maturity as Indonesian folk music, gaining the name *Orkers Melayu* as it evolved into a contemporary form of music featuring electric guitars and Western music.

In addition to dangdut music, Radio Dahlia's broadcasts feature the hue of da'wah. Da'wah is the dissemination of Islamic teachings within the context of worship to instil faith and obedience. In other words, a radio da'wah broadcast is an interactive segment of a radio broadcast aimed at spreading the teachings of Islam to maintain faith and obedience. In the 1970s and 1980s, Radio Dahlia's audience liked Dakwah programs hosted by the Indonesian preacher Zainuddin MZ. They liked, followed, and attended numerous Radio Dahlia-sponsored events, resulting in thousands of attendees.

Radio Dahlia must adjust to new circumstances. Therefore, digitalization is a requirement that must be met. Even though it operates in the middle-to-low market segment, Radio Dahlia gives close attention to changes in its audience. According to Helsa Sukasah, Station Manager of Radio Dahlia FM Bandung (personal communication, February 4, 2023), "our radio audience has changed." Numerous Radio Dahlia consumers utilize mobile Internet applications.

Table 2: Usability implication digital devices on Radio Dahlia

Type of Digitization	Moneymaker / Advertising	Approaching Listeners
1. Streaming		√
2. Facebook		√
3. Instagram	√	
4. YouTube	√	
5. Tik Tok		√

Source: Data processing from Radio Delta interviews and documents (2022)

Radio Dahlia has digitized its radio broadcasting administration tools since 2018. Beginning with Facebook, Instagram, YouTube, and TikTok, Radio Dahlia's social media digitization has catered to its listeners' needs and interests. All of these digitalization efforts have not altered Radio Dahlia's conventionalization as a middle-to-low audience audio broadcast radio with "dangdut" entertainment as its programming. "Financially, digitization has not significantly altered our income pattern," Helsa explained. The contribution of digitization to profits is approximately 10 per cent. According to Helsa, the greatest benefit of

digitalization at Radio Dahlian is serving the needs of listeners. Digitalization enables Radio Dahlia to retain subscriber loyalty, increase the number of listeners, and expand its broadcast reach. Promotional activities and information about various events, invitations, and other notifications rely heavily on digitalization. Numerous social media platforms supplement Radio Dahlia's audio broadcast services. Each platform is complementary to the next. Although the numbers are not yet considerable, YouTube and Instagram are money-making machines. Facebook and TikTok are utilized to reach out to listeners. The Zoom device aids Radio Dahlia's off-air events, including talk programs.

Radio PRFM

In 1979, PRFM Radio was founded. Its real name is Radio Parahyangan. Joined the Pikiran Rakyat group in 1990 and changed its name to Radio Mustika Parahyangan with a female segment, known as feminine radio. In 2004, the station began broadcasting on 107.5 FM. In response to increased competition among radio stations in the early 21st century, new leadership is changing broadcast strategy.

According to PRFM Chief Editor Muhamad Fauzi, "the people of Bandung, West Java, and Indonesia are starting to need news radio" (personal communication, January 29, 2023). "The first action taken was the rebranding of the radio station to Radio Pikiran Rakyat FM (PRFM), with the slogan Inspiring News 'N Music." Radio Mustika changed its name to Radio PRFM in 2007, a news-focused radio station serving Greater Bandung and West Java. Management established the "PRFM 107.5 News Channel" as radio news on November 8, 2009. PRFM Radio has changed its broadcasting approach, adopting a news-talk format in place of the popular music-only radio format. Since 2007, when it was still called Radio Mustika, PRFM Radio has digitized it through streaming at www.mustikafm.com. This includes "radio profiles, broadcast programs, light articles, and broadcast broadcasts." At that time, digitalization was not widely known. Radio listeners at that time consisted of music and entertainment seekers who listened to conventional radio. As a result, Mustika Radio's streaming broadcasts have limited listeners.

