

## **Development of a Radio Broadcasting Model to Promote the Propagation of Buddhism in Nakhon Ratchasima Province**

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### **Abstract**

This qualitative research aimed to investigate the current radio broadcasting situation to promote Buddhism propagation in Nakhon Ratchasima Province, Thailand, and to develop a radio broadcasting model to promote Buddhism propagation in Nakhon Ratchasima. Purposive sampling was employed to select 106 informants in this study. The informants were classified into three groups: experts, practitioners, and general informants. Data were collected by using a questionnaire, an observation form, an interview guide, and a focus group discussion form. The data were presented with descriptive statistics. The findings showed that most radio stations in Nakhon Ratchasima received the signals of Buddhism propagation content from Radio Thailand (central). The content included preaching, dharma lecture, sermons of the Buddha, and anecdotes about Buddhist religious days. Radio stations in Nakhon Ratchasima that produce original content to propagate Buddhism were moderated by monks or devout laymen with technicians assisting with live or recorded broadcasting. Regarding the model for radio broadcasting to promote Buddhism propagation in Nakhon Ratchasima, there were eight significant elements. The first element was the target group with age ranging from 55 – 65. The second element was the content of the programs, including how to be good sons and daughters to parents, how to be good students to teachers, how to be good friends, how to be good citizens, how to be good disciples to the Buddha, nature of life, principles in life, and happy life. The third element was the presentation methods, including magazine programs, talk programs, and question and answer programs. The fourth element was moderators, including monks or laymen or both monks and laymen with Buddhism knowledge and the ability to present the content in an interesting manner, use easy language, and communicate in central Thai, Pali, Sanskrit, and Buddhist expressions accurately. The fifth element was language; moderators should use the central Thai language as the main communication medium while inserting Korat dialect, Korat folk songs, and Lae songs in the Korat dialect. The sixth element was sound, including speech, audio narration, music, and sound effect. The seventh element was the length; the suitable length should be 20 – 30 minutes. The eighth element was broadcasting channels, including Facebook Live, Podcast, YouTube channels, and Line.

**Keywords :** Model, Radio broadcasting program, Buddhism propagation introduction

### **Introduction**

The stability of Thai society from past to present is partly due to Buddhism. Buddhism is regarded as a national religion as it plays a significant role in Thai society. The Thai people apply Buddhist teachings into their daily life to the extent that the rest of the world regards them as friendly, kind, united, and merciful. The Constitution of the Kingdom of Thailand B.E.

2560 (The Constitution of the Kingdom of Thailand B.E. 2560, 2017) was announced in the Government Gazette Article 6 Directive Principles of State Policies, Section 67, states that the State should support and protect Buddhism and other religions. In supporting and protecting Buddhism, which is the religion observed by the majority of Thai people for a long period of time, the State should promote and support education and dissemination of dharmic principles of Theravada Buddhism for the development of mind and wisdom development, and shall have measures and mechanisms to prevent Buddhism from being undermined in any form. The State should also encourage Buddhists to participate in implementing such measures or mechanisms. Mass communication technologies should be used to suit the modern generation, including textbooks, print media, radio broadcasting, television, as well as several other social networks.

One of the most popular mass media is radio broadcasting due to its accessibility to a large crowd. To explain the significance of radio broadcasting, explains that Radio broadcasting can transmit radio waves over long distances (Siriyuvasak, U., 2004). Listeners can turn on the radio receiver and listen to signals from any station, making it possible to convey knowledge and news to a large number of audiences at the same time. Radio broadcasts can transmit information faster than other media because broadcasting can be done easily; only one person is needed to talk or start broadcasting instantly. Regarding the number, there are numerous radio broadcasting stations in every region of Thailand combined, allowing audiences to choose the programs that they like. In term of quality, radio signals are transmitted in the stereo system with exceptionally clear sound quality. Radio broadcasting is highly persuasive. Despite having sound as its sole medium, the power of sound, speech, speaking techniques, and abilities of program moderators who have excellent speaking skills makes audiences understand the content clearly. These factors help audiences visualize the image, and the speech is highly persuasive. Therefore, radio broadcasting is a tool that can propagate Buddhism very quickly and extensively.

