TELEVISION INDUSTRY AND ITS ROLE IN THE NEW MEDIA LANDSCAPE UNDER THE SYSTEM OF DIGITAL ECONOMY



A Dissertation Submitted in Partial
Fulfillment of the Requirements for the Degree of
Doctor of Philosophy (Communication Arts and Innovation)
The Graduate School of Communication Arts and Management
Innovation
National Institute of Development Administration
2020

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ABSTRACT

Title of Dissertation TELEVISION INDUSTRY AND ITS ROLE IN THE

NEW MEDIA LANDSCAPE UNDER THE SYSTEM

OF DIGITAL ECONOMY

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Degree Doctor of Philosophy (Communication Arts and

Innovation)

Year 2020

This research is aimed to study changes in the television industry in Thailand under the digital economy system, to explore the adaptation of the television industry in Thailand in the new media landscape, to examine the roles of television in the new media landscape, and to investigate viewers' perspectives on the roles and adaptation of television in the new media landscape. The research is a mixed-methods study, composing of both qualitative and quantitative research. For the qualitative research, documentary research, and content analysis on the TV program schedules, including indepth interviews with those involved in the television industry were conducted. For the quantitative research, survey questionnaires were collected from viewers to explore their viewing behaviors and their opinions on the roles and adaptation of television in the new media landscape.

From the study, it was found that technological factors have changed the current situation of the television industry enormously. As a sender, all TV stations have adapted their broadcasting and management explicitly. Concerning the message, the content is more individualized to suitable for and attract viewers. Communication channels have been modified towards digitalization increasingly, including the form of OTT channels. All changes were affected by viewers' changing behaviors from a passive to an active audience. Regarding the adaptation of TV organizations in the digital economy system, it was found that they changed in four dimensions: organizational structure, communication channels, genres in content presentation, and content. On the other hand, the roles of television did not change so much. Still, it was found that nowadays televisions have to learn about their viewers primarily, while they have to adjust their presentation genres and channels to respond to changing society and

viewers' needs. The most important thing TV channels should concern is the content. Besides, it was found that television still plays the role of an opinion leader, while television can broadcast their programs widely to access all groups.

As for viewers' TV exposure behaviors, it was found from the survey questionnaires that most samples were female, aged 21-30 years old, and graduated with a bachelor's degree. Most of them viewed TV via YouTube the most, and the viewing device used the most was mobile phones because of its portability and because viewers could view TV programs everywhere at any time. Most samples watched TV for entertainment and relaxation, while they expected from their viewing and expected from the functioning of the TV for society as a whole was to obtain amusement, pleasure, entertainment, and emotional support.



ACKNOWLEDGEMENTS

This dissertation has been accomplished because of great kindness and support from Emeritus Professor Yubol Benjarongkij, my beloved advisor, who did not only give me research advice, but also all personal matters. I thus would like to express my gratitude and appreciation to her.

Besides, my high appreciation and gratitude are for Professor Patchanee Cheyjunya, the Chairperson, and Associate Professor Tatri Taiphapoon, an external expert, who kindly took part in the Thesis Committee and provided useful information to fulfill and complete my dissertation.

Special thanks are also for Assistant Professor Panpilas Kuldilok or Pee Tuck and her family who assisted me in everything. Without their help and support, I could not be able to finish this dissertation successfully. Thank you so much indeed.

I also would like to express my sincere thanks for all samples who kindly gave their time to provide information that is beneficial to a great extent for this research.

Thank you very much for all supports and encouragement from my relatives, instructors, Faculty staff, friends, classmates, and all networks who boosted the researcher to obtain the utmost complete information for this study.

Finally, but not least, I would like to express my deepest gratitude to my mom and dad for their love, encouragement, and support, especially for giving me opportunities and being confident in me all through my life. Without them, this dissertation would never be fulfilled. I thus would like to give this dissertation for my mom and dad.

Natthakan Kaewkhum August 2020

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CHAPTER 1

INTRODUCTION

1.1 Background and the Significance of the Problem

The national development following the National Economic and Social Development has promoted Thailand towards increased development in many prospects. For instance, Thai economic growth in many areas is larger with a strong and distinguished production base and service. On the other hand, the infrastructure has been developed to have wider coverage with all dimensions of social service. Accordingly, people's income is increased whereas poverty is decreased. All of these enhance people's quality of life and well-being. However, while the Thai economic structure connects increasingly with global economics and society, the competitive capabilities of the country is relatively slow. Notably, the major income of the country comes from agricultural, industrial, and service sectors, but the acceleration of the adoption of scientific, technological, and innovative knowledge has not been fully fulfilled. Accordingly, Thailand has faced quality problems in many domains, such as lower productivity than it should be in agricultural, industrial, and service sectors. Besides, Thailand is still facing a problem of inequalities in many aspects.

The aforementioned phenomena induce changes at various levels, starting at the policy level. The most apparent change was the transformation of the Ministry of Information Technology and Communications to the Ministry of Digital Economy and Society on September 16, 2016, responsible for planning, promoting, and developing digital economy. Moreover, the National Economic and Social Development Commission (NESDC) launched the twelfth National Economic and Society Plan (2017-2021) based on the 20-year national strategy (2017-2036), which is the master plan of the nation. The main purposes are for Sustainable Development Goals (SDGs) and restructuring Thailand towards Thailand 4.0.

The main concept of the Twelfth National Economic and Social Plan is based on "Sufficiency Economy Philosophy," "sustainable development", and "peoplecentered." The existing economic, social, natural resource, and environment requires attention to several issues. Among these issues, it is the enhancement of new economy, such as the digital economy, bio-economy, creative and cultural economy, start-up enterprise, and social enterprise, etc., including the creation of entrepreneurship society to extend the national production and service. (Office of the Prime Minister. Office of the National Economic and Social Development Board, n.d.). The digital economy is also one of the important issues specified in the Twelfth National Economic and Social Plan.

The Ministry of Digital Economy and Society defines "digital economy" as the economy and society using information and communication technologies as crucial mechanisms in mobilizing the reformation in the production process, business operation, commerce, service, education, public health, governance, and economic and social activities towards the development of economics, quality of people's lives, and increased employment. To drive the digital economy and society policies, the National Digital Economy and Society Committee was established, chaired by the Prime Minister. Specialized committees were also assigned to assist the National Digital Economy and Society Committee to guide the development directions for both government and private offices, including determining supporting policies in providing incentives, innovation, markets, etc. to collaboratively strengthen Thai economics and empower Thai people towards higher capabilities.

Moreover, the Ministry of Digital Economy and Society specifies the "digital divide" as one of the challenges in the Digital Economy and Society Development Plan. An accessibility gap of technology apparently is a problem in the national development in the digital economy era around the world. The Village Broadband Internet Project (or Pracharat project) was founded and is run by TOT at present to solve the digital divide problem. In general, the "digital divide" is defined as an opportunity difference between people who can and cannot access technology, especially the internet. Due to this gap, the latter group cannot make use of technology in the online world to search for information and knowledge nor to see

more opportunities in life, etc. Neither can they access the governmental online service. Because of this problem, it broadens a gap between urban and rural people.

Inevitably, at present, the word "digital" involves people's lives and plays a great role in their ways of living. The main cause comes from the advancement of technologies, which also alters human living conditions. At the individual level, technology makes life easier and more comfortable. In our daily life, it starts with our use of a mobile phone instead of an alarm clock, or our use of smartphone or tablet replacing a diary or notebook to record what to do or work each day, etc. Therefore, technology penetrates every part of our living. At the societal level, technology changes society and huge numbers of systems, i.e., transportation, communications, etc.

In terms of communication changes, the media industry is one of them. The media industry has to face plenty of changes, i.e., technology, consumers' behaviors, economic condition, etc. Due to such changes, the circulating amount of money in the media industry has been decreasing continually every year, as illustrated in Figure 1.1



Figure 1.1 Illustrates the Circulating Amount of Money in the Media Industry

For the overall advertising spending during 2014-2019 of Nielsen (Thailand), it was found that

In 2014, 123,545 million baht was spent on advertising, and in 2558 129,192 million baht, with the growth of 5%. After that, advertising markets started to drop. In 2016, the advertising spending decreased to 115,666 million baht or 10% decrease, and in 2017, to 112,369 million baht or 3% decrease.

In 2561, due to the government economic stimulus measures and the investment of private sectors, the overall market returned to grow at 6% with advertising spending of 118,930 million baht. In 2019, the growth was 2%, compared with that of the previous year. Aaron Rigby, the managing director of Nielsen (Thailand), Inc. revealed that during the past two years, advertising spending tended to recover. Particularly, in recent years, the increase of advertising spending seems to be a good signal and there is a tendency that the money spent in advertising might be close to that in the year 2015-2016, with the approximated amount of 120,000 million baht.

The media that have a good rate of growth are digital and outdoor media. Still, television holds the biggest market share in advertising spending at 57%.

In spite of the closing of seven digital television channels, namely Channel 3 Family (13), MCOT Family (14), Spring News (19), Bright TV (20), Voice TV (21), NOW (26), and 3SD (28), during August-September 2019, the advertising spending decreased only 1%. On the other hand, the overall advertising spending in the past September grew 1% or 10,426 million baht. Therefore, the closing of those digital TV channels has not affected the overall TV industry so much.

Regarding the media advertising budget from January to September 2019 of totally 91,034 million baht, it is divided into TV advertising 51,842 million baht (decreasing 1%), digital TV 14,591 million baht (growing 24%), outdoor and mobile media 9,953 million baht (growing 5%), movie 6,113 million baht (growing 12%), printed media 4,312 million baht (decreasing 21%), radio 3,430 million baht (decreasing 1%), and In-Store media 793 million baht (growing 2%).

From the above figures, more than half of advertising spending was on television. Nevertheless, in the TV market, there have been more than two times of competitors scrambling for advertising spending as well. To illustrate this, from six TV channels in the analog system, at present, there are twenty-four digital TV channels. Definitely, among all media industries, printed media earns the lowest

growth and income tends to be decreasing every year. The distinct evidence was several magazines were out of business in 2015-2016, namely Ploy Kaem Petch, Sakul Thai, Image, etc., including the closing of Baan Muang Newspaper. Besides, other printed media adapted their line of production to continue their business. For instance, TV Pool Magazine changed from a paid to a free magazine. Dichan Magazine adapted their issuing period from biweekly to monthly. The reasons why printed media is declining are 1) a decrease number of readers. 2) Each organization spent fewer budgets on printed media. 3) Increased cost, i.e. paper. 4) It is a delayed media compared with online media. From another perspective, changes in technology lead to changes in consumers' behaviors as well.

From the aforementioned data, TV has still been a significant media since the past up to the present. It is considered as a part of Thai society and Thai people's life since the pioneer broadcasting of Channel 4 (Bang Khun Phrom) in Thailand. Initially, TV was broadcasted by the analog system, then by a satellite system, and digital TV, which is equipped with compressions to yield more frequency waves. The broadcasting by audio-visual TV technology on the internet multi- networks enables the presentation of image, sound, and information or data simultaneously. (Somsuk Hinviman et al., 2014).

According to mass media theories, television plays several roles, i.e., Harold Lasswell proposes the concept of Functionalism to explain the roles of mass media for the society, Dennis McQuail who raises the function of mass media in the surveillance of social order and growth.

For Harold Lasswell, he explains the roles of mass media for the society as follows: (Somsuk Hinviman et al., 2014)

- 1) Surveillance of Environment means to inform or provide information to society members. Mass media acts as a watchdog of the society, from a small society to the global level, i.e., to inform about criminal news in the community, information on economic regression around the world, global warming, or disasters, etc.
- 2) Correlation of the Parts of the Society means to coordinate dispersed members in the society for the shared perception of what happens in the society, i.e., television helps to publicize all parts of the society to get into the national

harmony plan. Another example is the broadcasting of world cup that makes people from different parts of the world to view the same thing at the same time. Thus, television can enable people across time and space to perceive the same things commonly.