PRFM Radio can be said to have undergone a certain acceleration. This is related to efforts to expand access to broadcast content by opening an information space for listeners who want to convey information from their environment (Journalism Citizens). PRFM opens a broadcast slot called Citizen Report every morning, where the radio announcer reads out content submitted by listeners related to any public service.

Table 3: Usability implication digital devices on Radio PRFM

Type of Digitization	Moneymaker / Advertising	Approaching Listeners
1. Streaming		√
2. Twitter		√
3. Instagram	√	
4. Aplikasi Android radioonline.com	√	
5. You Tube	√	
6. Website	√	
7. Tik Tok		√
8. Snack Video		√

Source: Data processing from Radio Delta interviews and documents (2022)

PRFM takes advantage of Internet digitization to increase audience numbers, interactive services, and intimacy, according to Muhamad Fauzi, editor-in-chief of PRFM News Channel, West Java, Indonesia (personal communication, January 29, 2023). To that end, PRFM Radio has developed several tools, including an Android application (2016), PRFM streaming on radioonline.com (2018), and partnerships with Spotify and Noice in 2022. PRFM Radio has also developed platforms in social media: Twitter (June 2010), Instagram (May 2014), YouTube (August 2018), TikTok (September 2020), and Snack Video (2021).

According to Iqbal Pratama Putra, News and Public Relations Editor, PRFM News Channel, West Java, Indonesia (personal communication, January 29, 2023), PR FM streaming broadcasts are broadcast by the website manager prfmnews.com changed its name to www.prfmnews.id in 2019 and introduced a streaming service in 2021. In developing public services, PRFM Radio launched a website, www.mapaybandung.com (2021), to channel various actual, widespread, and popular information, known as clickbait, on various topics, including Korean drama, mysticism, and various artists.

PRFM reorganized its broadcast production and distribution. News and information broadcasts are designed to fit into message platforms and digital networks. PRFM's social media messages often become news material or information on PRFM radio broadcasts. According to Priyadi Zalman Yudha, General Manager of PRFM News Channel, West Java, Indonesia (personal communication, December 12, 2023), any information is processed into material for radio broadcasts, online media readers, and social media users.

DISCUSSION

Radio needs listeners. Radio listeners must be served, their needs must be met, their loyalty must be maintained, and their numbers must increase. For this reason, broadcast radio stations must always maintain their "voice". PRFM Radio, Delta Radio, and Dahlia Radio are commercial broadcast radio stations. The strategies and broadcast formats of the three radio stations have evolved to cater to listener preferences. Initially, the three radios aimed and formatted their transmissions towards entertainment (music) and some information (as a bonus). The development of these three radios followed the development of the radio industry, which, in the 1970s, emphasized entertainment. Likewise, with the equipment and programming of the radio broadcasting industry, these three radios are also developing.

However, PRFM Radio differs in its broadcast orientation. In its development, PRFM changed its orientation and broadcast format to become information and news radio, with a focus on community-based news and information. Broadcasting orientation changed to participatory media. Listening audiences are invited to participate in program discussions, information sharing, and so on (Taibi et al., 2022). The audience is framed in the format of a community interested in news and information.

The various developments carried out by the three radio stations require a budget that is managed within the framework of the media business. The three radios carry out business management efforts. Their operational financing is obtained, among others, from advertising. Radio Delta presents entertainment music programs with the "best" songs to reach a wider audience and attract advertisers. Radio Dahlia continues to develop broadcasts of dangdut music and da'wah, as well as off-air programs so that the audience of listeners will increase and advertisers will be interested. PRFM radio developed Talk and News broadcasts to serve the needs of everyday listeners and get advertisers to invest.

When digitalization technology came, the world of radio broadcasting in Bandung also followed its development. The world of radio broadcasting in Bandung has used digitization

since the beginning of the new millennium. Digitalization is used by various radios in Bandung as one of the competitive advantages in the radio industry.