The trend of social changes will occur rapidly. Communication gadgets are very common in people of any age. News springs up, and communication takes place within a flash of time. As a result, the number of people listening to the radio has started to decline. Audiences do not have time to listen to the radio broadcasts for too long. Sometimes they cannot complete listening to the entire program. In addition, radio programs tend to present sermons in Pali, while most listeners do not have a profound understanding of Pali or Sanskrit. Given the complexity of Buddhist dharma, audiences might perceive inaccurate principles and, as a consequence, are unable to apply them. Some radio moderators with monotonous pace and disorganized structure fail to interest audiences. Music in the program is also an essential factor. Repeated background music makes audiences feel bored and not interested in following the program with the abovementioned characteristics. Buddhism should continue to be propagated through radio broadcasting, but with a new presentation model, accurate content, and more modern and interesting techniques to attract various target groups. Despite rapid social changes, the propagation of Buddhism through multiple forms of media shall persist endlessly.

As such, the researchers have become motivated to develop the model for radio broadcasting to promote Buddhism propagation in Nakhon Ratchasima, objectives of the research to investigate the current situation of radio broadcasting to promote Buddhism in Nakhon Ratchasima province and to develop the model for radio broadcasting to promote Buddhism in Nakhon Ratchasima province. Where the majority of the population are Buddhists. In 2018, Nakhon Ratchasima was ranked number one in Thailand with 2,107 Buddhist temples. With the new model, radio broadcasting to promote Buddhism in Nakhon Ratchasima is expected to become more effective.

## **Objectives of the research**

1. To investigate the current situation of radio broadcasting to promote Buddhism in Nakhon Ratchasima province.
2. To develop the model for radio broadcasting to promote Buddhism in Nakhon Ratchasima province.

## **Research methodology**

In this study, the qualitative approach was used. The secondary data were collected from books, textbooks, documents, manuals, papers, periodicals, websites, research articles, independent studies, and theses. The primary data were collected from the field survey, participant and non-participant observations, structured and unstructured interviews, and group discussions. The field data were collected using a questionnaire, an observation form, and a group discussion form. Subsequently, the data were manipulated, verified, analyzed, and presented according to the study's objectives using descriptive statistics.

## **Representative sample**

The researcher selects a specific group of informants. The informants involved in this research were divided into 3 groups, consisting of key information, casual information and general information as follows:

1. Key information, who provide important information and are related to radio stations, consisting of 1) government key information, namely 3 cultural academics, 3 mass communication academics, and 3 mass communication professionals. And 2) a group of private sector experts, consisting of 3 representatives of mass media organizations and 10 entrepreneurs, totaling 22 people.
2. Casual information is a group of informants who are related to radio broadcasting work, such as the head of the program department. List producer program staff moderators or people involved in radio broadcasting, etc., totaling 14 people.
3. General information is a group that provides information about radio broadcasting programs, namely people in the area of Muang district, Nakhon Ratchasima province by purposively selected by the researcher, 70 people.

## **Research instruments**

1. Observation form is the research instrument that the researchers use to observe the general condition of the study area. In this study, both participant observation and non-participant observation methods were used.
2. Interview guide is the research instrument that the researchers used to interview the informants. Both structured and unstructured interview approaches were used in this research. The interview guide included questions about the current situation of radio broadcasting and the model of radio broadcasting to promote Buddhism propagation according to the objectives of the research. However, the structured interview guide was utilized for to collect the data on the current model of radio broadcasting to promote Buddhism propagation from the informants using the in-depth interview technique. The purpose was to ensure that the informants could think about the current situation carefully and accommodate the model of radio broadcasting to promote Buddhism propagation.

3. Focus group discussion form is the instrument that the researchers used to discuss with the informants. The researchers used this form in conjunction with grouping the informants to discuss the topics that satisfied the objectives of the research.

## **Validation of the research instruments**

The researchers discussed the research instruments with the thesis committee to validate their content and language. Subsequently, the instruments validated by the thesis committee were evaluated by a team of experts for the index of item objective congruence (IOC). The experts who evaluated the research instrument included a cultural expert, a mass communication expert, and a mass communication scholar. It was found that the IOC evaluation results ranged from the criteria of 0.60 – 1.00, which were adequate and acceptable to be used for data collection.

## **Data collection**

The researcher scoped the research period from January 2019 to July 2020. The data collection procedures are discussed in detail below.