3) Transmission of Social Inheritance means the roles of transmitting cultural heritage from generation to another generation to maintain it. For example, the Arts and Culture Program on TV conveys different cultural heritages around the world to the audience of different regions.

Later, Charles Wright extended Lasswell's concept and added one more role of mass media, namely the role of creating entertainment, i.e., music programs, game shows, etc. to entertain viewers or release viewers' stress in their daily life.

For Dennis McQuail, his concept is similar to that of Lasswell. McQuail proposes five roles of mass media (Somsuk Hinviman et al., 2014).

- 1) Information means the roles in providing information on what is going on in the society for people in the society.
- 2) Correlation means the roles in gathering people and setting up a social agenda.
- 3) Continuity means the roles in maintaining and inheriting culture, both core culture, subculture, and hybrid culture.
- 4) Entertainment means the roles of creating entertainment and emotional release.
- 5) Mobilization means the roles in driving towards political, religious, or economic purposes, including wars.

The roles of radio and television as mass media from the concept of Lasswell and McQuail are for both responding to human basic needs at the individual level, i.e., the needs for information and opinions, for belonging or as a part of the society, and for entertainment, and at the societal level, i.e., for establishing social relations, for creating the shared perception of social order, for providing an explanation about social, economic, and political structure, including for maintaining a culture of the society.

Both Lasswell and McQuail explain what mass media should do or what are their roles for society. From understanding such roles, it helps to explain phenomena in society meaningfully. Thus, it is interesting to know if television still has the same roles or changes its roles in the new media landscape.

Since the media industry is one kind of business driven by technology, the transformation of the media system into media convergence era affects media producers and media organization management, which require adaptation in various ways: formats of media content, presentation channels, media organizational and personnel management.

All kinds of media have their development steps and need to adapt themselves all the time to increase their working potentials to respond to the changing uses of consumers and to keep their business to survive in the world of communication. Caspi (as cited in Thitinan B. Common, 2010) explains that each medium, after its emergence, will go through four stages of evolution:

- 1) An inauguration is the stage of formation and emergence of media in the society
- 2) Institutionalization is the stage in which media is used by people diffusely and developed until it is accepted as a social institution.
- 3) Defensiveness is the stage in which media needs to protect itself from the challenges of newer media and needs to compete to scramble for receivers.
- 4) Adaptation is the stage in which media adapts itself for its survival. Caspi identifies three forms of self-adaptation of media: Adaptation, convergence with other media, and obsolescence or disappearance because of its inadaptability.

For the TV industry, it has been evolved to the stage of being accepted as a social institution (institutionalization) and is in the stage of being challenged by new media like the internet (defensiveness). The digitalization of media can be counted as self-adaptation. On the other hand, it also adapts itself by converging with other new media.

It is not only technology that changes, but also the audience's TV viewing behaviors. In the past, viewers watched a program only through a TV receptor. Now, they can watch live programs without a TV receptor due to new technology, i.e., a smartphone, tablet, or other devices, that facilitate them to view a TV program anywhere at any time. Besides, viewers can stop viewing a program any time, which is totally different from the past where the audience's viewing was determined by the

program schedule set by each TV station. Moreover, the audience can have a multi-screen viewing or can watch from more than one screen. Normally, it can be divided into two types: 1) Sequential Usage or to watch one by one in sequence, i.e. after reading news on a mobile phone, then searching for information from a computer. 2) Simultaneous Usage or watch/use several screens at one time. Simultaneous Usage is divided into sub-categories: 2.1 Multi-Tasking Usage means the activities or content of each screen are not related. 2.2 Complementary Usage means the activities or content of each screen are related. (Supasil Kuljitjuerwong, 2014).

From the survey on Thai people's new media or social media usage behaviors in 2016, it was found that each day online users aged over 15 years old spent 2.77 hours on average on Facebook, YouTube 2.19, Line 1.92, Twitter 1.29, and Instagram 1.25. Users also accessed multi-screen media each day on TV for 2.44 hours, the internet 3.45, and mobile internet 3.03 (IPG Media Brand, 2016).

In 2017, five trends were found to be important drivers:

- 1) The Audience of the Individual. It means that consumers become more individualized, they can choose to receive the content that responds to their needs rather than to receive only the content delivered by a sender. Therefore, the media industry focuses on "Multi-Screen" on which media owners and content producers require a number of platforms to carry each individual's lifestyle. Thus, rating measurement is not only on television but on several platforms due to consumers' changes in their media consumption behaviors. At present, they view content via YouTube and LINE TV increasingly. Similarly, for radio, now YouTube, and Music Streaming, i.e., JOOX, LINE Music are new alternatives for listening to radio. Another example is to read content from printed media and then changed to reading on Social Feed.
- 2) The World on the Fingertips means the whole world is at a fingertip. In other words, due to technology, consumers can receive information rapidly and connectedly. At present, users use the internet more than three hours a day. More than 20 million of Thai people have a Smartphone. (This means that people can communicate, access information, or see events around the world.
- 3) Content with a Purpose: It is essential for a marketer to create significant and meaningful content that is beneficial for consumers to gain their trust.

Nowadays, a huge amount of content pours into consumers' daily life and provides plenty of alternatives for their content consumption. Typically, consumers will select to expose only to the content in which they are interested. Thus, content with no interest cannot reach them. That is why to attract consumers' attention, the content must be meaningful and beneficial for consumers.

- 4) Progression to Mobile Only Consumers. This trend means the emergence of the generation who spends most of their time only on a mobile phone. Most of the users in this generation are young people. At present, Thailand is ranked second as the country whose population stays on mobile phones the most, next to the United Arab Emirates.
- 5) Wearable Revolution. It means the use of technology to create shared experiences with consumers, such as AR and VR. In spite of costly investment, brand builders must concern about this technology to create their competitive advantages. A successful case is Pokemon Go, which uses technology to connect with the content to create shared experiences with its consumers everywhere.

For the media industry, especially the traditional media, i.e., television, radio, and print media, it is crucial for them to adapt and develop themselves continually to respond to consumers' changing behaviors. Besides, the expansion of media in the digital economy era is much more complex and affects all concerned: consumers, media producers, media organizers, etc. Moreover, it brings about large changes at all levels, both macro and micro, including both technical and policy levels. (Thitinan B. Common, 2016).

Correspondingly, the media landscape of the present world is changed or media convergence occurs. Thus, media organizations have to adapt themselves to their survival. The occurrence of media convergence enables consumers to access content on every platform through the advancement of telecommunications, broadcasting, and information technologies. In other words, communication development leads to rapid access to information through more diverse channels. (Supanee Kotchapansompote, 2015).

Due to the government's new economy system policies and all technological changes, the researcher is interested to know how the media industry moves towards the digital economy system. Notably, the television industry is one of the industries

worth being paid high attention because of its full transformation to be digitalized with the content presented in the genre similar to traditional television. On the other hand, it is the communication and audio-visual broadcasting via the internet without service providers' investment on signal networks, or so-called "Over The Top" (OTT). In Thailand, OTT service providers that gain the top three competitive advantages are YouTube, Line TV, and True Visions Anywhere. The factors leading to their competitive advantages are the number of viewers, interestingness, the diversity of content, financial status, and platform stability in creating good experiences for viewers. All these three service providers collect no fee from destination users. Consequently, the TV business requires tremendous adaptation and changes to survive in the present era. Therefore, it is interesting to know if the roles of television remain the same or in what aspects it is changed. Moreover, from the consumers' perspective, how do they expect television to be?

1.2 Research Questions

- 1) How does the television industry change when moving into the digital economy system?
- 2) How does the television industry in Thailand adapt itself under the changing media landscape?
 - 3) What are the roles of television in the new media landscape?
- 4) From the viewers' perspective, what should be the roles of television and how does it adapt itself in the new media landscape?

1.3 Search Objectives

- 1) To study changes in the television industry when moving into digital economy systems.
- 2) To investigate the adaption of the television industry in Thailand under the changing media landscape.
 - 3) To examine the roles of television in the new media landscape.

4) To explore viewers' perspective on the roles and adaptation of television in the new media landscape.

1.4 Research Conceptual Framework

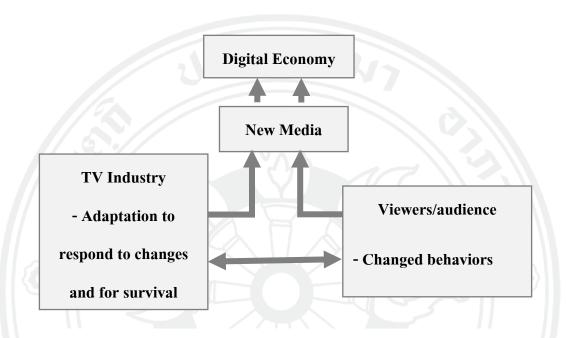


Figure 1.2 Illustrates Research Conceptual Framework

1.5 Research Scope

The study used mixed methods of both qualitative and quantitative research to study changes in the television industry when moving into digital economy systems, investigate the adaption of the television industry in Thailand under the changing media landscape, examine the roles of television in the new media landscape, and explore viewers' perspective on the roles and adaptation of television in the new media landscape. The population of the study is divided into five groups:

1) entrepreneurs in the television industry in Thailand, 2) media experts, 3) mass communication scholars, 4) representatives of the Office of the Broadcasting Commission, Television Business, and the National Telecommunications Commission, and 5) viewers

1.6 Operational Definitions

- 1) Television Industry means business related to television, i.e., YV stations, program producers, etc.
- 2) Digital Economy means an economic system relying on information technology and aimed to use information technology to conduct activities.
- 3) Roles of television mean the functioning or the responsibilities of television in responding to individuals' and society's needs.
- 4) New Media Landscape means the way people receive information, news, and entertainment through electronic media, i.e., smartphone, notebook, digital or Ebooks, and websites.
- 5) Viewers' Media Usage Behaviors means viewers' exposure and selection of media.
- 6) Television means an audio-visual receptor that can present both contents of moving pictures and sound simultaneously.
- 7) Television Programs means programs broadcasted by television presenting different kinds of content. At present, television programs can also be presented through online media.

1.7 The Expected Benefits from the Study

The research is expected to provide the following benefits:

- 1) Theoretical-Value Benefits. From studying changes and the adaptation of the television industry in the digital economy era, it leads to construct a new body of knowledge in the process and adaptation patterns of each sector or each part of the television industry, including consumers' behaviors at the present time. Such knowledge can be further extended in the future.
- 2) Application-Value Benefits. The findings from the study can be applied as useful information for entrepreneurs in the television industry for continuing their business in the digital economy era. Besides, the findings on consumers' changing behaviors on media consumption enable them to adapt themselves correspondingly to respond to consumers' needs.

CHAPTER 2

THEORIES, CONCEPTS, AND RELATED STUDIES

Theories, concepts, and related studies used as a theoretical framework for the study "Television Industry and Its Role in the New Media Landscape under the System of Digital Economy" are as follows:

- 2.1 Concepts of Digital Economy
- 2.2 Concepts in the Media Industry
- 2.3 Concepts on Television Genres
- 2.4 Concepts on the Roles of Radio and Television in the Society
- 2.5 Concepts on New Media
- 2.6 Concepts on Media Convergence
- 2.7 Concepts on Media Landscape
- 2.8 Concepts on Television Business Management
- 2.9 Concepts on Media Consumption Behavior
- 2.10 Communication Technological Determinism
- 2.11 Related Studies

2.1 Concepts of Digital Economy

Tapscott (2016) states that in the past, information was delivered through some tangible objects, i.e., cheques, cash, invoices, or through face-to-face or mediated communication, such as pictures, maps, telephone, or advertising handouts. However, in the era of the new economic world nowadays or so-called "Knowledge Economy," all information is digitalized and processed by a computer with high rapidity. Such an economy adds all value to products and everything through the use of wisdom and knowledge more than the use of labor. Thus, the economic structure is varied by information processing systems, i.e., hardware, software, information service providers, etc., including communication technologies, such as print media,

cables, satellites, wireless systems, etc. and the provided content (i.e., entertainment, etc.)