In 2008, when Facebook became popular in Indonesia, several broadcast radio stations also used the social media platform to communicate with their listeners. According to Achmad Abdul Basith Patria, deputy chairman of the West Java KPID (personal communication, February 3, 2023), several radio stations in Bandung already have Facebook accounts. It is still a "Facebook profile" with fewer than 5,000 friends, used for content distribution and engagement with listeners. When the "Facebook Page" feature was introduced, radio broadcasters took advantage of this by generating a larger audience of as many listeners as possible who "liked" the Facebook radio broadcast page. Then came Instagram, Twitter, YouTube, and TikTok, all of which radio operators took advantage of and developed into content distribution channels.

According to Patria, radio broadcasts use various categories of digitization. 1) As a content distribution channel. 2) As a channel of interaction with listeners, pressure is placed on the comments section to observe listeners' responses. 3) Methods for conducting audience research, including research on broadcast content, such as distributing questionnaires via Google Forms or social media or creating opinion polls to assess programs via social media 4) Sources of income come from endorsements or advertisements on social media accounts or websites (direct advertising), from third-party companies (advertising agencies), or programmatic advertising agencies (such as AdSense and Dable). Some are also turning to digital applications to create their digital radio ecosystems, identifying audio content creators, including celebrities.

Radio managers in Bandung take advantage of the internet by creating websites, video platforms, digital applications, and social media. Apart from using analogue telephones, listeners are increasingly interacting via digital telephones. They no longer depend on FM frequencies and start adding new channels (digital streaming) or Digital Audio Broadcasting. Expansion of internet broadcast coverage beyond the reach of traditional audiences. They take advantage of online content as a space for interaction. Interactive online content for radio entertainment includes virtual information spaces, virtual promotional spaces, virtual distribution spaces, and virtual communication spaces.

Radio Delta, Radio Dahlia, and PRFM did the same thing. The three radios enter the media dimension of the digital industry, which brings their institution into a multitasking and functional format in terms of production, dissemination, and exchange of messages across multiple platforms and in a network that facilitates interaction and collaboration.

Table 4: Digital device optimization (Broadcast support)

Delta https://www.deltafm.net	Dahlia https://www.radiodahliafm.com	PRFM https://prfmnews.pikiran-rakyat.com/ https://mapaybandung.pikiran-rakyat.com/
<ol style="list-style-type: none"> 1. Streaming (2018) 2. Facebook (2018) 3. Twitter (2018) 4. YouTube (2018) 5. Instagram (2018) 6. WhatsApp (2018) 	<ol style="list-style-type: none"> 1. Streaming (2018) 2. Facebook (2018) 3. Instagram (2018) 4. YouTube (2018) 5. TikTok (2018) 	<ol style="list-style-type: none"> 1. Streaming (2010) 2. Twitter (2010) 3. Instagram (2014) 4. Aplikasi Android 5. Radio Online (2018) 6. YouTube (2018) 7. TikTok (2020) 8. Snack Video (2021)

Source: Data categorization based on research result (2022)