- 1 Secondary data were collected from relevant literature, such as books, documents, textbooks, manuals, papers, periodicals, websites, research articles, independent studies, and theses.
- 2 The primary data were collected from the field survey in order to acquire the actual data to fulfill the research objectives. The primary data were collected by using the following techniques:
  - 2.1 Observation: The researchers used this technique to observe the general condition in the study area. Both participant observation and non-participant observation techniques were used in this study.
  - 2.2 Interview: In this study, both structured and unstructured interview techniques were used. The interviewees were classified into three groups: experts (including 22 interviewees providing key information), practitioners (14 interviewees providing casual information), and general interviewees (including 70 interviewees providing general information).
  - 2.3 Focus group discussion: The researchers conducted a focus group discussion with informants. The discussion topics involved the data regarding the development of a model for radio broadcasting to promote Buddhism propagation.

## **Data analysis**

To analyze the secondary data from relevant literature, the researchers sorted the data according to the research objectives. For the field data analysis, the researchers analyzed the content of the data, sorted them into significant issues, and summarized the data using the descriptive analysis approach according to the research objectives.

The analysis of the data to develop the model for radio broadcasting to promote Buddhism propagation in Nakhon Ratchasima was divided into three steps. In the first step, the researchers drafted the model of radio broadcasting to promote Buddhism propagation in Nakhon Ratchasima. The data were summarized based on the significant issues according to the research objectives. Secondly, the model for radio broadcasting to promote Buddhism propagation in Nakhon Ratchasima was developed. Representatives of the informants were

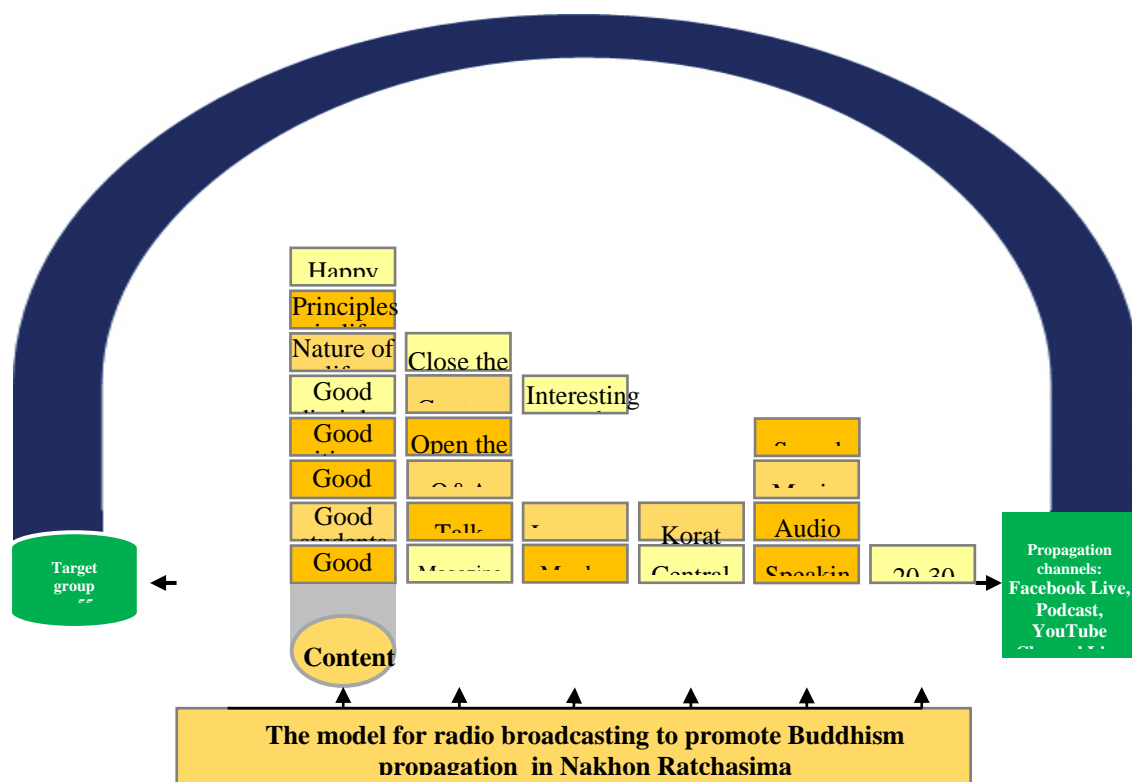
asked to review and acknowledge the model for radio broadcasting. Thirdly, the model for radio broadcasting to promote Buddhism propagation in Nakhon Ratchasima was acknowledged by representatives of the informants.