Besides, Tapscott adds that the way the interactive multi-media revolts the world is similar to the way the arrival of a car changes the earth. The internet becomes "a killer application." While telephone can be used to control and follow the work, including for communicating with people, the internet can combine all kinds of communication and be used for all purposes: business, medicine, social development, etc.

At present, both the industrial and agricultural sectors are moving towards the age of the intelligent network, which is the age of robots in factories with mass-customization production. Accordingly, without well-equipped major electronic networks, the new or modern economy cannot be accomplished since the internet requires the use of these intelligent networks to carry a vast amount of information in diverse forms.

2.1.1 12 Factors of the Modern Economy

The modern economy is the economic system in which everything involves competition towards the future, either the production capacity or the ability to adjusting business towards superiority. The modern economy comprises twelve factors as following:

Factor 1: Body of knowledge. Since the modern economy is the knowledge economy and information technologies lead the economy to reply to the knowledge foundation, "Smart products" have been introduced for social revolution in all aspects, i.e., smart clothes, smart cards, smart houses, smart cars, smart TVs, etc. It is the age in which the economy requires intelligence rather than modernity. Accordingly, all kinds of work need to move towards a body of knowledge. Intellectual property becomes a critical success in this era. It means that employees with good knowledge and management are required. In other words, a consistently learning organization will always have advantages over others.

Factor 2: Digitalization. From history, all revolutions were found to base on some new devices. No matter in the stone, fire, or iron age, new inventions led to new social development and prosperity. In the past, information was tangible. On the

contrary, in the digital economy system, everything is digitalized, which can be transmitted through the networks easily with better quality than in the past. If comparing the new communication technologies with the mail and email delivery, the advantages of the former are not only the more rapidity capacity but also more convenience and comfort. Emails might be the starting point of what human beings can do. Now, they are not merely alphabets, but also images, sound, and moving pictures.

- Factor 3: Virtuality. When information is digitalized, the tangibles then become virtual.
- Factor 4: Mobilization by subunits: The modern economy is formed by merging with a large-sized traditional organization, which is going to be replaced by independent subunits. Although large organizations may not necessarily disappear, it transforms the mighty towards smaller units.
- Factor 5: Integrated networks. The modern economy is the economy of networks in which each diverse subunit is combined into a bigger unit.
- Factor 6: No middle-man. A middle-man or an intermediary who works between producers and consumers will disappear since both parties can communicate with each other directly through a network system.
- Factor 7: Convergence. In the modern economy, major and successful business sectors must be supported by other business sectors surrounding them. The economic system that is the vital key is new media, which is the outcome of the merger of computerized systems.
- Factor 8: Innovation. The modern economy is based on an innovative economy.

Factor 9: Consumers as co-producers. In the past, it was a massive production. Now, it changes to the production that responds to consumers. Therefore, producers must produce high flexible products or can adjust their production to meet each consumer's taste and needs easily. Nowadays, consumers play a role in the production process. For instance, in the past, consumers needed to wait for the broadcasting time to watch any program based on the program schedule. Now, consumers can choose to view any program they want anywhere and at any time.

Factor 10: Updatedness. To update is a crucial key in every activity and success. Modern organizations must be Real-Time Enterprises that keep improving themselves continually and instantly to respond to new coming information.

Factor 11: Globalization. The modern economy is the economy of the whole world. Globalization moves towards new technologies; on the other hand, technologies also cause globalization. Globalization enhances the spreading of technologies, brings about markets everywhere, and responds to needs everywhere.

Factor 12: Incongruence. Social media can cause some gaps and disagreements. People of new generations tend to be freelances or have temporary work. In the digital economy, intellectual property is the most valuable. The meaning of the production has been transformed from a production assembly to increased value-added products by knowledgeable teamwork. Moreover, modern employees can turn out to be start-ups or entrepreneurs readily. Thus, these knowledgeable employees need trust and inspiration in their work.

Notably, digital humans have different behaviors and culture from those in the old days. They are more than customers, but they perform the role of product value analyzers simultaneously. Modern customers thus are those any business organization must be able to access. The modern economy is the complete revolution of marketing. People live with the media all the time. Instead of watching a 24-hour TV screen like in the past, new generations always adhere to their two-way or interactive network and spend their time searching for what they need by skipping advertising. As a consequence, more than half of the advertising has been abandoned. Particularly, new media can reduce co-working costs. Business on webs is now very attractive since the costs keep decreasing while the capacity of new media is growing increasingly. Customers become a part of an organization rather than outsiders. Webs are new ways of establishing customer relationships. Customers can access information of an organization more easily and extensively. Any improper or ineffective behavior or operation can turn customers on top and become co-developers of a product through the internet or through a large-sized computerized networking system. Such a system enables a wide communication and accessibility. Besides, it has been developed continually for many periods. Websites were introduced in the mid of 1990 for presenting information on a screen. At the end of 1990, it was the beginning of the digital economy (or so-called E-commerce). In 2002, it was the dark age of the dot-com business because the bubble economy collapsed. In 2005, mobile internet was introduced by Qualcomm, Blackberry, Apple, and Samsung. Hundred-Million people jumped to use webs again. Until in 2010, social media appeared and has taken almost the whole world since then, starting from My Space up to the golden age of Facebook and Twitter.

Anusara Anuwong (2015) defines the digital economy as "an economic system relying on information technology, aimed for developing economic activities and other sectors in the economic system through the use of computer technologies and related software, i.e., transportation, retail business, financial service, education, etc.

Due to the adoption of higher developed technologies in economic activities and borderless communication, the costs of communication, transportation, and activity conduction are decreased.

In general, the main benefit of the digital economy is to induce competition in economic systems. The details of the benefits are as follows:

- 1) A wider competition. On the other hand, geographic constraints and trade barriers are reduced, so it opens an opportunity for new entrepreneurs to come to compete in a market increasingly.
- 2) Increased productivity and production innovation. Effective supply chains enhance economic growth.
- 3) Decreased transaction cost. The costs that do not occur during the production process or service directly, but are related to the production and exchanges of products and services are decreased.
- 4) Other benefits, i.e., more accessibility to raw materials, lower prices, more diversity of products and services, etc.

However, the digital economy also faces some significant challenges, as follows:

1) Economic challenges. For example, the digital economy requires higher skillful laborers due to more top technologies. Business and personal tax collection are more complicated as digital commerce opens widely without borders. The development of the infrastructure of internet systems and information technology

must be modern and broad. Besides, most of the digital economy takes place in urban areas, while the technological development in the distant rural area is relatively low and costly. Consequently, it causes the digital divide between urban and rural people and other problems.

2) Social challenges. Due to the digital divide, some groups of people can access information more than other groups in society; thus, it leads to exploitation. Besides, it may cause isolation of people since, in the digital economy, people will have less face-to-face interaction. Moreover, people may face the risk of information safety because information technology has been used more in people's daily life. Critical personal data are stored in the digital form. Therefore, it can cause problems if such data are stolen, or the digital system is out of order.

In brief, the development of the digital economy yields several advantages for the nation and for connecting with other countries. The digital economy can increase competitive capabilities while decreasing trade restrictions. Besides, it increases the effectiveness of operating activities; on the other hand, it reduces operational costs. However, the digital economy is not limited to business sectors only, but it can be in different industries, i.e., public welfare, distance learning, tourism, transportation, etc. However, what is challenging Thailand is the improvement of the technological infrastructure towards modernity and equal distribution to support technological changes. Laborers' skills should be developed, especially to have a better understanding of technology to prepare them and to concern about the following impact on both economics and society.

2.1.2 The Mobilization of the Digital Economy for Thai Society

From the policy statement to the National Legislative Assembly on September 12, 2014, on the digital economy, what reflects distinct changes is the transformation of the "Ministry of Information and Communication Technology or ICT" to "Ministry of Digital Economy and Society." (Anusara Anuwong, 2015). The policy statement concerning the mobilization of the digital economy for society (Ministry of Digital Economy and Society, 2016) is as follows:

1) Private sectors must be the leaders for developing economics and society, facilitated and promoted by the government by creating motivations for them.

The government must also improve its efficiency by transparent digital usage and reduce corruption.

- 2) The National Digital Economy Commission is appointed, responsible for determining the direction for the national development to all concerned sectors and identifying supporting policies for creating incentives, innovation, and finding markets for private sectors to collaborative strengthen Thai economics and Thai people's potentials.
- 3) Policies for the digital economy and society are specified, including the national development guidelines based on the effective usage of digital technology and the collaboration of all sectors towards successful mobilization. The government regulates the use of technology and information processing by concerning morality, ethics, safety, and consumer protection from violating the rights of one another.
- 4) The government must improve roles, authority, and investment for the concerned organizations, i.e., Digital Economy Promotion Agency, Electronic Transactions Development Agency, and E-Government. Besides, the government must regulate telecommunications enterprises to enhance mutual support.

2.1.3 Objectives of the Digital Economy and Society Strategy

- 1) To install digital infrastructure with sufficient size and proper service fees.
- 2) To upgrade people's quality of life and expand people's accessibilities to public utilities equally and covering all areas.
- 3) To increase competitive capabilities in entrepreneurs' digital business and to assure digital users through empowerment, research, and innovation development, including structural education systems. Besides, it is essential to develop the country to have the supporting environment for the investment on the digital-technology adoption to create the readiness in ICT for Thailand to increase competitive capabilities at the international level.

2.1.4 The National Digital Economy and Society Commission

The National Digital Economy and Society Commission composes of committees from each area, responsible for providing consultation, and the Prime

Minister as the chairperson. The duties of the Commission are to give directions and develop both private and government offices. They also determine supporting policies for creating incentives, innovation, and finding markets for private sectors to strengthen Thai economics and Thai people's capabilities. The Commission composes of five committees in five areas as follows:

- 1) Hard Infrastructure. It is the development of digital technological infrastructure, of both telecommunications and broadcastings, aimed to enable Thailand to have sufficient digital infrastructure cover all areas for the use of people with stability and proper costs. Such infrastructure can lead to the promotion of national development activities in economic and social most effectively.
- 2) Soft Infrastructure. It is the development of infrastructure related to laws, regulations, and all standards to ensure the safety of and confidence in digital transactions.
- 3) Service Infrastructure. It is the development of infrastructure in service provision by promoting innovative service through a digital system for both private and government sectors towards the utmost effectiveness with the lowest costs.
- 4) Digital Economy Promotion. It is the promotion of digital business for stimulating economics and for transforming private organizations to be digital organizations by modifying their ways of doing business towards price competition through the value-added of the products and services or through service infrastructure to respond to consumers' needs and maximize their benefits.
- 5) Digital Society. It is a digital community in which everybody can use digital systems equally. It helps people to access information easily from all government services everywhere at any time through digital technology. Besides, it helps to develop digital citizens who can use digital technologies wisely and responsibly with media literacy.

2.1.5 Guidelines for Leading Thailand towards Prosperity through the Concept of Digital Economy and Society

1) Private sectors operate the digital economy and society with support from the government by creating motivations for private sectors and by improving the effectiveness of government sectors as well through the transparent use of digital technology and the decreased corruptions, such as the development of National Broadband with good quality, stability, and broad coverage, the development of National Single Window System for use, etc.

- 2) The National Digital Economy Committee supports the system by creating incentives, innovations, and finding markets for private sectors for collaboratively strengthening Thai economics and Thai people's capabilities to be able to compete with other nations.
- 3) The government regulates the ICT ethically and focuses strongly on security and privacy to avoid violating individuals' rights and to accelerate the justice system.
- 4) The government will improve the authority of concerned organizations, i.e., Electronic Transactions Promotion Agency, E-Government, including CAT and TOT, that regulate telecommunications enterprises towards mutual support.
- 5) Labor force must be empowered to support SME entrepreneurs. Besides, robust fundamental education systems in ICT have to be established to help them understand the effective modern trade.