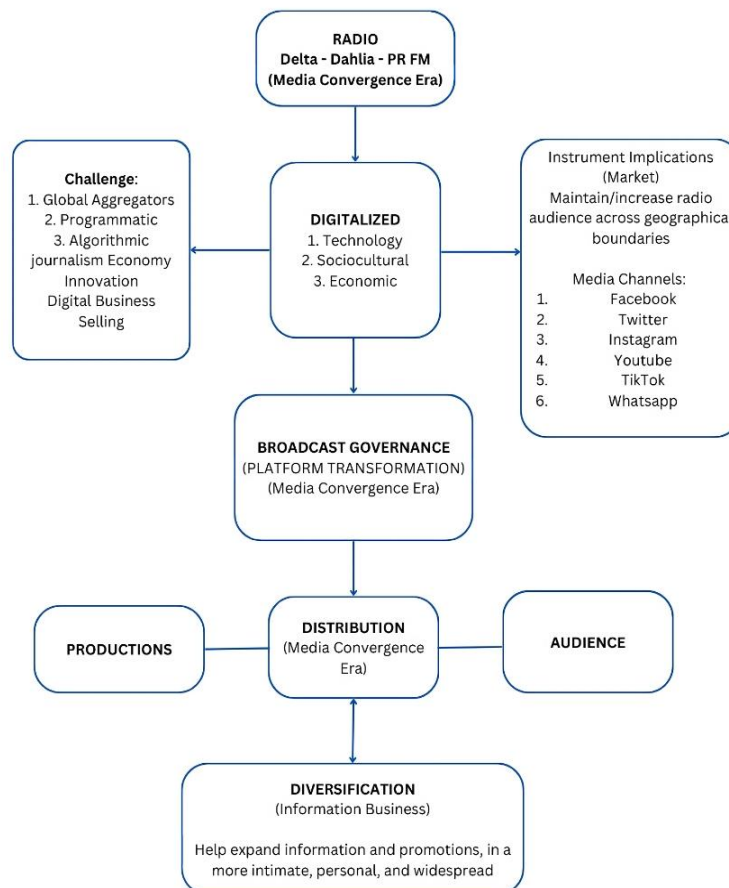
For Radio Delta, as an entertainment radio, digitalization is a complementary action to radio broadcasting. Digitization helps broadcast various radio programs, promote off-air activities, and monitor competitor developments. Gilang Prambudhi, Operational Manager for the Delta Female Indonesia Network at Delta FM Radio Bandung, West Java, Indonesia (personal communication, January 26, 2023) states, "We utilize spaces on social media to promote these activities."

Likewise, for Radio Dahlia, digitalization is a complement to broadcast services. Social media platforms contributed to the enthusiasm and large audience attending the off-air events. The audience came from various cities. "This has a positive impact on Radio Dahlia's image," explained Helsa Sukasah, Dahlia FM Bandung Radio Station Manager (personal communication, February 4, 2023).

In contrast to Radio PRFM, as an information/news radio, digitalization is a tool to develop business. Their branding, promotional efforts, and market expansion have had a significant impact. PRFM's business expansion, using digitalization, increased revenue, according to Priyadi Zalman Yudha, General Manager of PRFM News Channel PRFM, West Java, Indonesia (personal communication, December 12, 2023).

For this reason, PRFM is consolidating human resources (HR). Human resources from radio and online are arranged to complement, assist, and coordinate the development of PRFM as a broadcast radio station and online media site. This is manifested in the integration of media under PRFM in terms of updating data and news content.

Figure 1: Radio digitalization change (Platform and business transformation)



Source: Data categorization based on research result (2022)

PRFM Radio is taking a step towards digital convergence radio. PRFM is no longer engaged in broadcasting (audio) radio. PRFM expanded its business from the radio industry to the digital media industry, including websites and social media platforms. PRFM introduced many innovations, transformed technology and manufacturing exploitation, expanded broadcast access, and reached previously unreachable audiences.

PRFM utilizes Instagram, for example, "for various information containing news or excerpts from our website, as well as advertisements," according to Priyadi Zalman Yudha, General Manager of PRFM News Channel PRFM, West Java, Indonesia (personal communication, December 12, 2023). Every PRFM radio broadcast is designed to fit into an online media channel format, with categories such as News Update, Sports News, Breaking News, Weather Info, Lifestyle, Ladies Corner, and Persib News. Message after message is designed to generate advertising revenue that has a positive impact on the business.

PRFM's convergence has successfully utilized information business opportunities, at the beginning of the digital era, according to the Business Director of Pikiran Rakyat, Januar P. Ruswita (personal communication March 1, 2023). PRFM entered the realm of online media information business, which receives revenue from direct advertising. The results were very significant. However, later on, it experienced a decline. The income was obtained from two online portals created by PRFM.

PRFM's online media has become a business development model for the Pikiran Rakyat Media Network (PRMN) group, according to Jiwa Perdamaian, Vice President (VP) Operations of Pikiran Rakyat Media Network (personal communication, March 4, 2023). PRMN manages dozens of online media. In terms of revenue, PRFM's revenue from online advertising is sufficient. In addition, www.mapaybandung.com often generates substantial revenue. Its content creators, based on an incentive system, often receive large incentives. On the other hand, PRFM's online content generates high clickbait, which attracts advertisers.