## Results

### *The current situation of radio broadcasting to promote Buddhism propagation in Nakhon Ratchasima*

The research results were found that the government radio station in Nakhon Ratchasima province was set up to share government data, information and policies to people. According to the Constitution of the Kingdom of Thailand, Buddhist Era 2540 (The Constitution of the Kingdom of Thailand, B.E. 2540, 1997), section 40. Transmission frequencies for radio or television broadcasting and radio telecommunication are national communication resources for public interest, citizens were able to own a radio station. For this reason, there were over 400 community radio in Nakhon Ratchasima province, were presented news, knowledge, entertainment, art and culture, children and youth, education and activities through talk program, news program, variety program and magazine program according to the NBTC's criteria. Because of media reform in Thailand and political violence, the illegal community radio station was strictly abide by NBTC regulations.

The most of radio station in Nakhon Ratchasima province receive broadcast signal from the radio Thailand. There are sermons and lectures on the Buddha's doctrine and inserting knowledge of important religious days. The mcunkr Buddhist radio broadcasting station has been produce their own programs both live and recorded program The problems of broadcasting programs include audience, program content, moderator, present, language, sound, time length and channel.



**Figure 1:** *The model for radio broadcasting to promote Buddhism propagation in Nakhon Ratchasima*

***Development of the model for radio broadcasting to promote Buddhism propagation in Nakhon Ratchasima.***

The format of radio program for Buddhism dissemination in Nakhon Ratchasima province includes 7 compositions : 1. audience age between 55-65 years, 2. content about the childbearing of parents, being a good disciple of teachers, being a good friend of friends, good citizenship, being a good disciple of the prophet, nature of life, principles for living and a happy life, 3. program presentation such as magazine program, talk program and answer the question program, 4. moderator is a monks or laymen or monks and laymen who has knowledge of Buddhism, has an interesting presentation, can talk to the audience in easy-to-understand language and speaks Thai, Pali, Sanskrit and Buddhism correctly, 5. language the moderators should speak in central Thai dialect, 6. sound such as voice, music and sound effects, 7. program length 20-30 minutes and 8. channel such as facebook Live, podcast, youtube and line.

## **Discussion**

***The current situation of radio broadcasting to promote Buddhism propagation in Nakhon Ratchasima.***

It was found that the government radio stations in Nakhon Ratchasima were established to provide guidance for radio broadcasting, disseminating news, information, and government policies to radio program moderators to communicate with the people in Nakhon Ratchasima directly. The Constitution of the Kingdom of Thailand B.E. 2540 (The Constitution of the Kingdom of Thailand, B.E. 2540, 1997) stipulates that "transmission frequencies for radio or television broadcasting and radio telecommunication are national communication resources for the public interest." Therefore, groups of citizens, stores, schools, temples, organizations, whether public or private, are allowed to establish their radio station under the guideline for operating community radio stations. For this reason, Nakhon Ratchasima, with more than 400 radio stations, is the top rank for the number of radio stations, particularly community radio stations. Therefore, the State has to regulate radio stations to ensure that they operate for public interests. Radio stations in Nakhon Ratchasima are required to file an application for the license to operate radio stations according to the criteria of the National Broadcasting and Telecommunication Commission (NBTC). The NBTC determined the characteristics and types of radio broadcasting business, the organizational structure of radio stations, and the proportion of the program content. The findings are consistent with the study by Ngam Sanyha, T. (2017), who investigates the effectiveness of the community radio station management in Nonthaburi province. , T. (2017) discovered that community radio stations were required to be operated and managed by an independent administrative committee comprising of community representatives or stakeholders, that the policy of the community radio stations was written down, and that participatory policy implementation was accompanied by financial and technical assistance. Above all, administrative practices were carried out in accordance with the legal requirements. All types of radio stations presented news and content that involved current or factual situations for public interests, issues related to public policies, along with knowledge, educational, religious, art, and cultural matters, including information necessary for audiences. Radio programs were still popular among audiences who wished to keep up with news and information in a timely manner. Thanks to the nature of radio broadcasting, audiences are able to listen to the programs while working. For this reason, radio program producers need to consider organizing the programs that suit the objectives of the programs and the target audiences. There are several types of radio programs, including talking with audiences, conversations, interviews, discussions, magazines, documentaries, dramas, music or entertainment, and Q&A programs. Radio program organizers are required to develop their