The studies on the digital economy lead to the understanding of the meaning and factors of the modern economy, including the benefits and significance of the emergence of the digital economy, supported by the government, especially in driving the digital economy of the country. The researcher studied such concepts to understand current situations of the digital economy and applied it for this research to answer the research question "how has the television industry changed?" and "what should the television industry do to survive in the digital economy?"

2.2 Concepts in the Media Industry

The production since the socialism period has been a mass production or the production of each kind of product in large quantities at the same time under the quality control and production standards. The main production factors are capital, land, labor, and entrepreneurs who are capable of managing products. For

organizations in the media industry, they are organizations with rapid growth and produced a considerable amount of products, i.e., programs, information, etc. for consumption like other products. In the industry, there is the determination of price and quality that can respond to consumers' needs to gain profits. The content is conveyed as news in the newspaper, radio, and television, including in the forms of articles, documentary programs, poems, songs, dramas, novels, and movies.(Somsuk Hinviman et al., 2015).

Mass Media is the media that transmit information or message from a sender to masses of receivers rapidly at or almost at the same time. Mass media is divided into two types: (Somsuk Hinviman et al., 2015)

- 1) Printed media is the media that transmits information through printed media, i.e., newspapers, magazines, journals, and books, etc.
- 2) Electronic media is the media that uses electric or electronic devices or equipment in transmitting and receiving information, i.e., radio, television, and movies, etc.

However, nowadays, due to technological advancement, communication channels and media have been converged to increase the capacity without any constraint. Moreover, such advancement affects the nature of mass media from a one-way communication in the past to a two-way communication process in which receivers can respond or send their feedback to a sender. Besides, it induces the emergence of communication networks of people in society to transmit and receive their message through new communication channels or so-called "new media."

Tracing back to the background of traditional mass media, i.e., printed media pictures, radio, television, movies, etc., conventional mass media occurred and were developed, during 1850-1950, under the analog system. It means all communication components, i.e., alphabets, words, images, sound, music, are presented precisely as what they are or the conveyed elements resemble the original ones. For instance, to print a photograph to get a movie, a negative film is developed, etc.

However, since the mid of the 20th century, human communication activities have moved towards the digital system, so communication through new media emerges substantially. Typically, digital innovation is operated through the conversion of images, sound, and letters, to binary code, or the decimal numbers of 0

and 1. Such a system does not only make communication more convenient, more productive, and more accessible, it affects the cycle of production, distribution, and media consumption, which have been modified from those in the old days. For example, in the production dimension, previously, the production of a television program required a very complicated process, managed by a large-sized organization. Nowadays, whoever wants to produce a program, he or she can do it on his or her smartphone. From the old days, the distribution of a program required public radio waves, but nowadays, channels for distribution are very easy to find, i.e., a program can be uploaded on various platforms, such as YouTube, etc. Regarding media consumption, in the past, viewers had to watch a program by following each channel's program schedule. Still, now consumers can view any program from any channel, i.e., YouTube, everywhere at any time without any restrictions. Due to this drastic change caused by the digital system, the media industry has to adapt presentation forms and ways of communication. (Somsuk Hinviman, et al., 2015).

2.2.1 The Television Industry

Radio and television are electronic media that occurred after the oral media, written media, and printed media. (Somsuk Hinviman et al., 2014). Primarily, the word "radio" means audio communication through electromagnetic waves. The term "television" means seeing from a distance. In other words, both radio and television are communication channels that enable human beings to see and hear what happens in distant areas via a mediator or electromagnetic wave.

2.2.2 The Status of Radio and Television as Mass Media

Kunczik (1991, as cited in Somsuk Hinviman et al., 2014) specifies nine fundamental properties of radio and television:

1) The raw material of radio and television is short-lived, compared with other media, i.e., folk media. In other words, the material used for production is short-lived and can exist only for a while. For example, for a news program broadcasted on radio and television, news value focuses on the updated news and freshness as the priority so the news value will decrease in the next day and will be gone after time passes by.

- 2) Radio and television are produced by a formal organization, and only one person cannot operate a professional organization.
- 3) Radio and television are communication channels produced by media techniques, i.e., production, distribution, and media consumption. Concerning media production, it requires costly equipment, compared with other mass media. For distribution or broadcasting techniques, radio and television are active media with the potentials to communicate across time and space. Regarding media consumption, the receptor technology of radio and television has a continual evolution. For example, it has been developed from an earphone to a loudspeaker, from black-and-white to colored TV, and from analog to digital system, etc. However, it is remarkable that every time reception technologies are developed, they always affect the perceptual experiences of receivers. As an example, by equipping a remote control as a supplementary device for television, it enables viewers to have the more negotiating power to choose to view any program or to change to any program. In other words, viewers can choose to view television programs as they wish and that are more convenient for them.
- 4) Receivers of radio and television are masses of people. Both radio and television can access the masses of audiences easily and widely. However, the masses of people are dispersed or are not grouped. Thus, audiences are anonymous. They do not know one another nor have genuine relationships.
- 5) Radio and television are communication channels at the public level since it is communication via radio waves that can reach masses of people widely. Thus, these two kinds of media are used as a mouthpiece or an announcer to communicate to the general public. Besides, both radio and television are operated on the public sphere, the management of both media associates with regulations that determine their operation, i.e., impolite words are prohibited on broadcasting, etc.
- 6) The flow of information from radio and television is one-way or one-directional flow without receivers' participation.
- 7) The feedback of communication through radio and television is indirect. For example, receivers can send their feedback by SMS to the station, send lids of some soft drinks for a drawing or a prize, phone-in after a program, etc.

However, all of the feedbacks do not take place during live broadcasting. Besides, a sender and receiver are not in the same place at the same time.

- 8) Radio and televisions have time factors as determinants. Thus, it is said that broadcasting culture is the clock culture or the culture determined by time or a clock. Therefore, in every step, i.e., production, distribution, and media consumption, both a sender and receiver are determined by time. News producers must rush their news to compete with the time; otherwise, news value will be decreased as it highlights the fresh news. On the other hand, the broadcasting of radio and television is determined by a program schedule, so time is purchased in advance. Likewise, TV consumption follows the program schedule that is set by each group of receivers' daily life.
- 9) Radio and television work continually or endlessly towards maximum profits. For instance, news programs must be fed to each station continuously, or a TV drama or series will be presented continually, or after one drama ends, the new drama will be continually broadcasted.

The nine fundamental properties of radio and television, radio, and television, possess some unique characteristics that are common characteristics among other mass media, i.e., newspapers, magazines, radio, or movies. Nevertheless, Cline (2006, as cited in Somsuk Hinviman et al., 2014) remarks that when television moves towards digitalization, TV networks become a part of a multi-media system or move towards online communication. Cline called this period "Post-TV Era." Accordingly, the above nine properties of radio and television might be transformed. For instance, it leads to the occurrence of interactive TV with more flexibility in consuming television without time constraints. (because viewers can record or choose to view any time). Therefore, television needs no dependence on one-directional communication as before. Moreover, viewers can select their viewing time. They are no longer dispersed masses of the audience but can gather in groups or form their groups and networks as needed.

2.2.3 Characteristics of Radio and Television in Comparison with Other Mass Media

McQuail (1987, as cited in Somsuk Hinviman et al., 2014) compares the distinct characteristics of radio and television with other mass media, as illustrated in Table 2.1

Table 2.1 A Comparison of the Distinct Characteristics of Radio and Television with those of Other Mass Media

Appearing	Degree of Orientation			Appearing
Characteristics	High	Moderate	Low	- Characteristics
1. Condition on broad	dcasting content	and its use	100	
Single or unified	Movie, Song,		Newspaper,	Diverse content
content	Book		Radio, TV,	
			Magazine	
Flexible for use and	Newspaper,		TV, Movie	Content adhered
portability	Song,			to place or space-
	Newspaper,			bound
	Radio, Book			
No time-bound	Newspaper,		Newspaper	Time-bound
content	Magazine,		Radio, TV	content
	Movie, Song			
2. Political condition				
Under regulation and	Radio, TV	Movie	Newspaper,	Freedom and
limit			Song,	resistance
			Magazine,	
			Book	
3. Socio-cultural valu	e			
Realistic-oriented	Newspaper	Radio, TV	Book, Song,	Fantasy-oriented
			Movie,	
			Magazine	
4. Social relations asp	ects			
Individual media	Newspaper,		TV, Movie	Media exposure
exposure	Radio,			in groups

Appearing	Degree of Orientation			Appearing
Characteristics	High	Moderate	Low	- Characteristics
	Magazine,			
	Book, Song			
Immediate feedback	Radio		Newspaper,	Delayed
to a sender			Song,	feedback to a
			Magazine,	sender
			Movie, Book,	
			TV	
Spatial proximity and	Newspaper,		movie	Distance, and
exposure at home	Book, Radio,			cannot identify
	Magazine, TV,			certain places or
	Song			requiring
				traveling.
5. The nature of produ	iction organizati	on		
High use of	Movie, TV,			Low use of
production technology	Radio,			production
	Newspaper,			technology
	Magazine,			
	Song, Book			
Production is planned,	book		Radio, TV,	Production is
but the coordination is			Newspaper,	planned, but the
not complex			Song,	coordination is
			Magazine,	complex
			Movie	
Explicit professional	Radio, TV,			Unclear
nature, i.e., a	Newspaper,			professional
gathering in the form	Song, Book,			nature
of professional	Movie,			
associations	Magazine			

Table 2.1 illustrates the distinct characteristics of radio and television from other mass media. To explain this, the content of the message via media is more diverse and is time and spatial bound. Radio and television by various factors

intensively. Besides, the media exposure is bound to the condition of the program table or schedule. Activities of media use often take place in the household or home sphere. Moreover, production technologies are so complex that it is difficult for receivers to participate, etc.

Still, when radio and television move towards the era of new media or into digital communication, some changes may also be faced as following:

- 1) Radio and television possess more interactive properties, which facilitate them to provide a quicker and more immediate response or feedback. Upon exposure to any TV program, viewers can use it to create new content via social media in any way they need. Besides, receivers have more diverse channels for exposure, i.e., via smartphones or tablets. They can transmit their comments to any program immediately or any time they want, i.e., by pressing "Like" or writing comments via Fan page Facebook, etc.
- 2) Radio and television allow opportunities for receivers to take the role of a sender more quickly, or they allow more role-shifting. In the new media era, receivers can generate their content increasingly or so-called user-generated content or audience-generated content. Besides, they can use new media channels to distribute their content to the public, i.e., through Instagram applications in which receivers can create their content and distribute widely. Another example is the use of a communication channel like YouTube to upload clips on social media. Thus, the slogan for this website is "broadcast yourself."
- 3) Radio and television become mobile media, so this enables the exposure to radio and television not to be space-bound like in the past. The exposure can be at any place, not only at home.
- 4. Radio and television are the media with no time constraint. In the past, broadcasting was determined by program schedules only, but now it is not. Therefore, the audience can expose to them any time, or they can even determine their exposure time to accord with their daily-life activities, i.e., to view on-air TV programs later via the internet, etc.
- 5. Radio and television tend to move towards media convergence increasingly. In other words, radio and television begin to merge with other media, in terms of production and media consumption. For example, some music companies do

not produce only songs, but also produce songs to cooperate with the work of other kinds of media, i.e., for radio and TV programs, movies, magazines, etc. Concerning media consumption, the example is with one computer; receivers can listen to the radio, watch TV, in combination with other functions of other media at the same time.

From the aforementioned conditions of new media, properties of radio and television have been altered from the past in many aspects, especially in facilitating more participation of receivers in the production, distribution, and media consumption stages based on the potential of new media.