These advertisers come from the private sector and the government, according to Priyadi Zalman Yudha, General Manager of PRFM News Channel PRFM, West Java, Indonesia, (personal communication, December 12, 2023). In 2022, PRFM's online media advertising revenue is considered high. Endorsement revenue, and AdSense/programmatic advertising, from PRFM's digital platforms, are high: the overall revenue of a broadcast radio company. The amount of digital revenue exceeds regular advertising revenue.

CONCLUSION

In terms of technology, sociocultural, economic, and generational aspects of broadcast radio management, as well as production, distribution, and audience reception, digitalization has brought about three changes to radio in Indonesia. The broadcast radio management paradigm introduces new mandates, missions, and aspirations for public services (Cwynar & Fauteux, 2020). These changes bring new media tools for maintaining, expanding, and sustaining audiences, as well as broadcasting power that transcends cities and countries. The power of music entertainment broadcasts, from the local (*dangdut*) to the contemporary (contemporary hits), is broadcast and disseminated through digital media managerial formats, particularly for entertainment radio, which uses various digital Internet platforms to inform and promote their broadcast content.

Previously restricted, closed, and difficult-to-reach audiences' communication, information, and promotion spaces are now unlimited, open, and simple to reach audiences. Facebook, Twitter, Instagram, YouTube, TikTok, and WhatsApp have become the chain of

entertainment radio in terms of approaching audiences in a more intimate, individualized, and extensive manner. Various interactive channels are developed to expand networks (Ferguson & Greer, 2011; Owen, 2018).

Using interconnected computer systems and servers, they were able to sell advertisements without disrupting the broadcast signal. Detailed radio program content, disc jockey biographies, and other information are disseminated more efficiently: promotional content is disseminated with greater precision, taking into account the demographic and psychographic differences of each radio station's audience. The Web presence provides a means to serve advertisers who lament the absence of visual displays, detailed information provision, and promotional coupons from other radio companies (Antwi-Boateng et al., 2023; Medina et al., 2022).

The digitization of news/talk radio creates a larger promotional space, more robust interactive services, and even a distinct business space. To maintain listener loyalty and contentment, news-talk radio managers initially created diverse content in various service formats (Steinfeld & Laor, 2019; Laor & Steinfeld, 2018). Utilizing online interaction formats, they widened the scope of information services during its development (Ferguson & Greer, 2011).

Digitalization facilitates the diversification of businesses. The causal fusion of conventional radio (old media) and online media (new media) occurs in a relationship that is complementary and mutually beneficial (Owen, 2018; Mitchell et al., 2016). Digitalization is no longer used for streaming transmissions. In approaching the market, they are acquiring a new business step, namely websites. News-talk radio utilizes websites to establish information businesses, not just for branding and promotion (Medina et al., 2022).

Multiple digital technology options are intended to complement one another for business purposes. Radio station administrators, along with their institutions and audiences, create clickbait distribution opportunities (Lowe & Maijanen, 2019). With diverse information products and manufacturing, radio companies introduce several innovations to the market for information (Lokshin & Knippen, 2013). Digital media portals became a development sector. In the radio broadcasting industry, the proliferation of competition patterns was facilitated by news-talk radio operators (Halbert & McDowell, 2013). They wish to open up the monopoly space of the information business, by designing the structure, behaviour, and performance of the managerial design of the radio industry (Bates & Chambers, 1999) and more revenue space (Ferguson & Greer, 2011).