skills to disseminate the information with social responsibility according to the code of conduct for journalistic professions according to the NBTC's Notification regarding training and testing for the professional permit of radio and television broadcasting business. Radio stations establish a program schedule that allows listeners to manage their time to listen to the programs in which they are interested. This is consistent with the fact that the NBTC has determined the proportion of cent for radio broadcasting for different business types. Radio stations may produce original content in the form of recording and live broadcasts. This is different from the past when radio stations had a lot of live programs. External organizations are allowed to produce their content and submit it for the stations to air at the determined time. In particular, radio stations in Nakhon Ratchasima province organizing radio programs to promote Buddhism propagation mostly received signals from the central. The content included preaching, dharma lectures, sermons of the Buddha, and anecdotes about religious days. The programs were moderated by monks or devout laymen. These knowledgeable monks were able to present Buddhist teachings accurately. They had gentle sound, reliable personalities, natural communicative skills, and the ability to bring real social events to discuss with the listeners. Similarly, devout laymen who moderated radio programs also had accurate knowledge of Buddhist doctrines, Pali, and fluent communicative skills. Problems in radio broadcasting to promote Buddhism propagation in Nakhon Ratchasima included the issues with audiences, content, presentation techniques, moderators, language, sound, length of programs, and propagation channels. Piyasilo, S. (2005) investigates the appropriate administration and model for radio broadcasting for Buddhism Propagation to Youths at Wat Sam Phran Community Radio in Nakhon Pathom province and discovers several problems in radio broadcasting. The problems range from the organizational structure, administrative policies, personnel, budget, broadcasting process, program schedules, and above all, program production. The issues with program production are found to be caused by the program moderators who lack knowledge, continuity, attentiveness, speaking skills and styles, worldly experience and knowledge, content, and broadcasting time. Most radio programs to promote Buddhism propagation are still operated in the traditional style: preaching by monks in Pali and Sanskrit through radio broadcasting as the only channel, the signal received from the central, and long broadcasting time. Program moderators are unable to make the content interesting and fail to communicate with the audience effectively. As a result, listeners are unable to understand and apply Buddhist principles in their lives. Furthermore, listeners are living a highly competitive lifestyle. They tend to favor fast, concise, and easily understandable news, knowledge, and entertainment. More people turn to online communities, use social media platforms as communication channels, and spend more time on social activities. These are the current problems for propagating Buddhism through radio broadcasting. This is consistent with the research of Thanarat Sa-ard-iam & Pisutpong Endoo (2021) was found that the impact of the Dhamma propagation by Live Broadcast via Facebook are; (1) real-time engagement, (2) target group that selects only who are deeply interested in particularly, (3) timeless (4) wide impact, (5) economical and (6) less time-consuming in production. And Niraj Ruangsarn (2017) was found that the model of network building for the Buddhist proactive propagation of Khon Kaen Campus based on the research of the Deputy Rector of the campus, Phra Sophonphatthanapundit (Assoc. Dr.), conducted in 2016. In so doing, it will first provide some of background of the topic: the dissemination of Buddhism in Thailand, network building of the main campus, proactive propagation of Buddhism in the northeast; and then it will provide some perspectives on the propagation of Buddhism based on the model. And Chalita Srinuan (2011) was found that the growth rate of radio advertising expenditure did not increase much between 2007 and 2011 because some other types of media were able to reach consumers more rapidly. The concession contract system was valid for a very short period of time and lacked transparency, making it difficult for radio producers to engage in strategic planning. For this

reason, grantees of radio broadcasting concessions, which were companies of full-cycle entertainment business or other forms of media of both vertical and horizontal integration, had an advantage.

***Development of the model for radio broadcasting to promote Buddhism propagation in Nakhon Ratchasima.***

The development of the model for radio broadcasting to promote Buddhism propagation in Nakhon Ratchasima consists of eight elements, namely 1) the target group, 2) content, 3) presentation method, 4) moderator, 5) language, 6) sound, 7) length, and 8) broadcasting channels. The details can be illustrated below;