2.2.4 Key Persons in Television Business Circle

The word "business" covers a systematic and continual process of economic enterprise return" as an ultimate goal. For TV business, it may seem to cover only TV-program service operated by TV stations. However, in fact, it covers all production, service, and trade business, namely business of TV producers, network service providers, program trading and exchanges, etc. Thus, TV business includes all activities involving the production of television technology, the arrangement and production of TV programs, broadcasting of TV programs, advertising, and other operations yielding increased income for entrepreneurs, including searching for opportunities and channels for creating income from other related operation. (modified by Nattawat Sutthiyothin, 2009, as cited in Somsuk Hinviman et al., 2015). Typically, key persons in TV business are divided into four groups: 1) TV technology entrepreneurs, 2) TV stations and program providers, 3) sponsors of TV programs, and 4) viewers. Each of the four key persons plays the following role:

1) TV Technology Entrepreneurs

TV technologies change all the time from a twisted plate in the past, to analog, and then to digital system nowadays. Likewise, equipment also develops by technological growth, such as an antenna changing to a satellite dish, fiber-optic cable, and digital TV set-top box, etc., respectively.

Notably, TV technology is a kind of business that grows in parallel to TV enterprise because exposure to TV needs a TV signal transmitter and a receiver. Besides, in producing a program, it requires shooting and editing equipment, which

are electronic. Therefore, TV technology entrepreneurs are an important factor in the TV business development.

Moreover, most of TV-technology producers and distributors are giant companies in electric engineering and supplies, i.e. Sony, Samsung, Apple, Panasonic, PSI, and Thai Kom, etc. These business companies produce, distribute, and give service related to the technology of different models to help TV stations, program producers, and the audience to be able to choose technology that they need.

2) TV Stations and Program Providers

There are several kinds of TV stations, i.e. via satellite, subscription, terrestrial, national, regional, etc. However, no matter what kind the TV station is, TV programs are the essence of all kinds. TV stations thus have main duties in providing, producing, promoting, and selling programs, including arranging a program schedule and broadcasting it regularly. A TV station is like a market whose space is to present TV programs for viewers. Therefore, it is essential for TV stations to find new programs into their list to respond to viewers' needs as much as they can. A program selection is thus under the authority of TV stations to decide which programs will be or will not be selected to be broadcasted. Typically, they will select a program, analyze, and then plan thoroughly based on their consideration on each station's vision, mission, and responsibility. Besides, they have to consider if the existing programs can respond to the organizational goal, what kind of programs the target audience prefers, and how much a program production costs. They have to further consider if the existing programs can compete with those of their competitors. Which program should be remade, which one should be continued, and which one should be taken off the program schedule. They also have to concern the broadcasting time of which program should be adjusted to meet the target viewers' lifestyle and needs. Generally, the broadcasted programs are from several sources as follows:

- (1) TV stations are producers, i.e., news or some regular programs produced by the station's production staff, including production control.
- (2) Programs are produced by outsourcing or an outsourcing company since most TV stations have no sufficient labor to produce their programs so they hire outsourcing companies to do for them. Typically, TV stations will determine concepts they need, and select a story, actors, and presentation methods, etc. In the

selection process, a hired outsourcing company may rely on a patronage system or by its ability.

- (3) TV stations divide their rental time for others to produce a program. Primarily, it is a heavy burden for TV stations to provide a program every day and for many hours daily. Thus, the entire process of a program production is very costly while lots of program producers have no enough capital nor opportunities to establish their stations; thus, they have to rent broadcasting time from an existing station, depending on the agreed conditions, i.e. TV stations collect rental time while the renter invests and produce a program, including finding income from all advertising. The joint investment between a TV station and a program producer through rental time is called "time-sharing." Time-sharing is an operation in which a program producer charges no rental time, but exchanges for advertising time. Therefore, a renter of the station's time is also another key player in the TV business. Notably, after TV stations in Thailand increase their channels, many large-sized TVprogram production companies, who used to ask for rental time from other TV stations, upgrade to be TV station owners and become new competitors against the old TV stations, i.e., Workpoint TV, CH8, ONE, Nation, etc. Wanitra Taphowtong (2011, as cited in Somsuk Hinviman et al., 2015, p. 381) says that most program producers who have competitive advantages are only a few of them who can push their programs to be broadcasted in the prime time. On the other hand, programs of the SME producers are often out of the program schedule or broadcasted in a fewviewers time in which to find advertising is difficult. Thus, they have to find income from other sources, i.e., editing service, or equipment rental service, etc. Accordingly, the business of large-sized TV program producers grows very rapidly.
- (4) To buy copyrights from domestic and foreign countries is another strategy that is favored by many TV stations since they can see all program format and content before broadcasting or can foresee viewers' responses. It thus helps them to anticipate if a certain program satisfies the audience or not.

Copyrights can cover all a program without editing or modification, i.e., drama, series, movies, foreign documentary programs, and sports broadcasting. Another frequently-found way is to buy copyrights of only a program format from abroad, i.e., The Voice Thailand, Thailand's Got Talent, the Academy Fantasia, etc.

For sellers, it helps them to reduce their costs and increase their profits. Therefore, the more they can sell, the less the production costs will be.

(5) A host broadcaster or affiliate stations are a program provider. In the U.S.A., TV networks are a key component of this business. Mostly, National network station, i.e., NBC, ABC, CBS, etc. makes a contract to provide a program or launch a repeater to send the signal to affiliate stations that are dispersed over the country to broadcast major programs during the prime time. From doing so, the number of viewers will be increased while advertising time can be sold at a higher rate. However, it depends on the business agreement as well. For instance, the host station may pay compensation or opportunity cost for affiliate stations to compensate for their reduced advertising income in case of their own program production. Sometimes, affiliate stations may pay for some of the host station's programs to be broadcasted in their station so that their local viewers can watch good programs with high production costs. (Wipa Uttamachan, 2002, as cited in Somsuk Hinviman et al., 2015).

3) Sponsors

Sponsors are very vital in TV business enterprise as the investment in The TV business is very costly in every part: technology, program production, personnel hireling, marketing activities organization, etc. Therefore, every TV station has to find income to make their operation go smoothly. However, TV stations of each system have different ways of finding their income, depending on the regulations of each country.

Wipa Uttamachan (2003, as cited in Somsuk Hinviman et al., 2015) raises five major income sources of most TV program producers:

(1) Government budget. Government TV stations, especially of the autocratic countries, such as socialism, or developing countries are supported by the annual government budgets, i.e., CCTV of the Republic of China, Channel 11 of Thailand, etc. However, some TV stations may receive some funds from other government sources; for example, the main income of Thai PBS comes from excise tax or duty, etc.

Still, the problems of income sources of this group is a limited amount of budgets and uncertain annual income. Moreover, TV stations funded by the

government may be interfered with by politicians easily. It may be perceived as a mouthpiece medium for the government rather than being genuine public benefits.

(2) Advertising expense. Advertising expense means the income gained from a product owner or an advertiser whose main income is from advertising during the loose spot and in-program spot. Thus, they are called commercial TV stations.

The key factor in running a commercial TV business is to present a program that responds to the target audience's behaviors and tastes. Therefore, it is important to know where the market is, who the target audience is, and of which level or group their target consumers are. Such information enables TV producers to present their insight to advertising agents, especially by referring to a program's rating. It thus can motivate product or service owners to buy advertising time for the next programs. A program with good ratings will yield higher advertising expenses. Mostly, the decision is based on the survey of the ratings. The most well-known or familiar research company on ratings is "AGB Nielsen." Advertisers often use such surveyed information to specify advertising time in each program to access the target consumers the most. The advantage of income from advertising is that program producers need to produce their programs competitively to satisfy the audience the most. However, the disadvantages are that advertisers tend to insert the format and content of a program to connect with the product they want to advertise by either way.

(3) License fee. Public TV stations prefer this kind of income. BBC of the United Kingdom can be considered as the prototype by gaining income from this method only. Thus, they cannot earn their income from any advertising. The advantage of this kind of income is independence or autonomy in working with mass media since the income comes directly from the general people of the country. TV stations thus have to be concerned about the audience's needs without fear of politicians' or sponsors' interference.

However, at present, there is no public broadcasting service that relies on only the license fee since the income is too low to develop a program and to compete with private TV stations. Therefore, most public TV stations are more flexible and allow income from other sources as determined in the condition, such as

to get allocated budgets from the government, donations of any foundation, or permitted business companies registered as a sponsor, etc.

(4) Membership or subscription fee. This kind of income is common for cable TV business, TV internets, and satellite TV, i.e., True Visions, CTH, 3BB IPTV, etc. Viewers can subscribe in many ways, such as to pay by a monthly or yearly fee, to pay extra for TV on-demand programs, or to pay for only some specific or selected programs or pay-per-view, etc.

The advantage of a subscription fee is the lower cost of a serviced program when the number of members or member base is larger. However, the disadvantage is that most viewers prefer watching free more than paid programs. Therefore, each provided program needs to be very distinguished and cannot be watched from other sources, such as expensive copyrighted programs from abroad, i.e., live broadcasting of the World Cup, the National Geographic documentary program, worldwide top-hit reality shows, etc.

(5) Other subsidy or grant-in-aid, i.e., donations from charity organizations or civil offices, supplementary income from other alternative business of the station, or financial support from the audience. For instance, the main income of community public television stations is from charity organizations to support any useful operation for the society and community. Still, such donation is relatively very low and causes many community stations to end their broadcasting.

Therefore, strategies of searching for any extended income from a program production become a popular tendency that creates huge income. Specifically, nowadays, each station will not only focus on selling its TV programs as a marketing strategy, but it will create any subsequent provisions of products and services, i.e., selling vouchers for dining with the stars on-air, writing computerized games by using actors as game players and letting people vote for their favorite player, etc. All of these extended business inventions help to promote the popularity of a program and to create business opportunities from those inventions as well.

4) Viewers

TV viewers are not only the audience of a program but also play a significant role in TV business survival. In other words, viewers pay for all types of TV business operations through the tax payment, license fee, or purchase of sponsors'

products or services. They are also very influential for the TV program operation, especially the impact of their ratings for commercial programs. High-rating programs lead to higher advertising income. Such a business mechanism causes several academicians to perceive this kind of commercial enterprise as a tool for drawing viewers' attention to advertisements.

However, not every TV viewer is seduced to the products presented in the advertisements. On the contrary, they mobilize and gather together as a network to negotiate their power with advertising entrepreneurs and advertisers. Examples of such networks related to consumers' rights mobilization are Mass Media Studies Foundation or Media Monitor Group, Family Surveillance and Media Creation Network, Thai Civil Rights and Investigative Journalism Center, Smart Family to Buy, Children and Youth Health Promotion Media, Consumer Right Protection Group, and other social media groups, etc.

The examples of the accomplished movements of TV viewers that affect previous TV business enterprises are the rating of the suitability of TV programs, the prohibition of advertising on alcohol and cigarette advertising in TV programs, and the driving towards the ethics and responsibility of program producers and TV stations for the society. Therefore, TV viewers as the active audience do not play a role in creating income for TV stations or programs but also urging them to take some actions for improvement.

2.2.5 Digital TV Channels

The Office of the National Broadcasting and Telecommunications Commission (NBTC) conducted an auction of digital television channels, which was counted as a major change in the television circle in Thailand. Twenty-four of them are business channels, and four are public channels as free TV. Six channels of the old analog system to the digital system. The broadcasting trial of digital TV started in April 2014. The digital channels are classified as follows: (The Office of the Broadcasting Commission Television Business and the National Telecommunications Commission, 2019).

1) Public service: Channel 5, NBT, Thai PBS, and Thai Parliament Television.

- 2) Children, youth, and family: Channel 13 Family, Channel 14 MCOT Family, and channel 15 LOCA
- 3) Documentary or non-fiction: TNN16, Channel 17 Thai TV, NEW18, SPRINGNEWS19, Bright TV 20, VOICE TV 21, and NATION TV22
- 4) General programs (SD): Workpoint23, TRUE4U 24, GMM25, NOW26, Channel 8, Channel 3SD, and MONO29
- 5) General programs (HD): MCOT HD, ONE 31, Thairath32, Channel 3HD, AMARIN 34, Channel 7HD, and PPTV36.