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REFERENCES

- Achmad, Z. A., Ida, R., Mustain, & Lukens-Bull, R. (2021). The synergy of Islamic da'wah and Madura culture programmes on Nada FM Sumenep radio, Indonesia. *Jurnal Komunikasi: Malaysian Journal of Communication*, 37(2), 111–129. <https://doi.org/10.17576/JKMJC-2021-3702-08>
- Antwi-Boateng, O., Musa, M. D., & Andani, M. A. I. (2023). Audience listenership of FM radio: A case study of rural development in Northern Ghana. *Cogent Arts and Humanities*, 10(1), 2184750. <https://doi.org/10.1080/23311983.2023.2184750>
- Bates, B. J., & Chambers, T. (1999). The economic basis for radio deregulation. *Journal of Media Economics*, 12(1), 19–34. https://doi.org/10.1207/s15327736me1201_2
- Brewer, Paul R. & Pritchard, David (2008). Ideology and public trust in radio as a source for local news. *Journal of Radio & Audio Media*, 15(2), 124–135. <https://doi.org/d8p5zq>
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches*. SAGE Publications.
- Criticos, H. (2021). The constraining effect of internet radio. *Journal of Radio and Audio Media*. <https://doi.org/10.1080/19376529.2021.1937629>
- Cwynar, C., & Fauteux, B. (2020). Introduction to public radio and music in the streaming era symposium music in the public service: Public radio and music in the streaming era. *Journal of Radio and Audio Media*, 27(1), 4–7. <https://doi.org/kvxf>
- Edosomwan, S., Prakasan, S.K., Kouamé, D., Watson, J., & Seymour, T. (2011). The history of social media and its impact on business. *Journal of Applied Management and Entrepreneurship*, 16(3), 79–91.
- Ferguson, D. A., & Greer, C. F. (2011). Local radio and microblogging: How radio stations in the U.S. are using Twitter. *Journal of Radio & Audio Media*, 18(1), 33–46. <https://doi.org/10.1080/19376529.2011.558867>
- Fernández-quijada, D. (2017). Distinctiveness of public radio in the age of digitization. *Journal of Radio & Audio Media*, 24(1), 77–89. <https://doi.org/kvvh>
- Geller, V. (2011). *Beyond powerful radio: A communicator's guide to the internet age — News, Talk, information & personality* (2nd ed.). Focal Press.
- Glantz, M. (2016). Internet radio adopts a human touch: A study of 12 streaming music services. *Journal of Radio and Audio Media*, 23(1), 36–49. <https://doi.org/gc6xq2>
- Halbert, J. C. C., & McDowell, W. S. (2013). Sustaining local radio journalism: A case study of the WLRN/Miami Herald strategic alliance. *Journal of Radio and Audio Media*, 20(1), 17–34. <https://doi.org/10.1080/19376529.2013.777338>
- Hallett, L., & Hintz, A. (2010). Digital broadcasting - Challenges and opportunities for European community radio broadcasters. *Telematics and Informatics*, 27(2), 151–161. <https://doi.org/10.1016/j.tele.2009.06.005>
- Harrison, H., Birks, M., Franklin, R., & Mills, J. (2017). Case study research: Foundations and methodological orientations. *Forum Qualitative Sozialforschung*, 18(1), 19. <https://doi.org/10.17169/fqs-18.1.2655>
- Hendrarto, D., & Ruliana, P. (2019). Strategi public relations radio Delta FM dalam mempertahankan pendengar melalui media sosial. *Inter Komunikasi*, 4(2), 166–178. <https://journal.interstudi.edu/index.php/InterKomunika/article/view/337>
- Hermansky, J. (2022). *Impact of community radio on community development in the United States* (Issue Publication No.3248) [Thesis, SIT Graduate Institute in Brattleboro, Vermont, USA.]. <https://digitalcollections.sit.edu/capstones/3248>