***The first element: The target group***

The target group of radio programs to promote Buddhism propagation in Nakhon Ratchasima has the age ranging from 55-65 years old. This group of people is preparing for retiring and experiencing the final changes in their lives. They need to study Buddhist doctrines to understand how life will go on, accept changes, and lead normal lives. The findings of this study are consistent with those by Panjapol, C. [9], who conducted a study entitled "Preparing for the Old Age: A Case Study from Office of the Permanent Secretary, Ministry of Public Health (Central)." Panjapol, C. (2015) discovers that preparation for old age is significant for those who are approaching old age. With good preparation for physical, mental, social, and economic change for old age, older people would be able to lead their lives sustainably, contribute to society, and cope with other changes in the future. Given that they need to prepare for the unexpected, they are likely to be open to new ideas and study Buddhism seriously. The researchers viewed that the main target group is interested in studying Buddhist doctrines. Therefore, radio program moderators can plan the program, language, content, and length that are appropriate for the target audiences. This is consistent with the research of Tal Laor (2022) was found that the investigation into changes in the radio listening habits of consumers who use on-demand radio. Findings indicate high daily listening rates to online on-demand radiophonic content as listeners are not dependent on schedules. Listeners proactively use the options offered by on-demand radio to satisfy listeners' diverse needs, in line with the uses and gratifications theory. The diversity of online radio offerings encourages frequent consumption of more varied content. Findings indicate that radio's entry into the new medium offers interactivity, demassification and asynchronicity, expands its distribution and helps it maintain its role as a relevant medium of influence.

***The second element: The content***

The content of radio program to promote Buddhism propagation in Nakhon Ratchasima includes 1) how to be good sons and daughters to parents, 2) how to be good students to teachers, 3) how to be good friends, 4) how to be good citizens, 5) how to be good disciples of the Buddha, 6) nature of life, 7) principles in life, 8) the eightfold path, and 9) happy life. The findings in this study are similar to those of Iambuenglam, S. (2017), who conducted a research study entitled "The Development of Buddhism Propagation Guidebook for Community Radio Broadcasters in the Lower Northern Region". Iambuenglam, S. (2017) discovers that the content in radio programs to promote Buddhism propagation includes belief, faith, dharma principles referenced from the Tipitaka, dharma and for problem-solving. The content should be clear and based on dharma from the Tipitaka without distorting from fact. It should be creative and able to point out solutions for society. Dharma should be relatable to current events. The researchers viewed that radio program moderators should select the content of Buddhist teachings that are suitable for the main target audiences, the presentation method, and the length of the program.



### ***The third element: The presentation methods***

The presentation methods of radio programs to promote Buddhism propagation in Nakhon Ratchasima are varied, including magazine programs, discussion programs, and question and answer programs that allow listeners to engage with the programs. The findings in this study are in agreement with those by Bupphamala [12], who conducted a research study entitled "Development of Cultural Programs for Youths through Community Radio in Nakhon Ratchasima Province". Bupphamala, A. (2014) reported that, with magazines included in the radio program, this technique contributes to the variety of content and presentation methods. The program moderators should relate the content and divide it proportionately in order not to confuse the listeners. In this respect, the researchers viewed that the appropriate presentation method for the main target audiences will keep them following the program until the end. This is consistent with the research of Martínez Martín, M. (2016) was found that the immediacy provided by the Internet, the elimination of all time-space barriers thanks to the new "radio on demand" and the radio's vocation to come closer to the audience have sketched out a scenario in which the direct participation of the audience is constantly reflected on the antenna. However, a higher participation does not necessarily imply greater quality of it. This is consistent with the research of Nelson Ribeiro (2022) was found that the broadcasters established in the Portuguese Empire dedicated significant airtime to the dissemination of Portugal's colonial mission but also promoted local identities with programming echoing the lifestyle of the colonial elites. Thus, the article argues that while the Portuguese authorities considered the cultural expressions and identities of the white residents in Africa as peripheral, these perceived themselves as part of a new devolved center. This 'peripheral centre' gained particular 'visibility' on the airwaves.