The occurrence of these digital televisions enhances great competition in the TV industry. In 2015, two channels: 15 LOCA and 17 Thai TV submitted their application for permission. Later, in 2019, seven channels submitted the request for the return of digital TV license: Channel 13 Family, 14 MCOT Family, SPRINGNEWS19, Bright TV 20, VOICE TV, NOW26, and channel 3SD. Thus, from this returning, there are no channels of children, youth, and family in digital TV programs anymore, and there are only 19 digital TV channels remaining. Fifteen of them are business and four are public channels. The remaining channels are classified into four categories as following:

- 1) Public service: Channel 5, NBT, Thai PBS, and Thai Parliament TV.
- 2) Documentary and non-fiction: TNN16, NEW18, and NATION TV22
- 3) General programs (SD): Workpoint23, TRUE4U 24, GMM25, channel 8, and MONO29
- 4) General programs (HD): MCOT HD, ONE 31, Thairath32, Channel 3HD, AMARIN 34, channel 7HD, and PPTV36.

The study on the concept of TV industry leads to an understanding of the roles of TV as a kind of mass media, the components of the TV industry, the current situation, characteristics of TV compared with other media, key persons in TV circle, and changes of the TV towards digitalization, which can be used to explain about changes and adaptation of the TV industry. Moreover, it helps to examine the existing and changing roles of television compared with those in the past.

2.3 Concepts on Television Genres

There are several ways for classifying TV programs. However, based on the Binary Opposition Approach of Ferdinand de Saussure, two main genres of television programs can be classified as follows: (Somsuk Hinviman et al., 2014)

2.3.1 Non-Fiction or Documentary TV Programs

They are Programs whose content is factual or is a true story, aimed to provide information, news, or knowledge for viewers.

1) News Program

- (1) News Program means the programs presenting news by a newscaster from the prepared scripts in brief without adding any opinion of the producer.
- (2) Breaking News or news reporting at the beginning of each hour means news that is periodically broadcasted at the beginning of each hour all day. The length 3-5 minutes.
- (3) News Interview means a news program presenting information, facts, and opinions from an interview with concerned people. The moderator takes the role of an interviewer. This kind of news has no news reading nor focuses on reporting an event, but uses prepared questions and focuses on presenting interviewee's information and opinions.
- (4) News Analysis means a program providing insight from the information behind the news. The significance of the presented information can be at the national or global level. The analysis is based solely on the analysis of news.
- (5) News Talk means a program presenting news through a conversation of possibly 2-3 persons. The program emphasizes the criticism and opinion expressed in the news as well.
- (6) News Magazine means a program that combines a variety of genres and covers news at all levels and all types.

2) Documentary Program

(1) Fly on the wall or Observational Documentary means a program taking viewers to watch or survey the lives of people, animals, or phenomena

in which the observed persons may or may not know that they are recorded. However, a producer will not regulate or monitor their actions.

- (2) Participatory Documentary means a documentary program taking viewers to follow or survey the lives of people, animals, or phenomena but the producer gets involved in such a phenomenon with the appearance of a news reporter among the happening.
- (3) Drama Documentary means a documentary program using an actor to transmit a true story by simulating the phenomenon.
- (4) Expository Documentary means a documentary program explaining the fact to viewers in a straightforward narration without an emphasis on the beauty of images. Instead, an MC uses a directive tone to present information, aimed to persuade viewers by the MC's words.

2.3.2 Entertaining TV Programs are Programs Emphasizing a Relaxing and Amusing Story to Release Viewers' Stress and Entertain Viewers

- 1) Situation Comedy
- (1) Action Sitcom means a sitcom emphasizing the use of funny words and body movements without any interpretation.
- (2) Domestic Sitcom means a sitcom whose main theme focuses on family relations. The comedy does not come from words or body language, but from perspectives reflected in the family or society.
- (3) Dramatic Sitcom means a sitcom with dark humor or sarcastic jokes requiring decoding and interpretation.
 - 2) Soap Opera or Drama Series/Movies
 - (1) Thai drama/ movies
 - (2) Foreign drama/ movies
 - 3) Game Show
 - (1) Quiz Show is a traditional quiz game.
- (2) Stunt Show is a program emphasizing a physical and effort contest in struggling against all obstacles

- (3) Performance Show is a program emphasizing the contest of specific skills or competence, i.e., singing, cooking, special talents, etc.
- (4) Agony Show is a program starting with a narration of competitors' tough experiences, followed by game playing and tests to find a winner, who will be rewarded for releasing his or her past hardship.
- (5) Dating or relationship show is a program that tests the degree of competitors' relationship, i.e., reading one's mind.

4) Talk Show

- (1) Hard talk is a show with direct and in-depth questions in the form of a conversation with a guest on a particular topic or issue all through the program. Mostly, the issue is related to politics or economics
- (2) Soft talk is a relaxing conversational program with a variety of issues. Mostly, the issues are generally interesting topics.

5) Reality

- (1) Reality-documentary or a life story of an individual or a group of people
 - (2) Reality-competition or a reality game show
- (3) Reality-make over or a program emphasizing changes towards new things or innovation. Mostly, changes are drastic or abrupt.
- (4) Reality-experiment or a reality program similar to a simulation of human beings' social reality to test what will happen or what are the consequences of the simulation.

6) Sports

- (1) A live broadcast program of sports competition
- (2) A program reporting the competition.
- 3) A program supporting sports.
- 7) Music
- 8) Children
- 9) Variety or miscellaneous program means a program with a variety of content and formats in the form of entertainment, i.e. talks, dancing, jokes, presenting abnormal or new things, etc.

For a variety of programs in Thailand, they can be classified into three types based on the presentation format: (Chaiyong Promwong & Nikom Thadaeng, 1987)

- (1) Variety Game Show is a variety program presenting a contest among program participants with some games to win a prize, i.e. Ching Roy Ching Lan (Compete for a hundred or a million), etc.
- (2) Variety Talk Show is a variety program focusing on an interview mainly, i.e., Tee Sib (at 10 o'clock), Sanya Mahachon (A promise to the mass of people), Tonight Show, etc.
- (3) Variety Show is a variety program of diverse and integrated formats, i.e., a stage performance, comedy, a prize competition, interview, etc., without focusing on any specific format, i.e. The Star Show, Soek Sib Song Rasee (a game among 12 zodiacs)

The study on the concepts of television genres helps the researcher to classify TV programs and use them as a guideline to divide types of program content as appearing in the program schedule of digital TV analyzed in documentary research. The analysis results were used to answer the research question about the adaptation of television.

2.4 Concepts on the Roles of Radio and Television in the Society

The word "role" means to perform duties as determined. The roles of radio and television thus cover their roles to respond to an individual or the society's needs. Therefore, the study on the roles of radio and television can help to understand the inseparable relationship between radio/television and persons/society. (Somsuk Hinviman et al., 2014).

The roles of radio and television can be explained by mass communication theories. For instance, Harold Lasswell proposes the Functionalism of mass media for the society, while Denis McQuail explains the roles of mass media on the social order and growth. On the other hand, Charles R. Wright mentions about dysfunctions of mass media.

According to Harold Lasswell, the roles of mass media in the society are as follows: (Somsuk Hinviman et al., 2014)

- 1) Surveillance of society and environment. It means to inform or provide information to members of the society. Mass media is like a watchdog of society, no matter a small society or global society. For example, to inform about crimes in the community, economic regression around the world, global warming, disasters, etc.
- 2) Correlation of the Parts. It means to coordinate dispersed members in the society to be commonly acknowledged of what is happening in society. For example, radio and television can connect all parts of the society towards the national harmony plan. In the case of the World Cup Broadcast, television enables to take people from different parts of the world to view the same match at the same time. Therefore, television plays a role in gathering people across space and time to perceive the same thing.
- 3) Transmission of Social Inheritance. It means the roles in transmitting culture of a society from a generation to another generation to maintain such a culture. For instance, arts and culture programs on television transmit cultural heritage to different viewers. Later, Charles Wright extends the concept of Lasswell by adding another role of mass media, which is to entertain people in the society, i.e., music or game shows for entertainment and for releasing stress in daily life.

The concept of Denis McQuail is similar to that of Lasswell. McQuail explains five roles of mass media as follows: (Somsuk Hinviman et al., 2014).

- 1) Information. It means a role in providing information or what is going on in society.
- 2) Correlation. It means a role in gathering people and in determining the social agenda.
- 3) Continuity. It means a role in maintaining and inheriting culture, both the great traditional culture, sub-culture, and hybrid culture.
- 4) Entertainment. It means a role in creating entertainment and relaxation in society.

5) Mobilization. It means a role in mobilizing or driving people in society towards some political, religious, and economic goals, including leading into or protesting against wars.

From analyzing both concepts, it is found that radio and television play a role at the individual level, namely to respond to the basic needs of human beings, i.e., the needs for information acquisition, opinion expression, being a part of the society, entertainment. Besides, radio and television also play a role at the societal level, i.e., to establish relationships, to create social order for co-living, to inform about social structure, i.e. economics, politics, etc., including maintaining culture.

Both Lasswell and McQuail pinpoint what mass media should do for society. Thus, to understand the roles of radio and television helps us to explain social phenomena meaningfully.

On the other hand, Charles R. Wright explains that mass media do not perform only functional roles, they also sometimes perform some dysfunctional roles or the negative or undesirable roles that do not respond to the needs of individuals and society as shown in the below comparative table

Table 2.2 Compares the Functional and Dysfunctional Roles of Mass Media

11211	Functional Roles	Dysfunctional Roles	
Reporting news/	To warn about risks and	To make people scared and	
what happens in the	danger, to inform political	feel unsafe, to make them get	
society	and economic news, etc.	used to or cause some	
		imitation.	
Coordinating parts	To mobilize/ gather people	To reduce diversity, to induce	
of society	together	susceptibility	
Inheriting cultural	To increase social unity.	To make people	
heritage		homogeneous and massive	
entertaining	To increase more relaxing	To reduce collective	
	opportunities	consciousness, to make	
		people credulous, to create	
		undesirable values	

In addition, mass media also perform non-functional roles, or do not perform their roles as determined or expected by the society, such as not reporting news straightforwardly or not comply with the ethic codes of mass media or news value. Another example is a TV drama can play a functional role in inspiring people in society during the hardship period, but it presents continuous violent issues instead, etc. (Somsuk Hinviman et al., 2014).

In short, radio and television can play functional, dysfunctional, and non-functional roles because of some surrounding factors. They may be affected by their own nature or influenced by economic, political, or cultural factors, i.e., being dominated by some power and thus affecting radio and television industry and operation.

The study on the concept on the roles of radio and television in the society enables the researcher to understand their roles in the society and can lead to answer the research question about how television performs its roles nowadays, whether the roles change from those in the past, and how they are changed.

2.5 Concepts on New Media

The technological development of mass media causes changes in the media's formats and characteristics. From interpersonal communication, it moved to mediated communication in each period, i.e., printed media, movies, radio, and television. At present, there is the internet and the development of digital systems.

Due to changes in communication technologies, media are classified into two main kinds: traditional and new media. Traditional media means the media with one-way communication from a sender to a receiver without direct feedback from the receiver back to the sender, such as newspapers, television, telegrams, radio, movies, etc. For new media, it means media that facilitates a simultaneous role between a sender and receiver in two-way communication. Besides, new media ha special qualifications in delivering messages in various forms, i.e., still pictures, sound, motion pictures, texts, and integrated media. (Thitinan B. Common, 2013).

Actually, the full name of the new media is new digital media (NDM). However, the meaning and definition of new media are still ambiguous. The

ambiguity is caused by the dynamic nature of media that changes by time so the meaning and qualification of new media are different as well. In the past, electronic media, such as radio and television, were also called "new media" because they replace the traditional printed media. Nowadays, due to the emergence of the internet, radio and television were called "traditional media" and thus new media means the internet instead. Nevertheless, even new media, such as the internet aged around 40 years old, has been developed tremendously. It evolved from web 1.0 to 2.0, that allows users to design and determine their own data or is called as User-Generated Content or UGC. The occurrence of social networks, including UGC websites affects communication patterns nowadays in many ways, including the converged roles of a sender and a receiver. Moreover, communication devices in the new media era have been continually developed and designed to facilitate multi-functions for users. For instance, Smartphones can be used as a telephone for talking. Users can hear voices, see faces, record their inbox and sent-mails, and see both still and moving pictures or images. Besides, they can be connected to the internet networks telecommunications (Thitinan B. Common, 2013).