- Hirschmeier, S., Tilly, R., & Beule, V. (2019, August 1). Digital transformation of radio broadcasting: An exploratory analysis of challenges and solutions for new digital radio services. *Proceedings of the 52nd Hawaii International Conference on System Sciences (HICSS-52)*, 2019-January, Grand Wailea, Hawaii. <https://doi.org/kvxxm>
- Jauert, P., Ala-Fossi, M., Föllmer, G., Lax, S., & Murphy, K. (2017). The future of radio revisited: Expert perspectives and future scenarios for radio media in 2025. *Journal of Radio and Audio Media*, 24(1), 7–27. <https://doi.org/ggt3w3>
- Krause, A. E. (2020). The role and impact of radio listening practices in older adults' everyday lives. *Frontiers in Psychology*, 11(December), 1–11. <https://doi.org/gp6q35>
- Laor, T., & Steinfeld, N. (2018). From FM to FB: Radio stations on Facebook. *Israel Affairs*. <https://doi.org/10.1207/s15506843jrs1002>
- Leavy, P. (2017). *Research design: Quantitative, qualitative, mix methods*. Guildford Press.
- Loeser, H. (2012). O'Neill, Digital radio in Europe: Technologies, industries, and cultures. *Journal of Radio & Audio Media*, 19(1), 130–132. <https://doi.org/kvxq>
- Lokshin, B., & Knippen, C. (2013). Innovativeness and broadcaster listenership: Evidence from the German radio industry. *Journal of Media Business Studies*, 10(2), 1–16. <https://doi.org/10.1080/16522354.2013.11073561>
- Lowe, G. F., & Maijanen, P. (2019). Making sense of the public service mission in media: Youth audiences, competition, and strategic management. *Journal of Media Business Studies*, 16(1), 1–18. <https://doi.org/10.1080/16522354.2018.1553279>
- Lull, J. T., Johnson, L. M., & Sweeny, E. (1978). Audiences for contemporary radio formats. *Journal of Broadcasting*, 22(4), 439-453. <https://doi.org/dt564f>
- Macfarland, D. T., & Shane, E. (1995). Modern radio formats: Trends and possibilities symposium. *Journal of Radio Studies*, 3(1), 1–9. <https://doi.org/dpx799>
- Martínez-Costa, M. d. P., & Prata, N. (2017). The radio in search of its audience: towards diversified and multiplatform listening. *Intercom: Revista Brasileira de Ciências Da Comunicação*, 40(3), 109–128. <https://doi.org/10.1590/1809-5844201737>
- Medina, E., Mazaira, A., & Alén, E. (2022). Innovation in the broadcasters' business model: A bibliometric and review approach. *European Research on Management and Business Economics*, 28(3). <https://doi.org/10.1016/j.iedeen.2022.100202>
- Mitchell, A., Holcomb, J., & Weisel, R. (2016). State of the news media. *Pew Research Center*. <https://www.pewresearch.org/journalism/2016/06/15/state-of-the-news-media-2016/>
- Mohamad, F. F. (2023). Enhancing listeners' social well-being through radio listening: A qualitative study among Klang Valley radio listeners. *Jurnal Komunikasi: Malaysian Journal of Communication*, 39(1), 372–385. <https://doi.org/10.17576/JKMJC-2023-3901-21>
- Muela-Molina, C., Perelló-Oliver, S., & Hormigos-Ruiz, J. (2016). Unidentified advertising: Separating contents and radio owner responsibility. *European Journal of Communication*, 31(5), 519–535. <https://doi.org/10.1177/0267323116666480>
- Ofcom (Office of Communications). (2019, September 18). Diversity and equal opportunities in television. Monitoring report on the UK broadcasting industry. https://www.ofcom.org.uk/data/assets/pdf_file/0028/166807/Diversity-in-TV-2019.pdf