### ***The fourth element: The program moderators***

According to the present study, the moderators in the radio programs to promote Buddhism propagation in Nakhon Ratchasima were monks or laymen or both. Program moderators are people who can transfer Buddhist teachings accurately and appropriately for the main target audiences. The findings in this study are consistent with those by Iambuenglam [11], who concludes that radio program moderators must have strong dharma knowledge, be attentive to listeners, and have unique characteristics. Furthermore, the moderators should have proper skills in the Thai language, be able to translate Pali and Sanskrit into the central Thai language as well as Korat dialect accurately and clarify the content so that listeners can understand it easily. In this regard, the researchers viewed that radio program moderators should have knowledge and communication skills and can answer dharma questions accurately. In the meantime, they should have unique characteristics and interesting styles to present the content, which will keep the listeners focused on the program. This is consistent with the research of Karin Hugelius, Mike Adams & Eila Romo-Murphy (2019) was found that the humanitarian radio could be used to promote both physical and psychosocial wellbeing by providing health-related information, advice and psychosocial support in natural disasters. Community resilience can be enhanced by the promotion of community engagement and can strengthen self-efficacy and community efficacy. Radio also has the potential to cost-effectively reach a large number of affected people in areas with severely damaged infrastructure. Radio could, therefore, contribute to health recovery and wellbeing from both individual and community perspectives.

### ***The fifth element: Language***

Regarding language used in radio programs to promote Buddhism propagation in Nakhon Ratchasima, the program moderators should use the central Thai language as the main medium of communication while other dialectic elements can be inserted, such as Korat dialect,

Korat folk songs, and Lae songs in Korat dialect. The researchers viewed that the moderators should use appropriate language to communicate the content in the radio programs with the target audiences so that they understand easily and feel closely engaged with the programs. This is consistent with the research of Victor Chikaipa & Anthony Mavuto Gunde (2021) was found that the role of community radio broadcasting in promoting indigenous minority languages and cultures in selected parts of Malawi. The study collected empirical data from two community radio stations and their surrounding populations. Using the theories of ethnolinguistic vitality and globalization, the study reveals that recent establishment of community radio stations, centered on local community development, has created opportunity for promotion of languages and cultures, as practiced by minorities in local areas surrounding the radio stations. Thus, the use of minority languages simplifies the understanding of information and encourages the participation of speakers who might otherwise be excluded due to language difficulties.

### ***The sixth element: Sound***

Sound in radio programs to promote Buddhism propagation in Nakhon Ratchasima includes speech or audio narration, music, and background effect. Sound is an integral element that enhances the audience's involvement and visualization in the story. It facilitates the audience to understand the content that the moderators are conveying. In this regard, the researchers viewed that, instead of using only one type of sound, the moderators should use a variety of sound types in the program, depending on the content and needs of the target audience. This is consistent with the research of Barun Gorain & Andrzej Pelc (2021) was found that the radio network is a collection of stations, called nodes, with wireless transmission and receiving capabilities. It is modeled as a simple connected undirected graph whose nodes communicate in synchronous rounds. In each round, a node can either transmit a message to all its neighbors, or stay silent and listen. At the receiving end, a node hears a message from a neighbor in a given round, if listens in this round, and if is its only neighbor that transmits in this round.

### ***The seventh element: The length***

The length of the radio programs to promote Buddhism propagation in Nakhon Ratchasima ranged from 20 – 30 minutes. In a similar study, Piyasilo, S. (2005) reports that the suitable length of radio programs for youth is 30 minutes and that radio programs should be organized continuously. In this respect, the researchers viewed that the length of radio programs for the main target audiences should not be too long or too short; it should be at a reasonable length that keeps audiences listening to the entire program. This is consistent with the research of Rafael P. Torres & Jesús R. Pérez (2021) was found that the lower bound for the coherence block (ChB) length in mobile radio channels is derived in this paper. The ChB length, associated with a certain mobile radio channel, is of great practical importance in future wireless systems, mainly those based on massive multiple input and multiple output (M-MIMO) technology. In fact, it is one of the factors that determines the achievable spectral efficiency. Firstly, theoretical aspects regarding the mobile radio channels are summarized, focusing on the rigorous definition of coherence bandwidth (BC) and coherence time (TC) parameters.

### ***The eighth element: Broadcasting channels***

Radio programs to promote Buddhism propagation in Nakhon Ratchasima should be broadcast on social media platforms, such as Facebook Live, Podcast, YouTube, or Line. Regarding this issue, the researchers viewed that adding social media platforms as additional channels for broadcasting radio programs to propagate Buddhism because they are convenient and suitable the modern lifestyles. This is consistent with the research of Jaime OsorioM. F.,

Caicedo MuñozM. C., & Trujillo BohórquezI. C. (2019) was found that the results indicate that there is an important relationship between the recording, broadcast, and reflection on a radio program and the development of students' oral competence, their motivation for learning, the improvement of dialogue, and the coexistence of students.

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