Furthermore, the word "New Digital Media" (NDM) identifies the form of the media using digital technologies. Therefore, it means media with information on binary digits or numbers, namely 0 and 1. Typically, new digital media has four formats and characteristics different from the traditional media as follows: (Lister et al., as cited in Siapera, 2012)

- 1) The content of NDM does not adhere to the device used; however, users can access such content from various kinds of devices, i.e., reading a book from the internet, watching a movie, or TV program by connecting with the internet through mobile phone devices. Such qualifications are caused by the phenomenon of media convergence.
- 2) The transmitted information from NDM can be both still and moving pictures, sound, and texts, which are compressed into small storage space. Therefore, content can be saved or stored in small-sized devices, i.e. mobile phone, Smartphone, USB, etc.
- 3) Information of NDM can be accessed easily and rapidly but in a non-linear pattern or can be accessed at every part or episode of the content, while it

can also skip to other parts or episodes. For instance, it is unnecessary to watch a movie from the beginning to the end. On the contrary, viewers can view any part or scene they want.

4) Data and content of NDM can be managed: delete, save, modify, arrange, etc. more easily and quickly than that of the analog system.

"New Digital Media" or shortly "New Media" is not only the outcome of technological innovation but also a consequence of the convergence between computerized development and communication innovations. Typically, there are three patterns of new media (Thitinan B. Common, 2013):

- 1) Patterns of Hardware, i.e., computer, Smartphone, DVD player, Multi-media, computerized games, etc.
- 2) Patterns of Software, i.e., social media, online games, applications used in smartphones and computer tablets, etc.
- 3) Patterns of Communication Network, i.e., satellite communication system, fiber-optic cable, internet network, telecommunications, etc.

"New Digital Media" or "New Media" thus means media that is a communication device, software program, and communication network in the form of storage, management, and delivery of digital information.

Kanjana Kaewthep (2013) notes that the word "new media" is not for calling something originating as a new thing but often is coined from the improvement and modification of some properties from the old traditional media. To illustrate this, in the past, a telephone is of the wiring system and in the analog system, so it is not called "new media." However, once it changes to a mobile phone or wireless phone or become digitalized, which can be connected with other media, such as a computer, it is thus called "new media."

Besides, based on the scope of new media, Sukanya Sudbanthad (1996, as cited in Duangkamol Chatprasert et al., 2004) classifies new media into 3 types:

- 1) Computer Technology: All kinds of technology related to the use of computers.
- 2) Telecommunication Technology: All kinds of devices or equipment for telecommunications, such as mobile phone, pager, fax, etc.

3) Communication System Technology: A communication system and its connected network in exchanging electronic data in the form of digital information, i.e., digital telephone network, satellite system, etc.

The characteristics of new media (Kanjana Kaewthep, 2013)

- 1) Interactivity due to its two-way communication
- 2) Portability
- 3) Convertibility
- 4) Connectivity
- 5) Ubiquity
- 6) Speed of Communication
- 7) Absence of Boundaries
- 8) Digitalization

All of these characteristics are technical aspects. For social and other aspects, Kanjana Kaewthep (2013) compiles sixteen characteristics of new media based on the propositions of Logan (2010) as follows:

- 1) Two-way communication. In one-way communication, during the transmission process, a receiver takes a passive role. However, for almost all new media, i.e., internet, blog, or email, are two-way communication. It means that a receiver can take the role of a receiver and a sender or take an active role.
- 2) Ease of Access to and Dissemination of Information. While receivers of mass media cannot control the flow of information and the only way they can control is to turn off their reception, receivers of new media can access and control the flow of information processing, which is an eminent characteristic in sending and receiving the message of new media.
- 3) Continuous Learning. Typically, mass media, i.e., radio, television, newspaper, etc. can transmit information regularly and continuously, including taking the role of providing knowledge to the audience. However, due to its one-way communication in nature, receivers are passive and can involve at the information level only. They cannot be a part of the communication or interact with the received information and turn it to be knowledge fully. On the contrary, new media facilitates interaction with information all the time; thus, it leads to an understanding or affects receivers' cognitive ability.

- 4) Alignment and Integration. The provision of information by mass media is disconnected and is difficult to be understood without connecting all information as a whole picture. However, in new media, content can be easily connected, i.e., through Search Engine, and integrated with the existing knowledge.
- 5) Creation of a Community. Communities of all types and purposes can be created in new media due to the four mentioned characteristics: learning, entertainment, politics, etc.
- 6) Portability. Because of its portability, new media can free communicators, both a sender and receiver, from time and space constraints. On the other hand, it may also cause some problems, such as easy to get lost, crimes, leaf-pocketing, hidden cameras, or even being used in an explosion or terrorism, etc.
- 7) Convergence. The convergence of new media can be interpreted in two ways. 1) In terms of media perspectives, new media can converge several media to be one communication device, and 2) in terms of business perspective, the content presented in the mainstream or traditional media can be stolen or secretly distributed in new media, such as YouTube or Bit Torrent. This caused a conflict between the traditional media and new media at the initial stage. However, later YouTube and Bit Torrent made a contract with movie and TV companies to disseminate or repeat only the permitted content.
- 8) Interoperability. In the internet, alphabets, images, sound, etc. can jointly be presented.
- 9) Aggregation of Content. In new media, new content can be selected, cut, and modified from the old content unlimitedly.
- 10) Diversity. New media can add more diversity, alternatives, and Long Tail. Long Tail means some produced work cannot be sold successfully in a huge quantity within a short time, but new media can prolong the sales slowly but for a continuous long time.
- 11) Re-convergence. The new convergence may take place again between a sender and a receive, not only at the production stage, but also during the stage of distribution, marketing, and consumption.
- 12) Social Collectivity & Cyber Cooperation. When people talk on the phone or write a letter, it is a relationship linkage between acquainted communicators.

However, for new media, people can connect and communicate with a complete stranger.

- 13) Remix Culture. For instance, the content from the new media can be modified, edited, and composed towards a new goal, such as to produce a song to listen by oneself, to write a report, to shoot a short film, etc.
- 14) Transformation. It is to transform a product to be a service. For example, from listening to a song through a record or cassette tape to online listening or viewing from a service provider.
- 15) User-generated content. In new media, receivers can also create the content.

In summary, from the aforementioned characteristics of new media, the traditional media may possess some of them, but all of them like new media.

2.5.1 OTT (Over the Top)

OTT (Over the Top) means the audio-visual service through the internet. However, OTT service providers are not the owners or internet network providers, such as YouTube and Facebook Live. From the survey of OVUM, it was found that in 2017, 324,355,503 users around the world registered to use OTT and it is anticipated to increase to 557,193,400 users in 2022. (The Office of the Broadcasting Commission Television Business and the National Telecommunications Commission, 2018).

2.5.2 The Patterns of OTT Income

- 1) AVoD (Advertising Video on Demand) means the income comes from service fee from product owners or advertising/ media agencies who want to present their products or advertisement via the OTT service, i.e., YouTube, Facebook, or Line TV, etc. The advantage is viewers do not have to pay for any service charge; thus, it can be assured that the products or advertisements can access and reach their target consumers.
- 2) SVoD (Subscription Video on Demand) means the income from subscription fee, either monthly or yearly, from service users or so-called members

who can view the content from a service provider any time they need by the right they own all through their membership period, i.e., Netflix, Primetime, iflix, etc.

- 3) TVoD (Transactional Video on Demand) means the income from service fees collected from service users for the specifically selected content without paying for a membership fee. TVoD is divided into two types:
- (1) Pay-Per-View is the service fee per each service time to view content or a program at a certain time. It is like buying copyright for rental or viewing.
- (2) Electronic See Through (EST) is the service fee from service users who download the content and store it. Service users can view the content freely without the time and frequency constraints. It is like buying absolute copyright for viewing.

PESO MODEL PAID MEDIA SHARED MEDIA O WNED

Figure 2.1 PESO Model

2.5.3 PESO Model

PESO Model is a diagram illustrating four kinds of media (iQMediaLink, 2017)

- 1) Paid Media means the media that needs to be paid to buy advertising space.
 - 2) Earned Media means the media that disseminates news of brands.
- 3) Shared Media means the media in which customers or consumers can interact with the brand and leads to the spreading of news.

4) Owned Media means the media created by a brand and can control the communication with customers or consumers.

2.5.4 A Gap in Accessing Information and Knowledge or Digital Divide

Increased changes in computer and internet technologies and inequality in disseminating information in the information society era cause a gap between groups of people growing and living under the old media landscape and other groups of people grown up in the digital era. Such a gap reflects differences in the ability to accessing and using digital information. Therefore, a gap occurs between people who have information (Info haves) and those who have not. (Info haves not). The inequality in accessing information and knowledge is called "Digital Divide." Such a gap can happen at the individual, family, business, or regional level with different socio-economic backgrounds or factors, which affect an opportunity in accessing information and technology, including the use of the internet in doing activities. (OECD, 2001, as cited in Penpak Tiawsomboonkit, 2014).

Owing to the digital divide in the media convergence period in which viewers can view from several devices beyond a regular receptor, groups of people are limited to view only from television, the traditional receptor. Such a limit is caused by several factors. Demographic variables, i.e., sex, age, education, occupation, and income are one of the major factors that are related to digital divide of both mainstream media, i.e., television, and new media, i.e., the internet Smartphone. Besides, socio-economic status often goes in parallel with the new media ownership.

Nevertheless, while demographic factors affect media literacy, the ability to accessing and using technologies also affects media literacy as well. Earlier, the meaning of media literacy of the traditional media means the ability to read and understand the content of media by basic knowledge on media production and distribution to masses of people.

However, under the new environment of digital media, a more variety of skills are essential and need to be added into media literacy beyond the ability to read books, view TV, and understand media content. Digital content requires additional skills. Digital media users have to search for information through various devices, i.e. TV, smartphones, computer, etc. and know how to manage with all those devices.

Thus, the ability to search for relevant information by screening it from devices is needed. Additionally, the media environment of digital media is different from the traditional media as it can be connected with other display-screen equipment, i.e., smartphones, Smart TV, or computer monitors, which is different from the analog system. Therefore, the use of digital devices and equipment is more complicating and requires more skills. To acquire needed information, users have to know how to connect the TV with the internet, turn on a computer, select and use the right software, and access the system properly. While how to turn on the TV or select issues in the newspaper news is a required skill, the skills in managing digital devices are also the fundamental necessities that users who want to access a variety of service forms.

Furthermore, Park (2012, as cited in Penpak Tiawsomboonkit, 2014) categorizes the access dimensions into two parts: Device literacy and content literacy. For device literacy or access, it reflects users' skills in accessing all kinds of devices and equipment, such as hardware, software, and networks that can access TV or other digital media. For content literacy, it means the ability to search and screen needed information. Besides, Buckingham (2005, as cited in Penpak Tiawsomboonkit, 2014) divides access into two dimensions: physical access or the ability in accessing devices and in managing technologies. For the first dimension, technologies are related to a physical device, i.e. ownership or the accessibility to hardware. The second dimension focuses on the skills in equipping technologies with the content or the ability in using software or content.

Van Dijk (2006, as cited in Penpak Tiawsomboonkit, 2014) explains four steps of media accessibility and usage as follows:

1) Motivational Access. It is the first step in using new technology. Motivation influences the decision-making of a computer purchase or network connection. It also influences the learning of important skills and the usage of interesting applications. Some people with low motivation may not want to use a computer because they dislike it, are afraid of, or worried about using it. Some people may have used it before but stop using it for a while or may use it temporarily. Eventually, it can imply that people who do not use a computer maybe because they have no choice, no opportunity to access computer or the internet or have no device.