- O'Neill, B. (2007). Digital audio broadcasting in Canada: Technology and policy in the transition to digital radio. *Canadian Journal of Communication*, 32(1), 71–90. <https://doi.org/10.22230/cjc.2007v32n1a1809>
- Owen, D. (2018). The new media's role in politics. In BBVA, & OpenMind (Ed.), *The age of perplexity: Rethinking the world we knew*. Penguin Random House Grupo Editorial. <https://www.bbvaopenmind.com/en/articles/the-new-media-s-role-in-politics/>
- Owen, D. (2019). The past decade and future of political media: The ascendance of social media. In BBVA (Ed.), *Towards a new enlightenment? A transcendent decade* (p. 347-365). OpenMind. <https://www.bbvaopenmind.com/en/articles/the-past-decade-and-future-of-political-media-the-ascendance-of-social-media/>
- Powell, L., & Ibelema, M. (2000). Credibility of radio news. *Journal of Radio Studies*, 7(1), 70-75. https://doi.org/10.1207/s15506843jrs0701_7
- Rachmiatie, A., Kristanto, A. B., Mulyana, R., Arief, M., & Nur, A. K. (2020, March 3). Challenges of local radios in advertising their business. *Proceedings of the 2nd Social and Humaniora Research Symposium (SoRes 2019) (Advances in Social Science, Education and Humanities Research, Vol. 409, pp. 391–395)*. Bandung, West Java, Indonesia. <https://doi.org/10.2991/assehr.k.200225.083>
- Ren, W., & Chan-Olmsted, S. M. (2004). Radio content on the world wide web: Comparing streaming radio stations in the United States. *Journal of Radio Studies*, 11(1), 6–25. https://doi.org/10.1207/s15506843jrs1101_3
- Sabatier, J. V. (2019, October 31). The media landscape: From showtime to screen time. SSRN. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3302030
- Sauls, S. J. (2011). Locally and free: What broadcast radio still provides. *Journal of Radio & Audio Media*, 18(2), 309–318.
- Schiffman, J. R. (2017). Undervaluing mutual: The FCC's missed opportunity to restructure radio broadcasting in the new deal era. *Journal of Radio and Audio Media*, 24(2), 302–319. <https://doi.org/10.1080/19376529.2017.1345912>
- Shane, E. (2016). The state of the industry : Radio's shifting paradigm. *Journal of Radio Studies*, 5(2), 1-7, <https://doi.org/10.1080/19376529809384541>
- Spalding, J. W. (1963). 1928: Radio becomes a mass advertising medium. *Journal of Broadcasting*, 8(1), 31–44. <https://doi.org/10.1080/08838156309386085>
- Steinfeld, N., & Laor, T. (2019). New arenas or more of the same? Public and commercial radio stations on Facebook. *Journal of Radio & Audio Media*, 26(2), 194–209. <https://doi.org/10.1080/19376529.2018.1431890>
- Šulentić, A., & Vukić, T. (2022). Commercial format FM radio stations for the young in Croatia from the perspective of the education of journalists. *Media Education (Mediaobrazovanie)*, 18(3), 499–520. <https://doi.org/10.13187/me.2022.3.499>
- Taibi, M., Mersat, N. I., & Gedat, R. (2022). Older adult listeners' perception of the language used and quality of the programme at Wai FM Iban. *Jurnal Komunikasi: Malaysian Journal of Communication*, 38(4), 412–424. <https://doi.org/kvx7>
- van Dijck, J. (2013). *The culture of connectivity: A critical history of social media*. Oxford University Press.
- Villi, M., & Picard, R. G. (2019). Transformation and innovation of media business models. In M. Deuze & M. Prenger (Eds.), *Making media: Production, practices, and professions* (pp. 121-132). Amsterdam University Press. <https://doi.org/10.2307/j.ctvcj305r.11>

- Wegwu, M. E. (2020). Diversification strategies and business performance in a competitive industry. *JournalNX - A Multidisciplinary Peer Reviewed Journal*, 6(8), 190-199. <https://repo.journalnx.com/index.php/nx/article/view/3843>
- Willis, E. E., & Aldridge, H. B. (1992). *Television, cable, and radio: A communications approach* (1st ed.). Pearson College Div.
- Xu, J. (2015, March). Analysis of competition between radio & TV and network media. *Proceedings of the 2015 International Conference on Education Technology and Economic Management* (Advances in Social Science, Education and Humanities Research)(pp. 404-408). Atlantis Press. <https://doi.org/10.2991/icetem-15.2015.61>
- Yin, R. K. (2014). *Case study research design and methods* (5th ed.). SAGE Publications, Inc.
- Yin, R. K. (2018). *Case study research and applications design and methods* (6th ed.). SAGE Publication, Inc.