They may not use it either because of their psychological state or because of their educational background. All of these reasons obstruct their connection to and their use of the internet.

- 2) Material and Physical Access. When people have a motivation to access technology, it provides an opportunity for these people as new users to take action, starting from buying a computer and connecting it to be their own device. They can also find other places to use it, i.e., at the workplace, school, family, friends, or the public. "Material access" covers broader meanings than "physical access." Material access does not cover only an opportunity to use a computer or the internet, but also the access to channels, programs, and data sources.
 - 3) Skills access is divided into three essential digital skills:
- (1) Operational skills: skills in using a computer, both hardware and software.
- (2) Information skills: skills in searching, screening, and operating with information from computers and networks.
- (3) Strategic skills: skills and ability in using computer and networks as information sources for achieving certain goals or general goals to improve their social status.
- (4) Usage Access. It is a measurement of the accessibility. However, what can be measured does not always mean the actual work or use. The measurement is on "usage time" and "diversity of use."

Although some people may be able to access the use of the internet; however, they may face other obstacles, such as a shortage of infrastructure, no understanding of information on the internet. It is found that these two obstacles are the main causes that obstruct the connection to the internet; thus, they also limit the ability to manage and access technologies.

The study on the concept of new media helps the researcher to understand the characteristics of new media, which are different from the traditional media, including the concept of digital divide and problems caused by such divide. The knowledge gained from this part leads to answer the research question on the new media landscape.

2.6 Concepts on Media Convergence

Media Convergence is the consequence of the advancement of computerized networks and telecommunications, leading to an information society Besides, it induces an integration and convergence of several media: computer, internet, mass media, i.e., TV, printed media, entertainment media, and music, to yield new media with no distance nor time limit. Moreover, users can interact with the content, create or generate content, and determine the usage and purposes by themselves. Accordingly, the internet and social media are favorite channels in information consumption of people in society. (Suparak Chutrakul, 2014)

Panida Saipradit (2006) Media convergence is the integration of technologies of all kinds. In the past, each equipment or device facilitating human lives performed only its function. For instance, a mobile phone was just a mobile phone that users could carry anywhere. Nowadays, the convergence of broadcasting technology with telephone technology enables users to listen to music or view a program on smartphones. Moreover, entertainment and information service are converged to be "Infotainment."

From analyzing the characteristics of each network, the convergence can be classified into three kinds of the network:

- 1) Telecommunication network. It is the ability of technologies in connection, i.e., copper wires, cable, wireless phone, or even satellite. It increases more alternatives for connection. Especially, the convergence with the advancement of the internet brings about a more variety of services, i.e., the service in the form of telephone via the internet (VoIP), etc.
- 2) Radio and TV network. Mostly, it is the service in the form of entertainment. When this kind of network can be connected through the internet network, it can create many new forms of service, i.e. listening to music via the internet, or to view a TV program via the internet, etc. To view TV programs via the internet requires a broad communication channel with high speed because to give a Real-Time service, if the communication channel is not broad enough, the quality of viewing will be poor.

3) Internet network. It is a large-sized network used by people all over the world; thus, it leads to technological development and a variety of services, i.e. to transmit distance information via the internet or e-learning, etc. For e-learning via the internet can be a transmission of images, sound, and moving pictures, which requires the capacity of the hi-speed internet.

Characteristics of Media Convergence

Media convergence can occur in four levels:

- 1) A convergence of services
- 2) A convergence of transmission channels
- 3) A convergence of terminals
- 4) A convergence of providers (through a merger and the establishment of business alliances)

Media convergence is driven by digital technology, enabling the transmission of sound, still and moving pictures, and information simultaneously on the same network effectively and leading to a variety of service provision. For instance, a service is provided for viewing TV programs or movies via the internet or mobile phone for listening to music or radio programs via the internet, an e-meeting or learning in which attendants or learners/instructor can communicate or exchange their information, including images in the Real-time, etc. Besides, it enables an entrepreneur in one area of business to enter other areas through a merger or business alliances. For instance, AOL Inc., the world's biggest internet service provider or ISP, merged with Time Warner, Inc., a world-class media corporation. Such a merger creates a new business form. AOL, as the online business leader, performs as a distributor while Time Warner produces entertaining media. When two giants merged, business innovation took place. Such innovation of digitalization makes the business stronger than in the form of only online media. Therefore, such a merger should bring about a tremendous increase in new forms on TV, radio, telephone, printing, and computer industry.

Consequently, mass media needs to adapt to the era of media convergence. In the past, mass media plays significant roles in agenda-setting and in screening information for society as a gatekeeper. Nowadays, mass media is going to be replaced by new media. Correspondingly, the significance of some related theories in mass communication may be reduced, i.e., the theory of Information Flow, Hypodermic Needle, etc., believing in the gigantic power of mass media on receivers or the audience. Two-Step Information Flow, which assumes that mass media plays a role in selecting information for receivers and reporting news to the society, is also diminished. At present, the advancement in technology and the internet induce people to have more options to search for information from various channels. Notably, communication through the internet also changes the lifestyles of people in the society. Besides, they shift to be a communication controller instead.

In the past, before media convergence, the industry of computer, telecommunications, and media technology are all separated completely. After the convergence of these three industries, it becomes a huge industry that also yields a shift in communication paradigms. Newspapers and magazines have adopted new media technologies, i.e. the use of the internet in developing the process of production, distribution, and marketing, and turned themselves to be "online newspapers" and "online magazines." During the period of media convergence, reporters need to use one of the four screens, namely a display screen, i.e., TV, computer, tablet, Smartphone for connecting to the internet in searching data or current issues in the online world for writing their news or articles and send it to the news-press or printing house. Apparently, the internet networks are the useful data source for producing news of reporters during the media convergence period.

Danesi (2002, as cited in Suparuk Jutrakoon, 2014) studied the evolution of media and its impact on social changes. He found that the present media convergence is the convergence of computer and mass media technologies: Television, movies, newspaper, entertainment media, and music, which yields great impact all over the world. At the same time, media convergence makes communication devices more personal or more individualized and leads to the gathering of several ethnic groups or re-tribalization, as well as the shrinking of the whole world to be a global community or globalism, with the power of digital galaxy.

(Tham Chuasathapanasiri, 2014a) states that media convergence means the integration of radio, television, telephone, and computer networks, which causes media impact and attracts people of the present world into the internet world. Receivers are not passive or play the role of receiving messages only, but it is the

period where receivers become media users who can generate their media and content. On the other hand, media consumption behaviors also change rapidly towards "Multi-Screen" media usage behavior. Users express different behaviors in each channel. Children decrease their use of radio and television and turn to use computers or Smartphones increasingly. Besides, many new diseases take place in the media convergence era, such as Selfie or preference of shooting oneself before the front camera and uploading it in the social media, waiting for other people to press "like." Other diseases are chats while sleeping, internet-addicted, etc.

The study on the concepts of media convergence helps the researcher to understand forms of media nowadays where several media have been converged for all kinds of purposes. Besides, it helps to understand media genres in the new media landscape, which leads to answering the research question on media changes and the roles of media in the new media landscape.

2.7 Concepts on Media Landscape

Landscape means the overall picture of the certain areas perceived mainly by the visual-auditory sensory organisms, i.e., land, water, trees, animal, or human inventions (such as architectural, cultural, and media landscape) (Wikipedia Free Encyclopedia (2013, as cited in Penpak Tiawsomboonkit, 2014).

In 1990, the word "media landscape" was coined to mean the ways people acquire information and entertainment. To illustrate this, earlier people read newspapers and books, listen to the radio, and watch TV, etc. All of these are called "old media or traditional media landscape." Today, they receive information and entertainment through Smartphone, e-notebook, digital books, websites, etc. (Penpak Tiawsomboonkit, 2014)

Tham Chuasathapanasiri (2014b) defines the media landscape as the consideration of physical aspects of the area, timeline, senders, receivers, channels, media content, and who exerts the dominant power in such a communication field or genuinely who is a media owner.

Penpak Tiawsomboonkit (2014) compiled the definitions of the media landscape and concludes that the media landscape is the illustration of the multi-

perspective appearance. For example, from a business structure perspective, people will see all kinds of media, i.e., radio, TV, printed media appearing in the society and also used in society. However, from the receivers' perspective, it appears media for women, children, teenagers, etc.

The Analysis of the Media Landscape. The analysis of the media landscape is on the following components: (Tham Chuasathapanasiri (2014b)

- 1) Communication form. It is to see where communication starts. If it was communication during an early age or the traditional form, communication will start from a sender or mass media as a sender. However, if it is in the form of new media, communication will start from users so it is called "user-generated content."
- 2) Target receivers. For the mass media convention, a sender will consider receivers at the destination as "a mass" of receivers. Therefore, receivers are perceived as homogeneous, i.e., groups of women, men, children, youth, well- or poorly educated, religious groups, occupational groups, racial groups, or different economic status or income groups. Thus, mass media focuses on the commonalities among them based on the assumption that people of similar demographic factors tend to have similar attitudes, behaviors, and needs. On the contrary, for new media, receivers tend to have relatively higher social status, be more individual with different needs, expectations, and behaviors. Accordingly, sex, age, education, or income may not be the factors to assume their commonalities any more. Therefore, communication in the new media era is based on the assumption that receivers are individuals with particular needs and interests.
- 3) Platform or communication channel. Nowadays, radio and television systems (or audio-visual media), telecommunication systems (telephone and auditory media), and computer systems (the internet) are converged to be new media and bring about social media or a virtual community. People are connected with daily information, thought, opinions, emotions, feelings, and experience, including daily activities, etc.

The television media landscape is dynamic (Penpak Tiawsomboonkit, 2014) or changes following changes of related factors, i.e., media regulation structure, the evolution of media technology, political and social environment, etc. Regarding television media landscape in Thailand, it has been transformed from a terrestrial

analog system of only six television channels to more diverse platforms nowadays, such as cable TV, satellite TV, internet TV, IPTV, mobile TV, etc. with a variety and plenty of TV channels, including a lot of receptors besides TV receptors. Moreover, receivers are not only TV viewers, but also users who can respond to a sender and other media users under the changing media landscape. Not only do the major components of the TV industry change, but only receivers' behaviors, expectations, and norms.

During these past few years, the global media landscape has been revolted. Broadcasting operations and channels have been changed rapidly. At present, the newspaper focuses on its website more than its traditional printing operation. Thus, video clips and auditory files tend to appear more on the newspaper's websites. On the other hand, mass media uses civil journalists increasingly as sources of the news and material providers for broadcasting or dissemination of information. Today, in the media, people appear as sources of information in various channels, i.e., Twitter, YouTube, etc. (Understanding the Media Landscape Components (2015, as cited in Penpak Tiawsomboonkit, 2014).

Furthermore, from the perspective of media consumers regarding the impact of the changes in the media landscape on marketers, they view that technology helps to increase consumers' capabilities in choosing their media usage in terms of usage time, patterns, and platforms. Such dynamism also changes the traditional media business model, especially printed media, radio, and television (Plutsky, 2009; as cited in Penpak Tiawsomboonkit, 2014).

The concept of the media landscape helps to understand the situation and landscape of the old or traditional media and new media for comparison to see clearer pictures for this research.

2.8 Concepts on Television Business Management

2.8.1 Communication Management

Management means the process of human work or the process of using people to achieve an organization's goal under the changing environment. (Sanoh Tiyao, 2000)

Albarren (2006) defines "management" as "a co-working process of several parties or divisions in an organization to accomplish some organizational goals or objectives."

Pringle and Star (2006) define "Management" as "a process of planning, organizing, leading or directing, and control to reach an organization's goal through the coordination and collaboration of collective personnel and shared resources."

Therefore, the meaning of management used in this study is a procedural process of working: planning, organizing, leading or directing, and controlling, administered by the executives in managing all resources, i.e., personnel, budgets, tools, and equipment under the changing internal and external organizational environment towards the utmost effectiveness as set by an organization.

From the above definition, management thus requires a continuous process of activities and coordination, facilitated by the top management to achieve the desired goal. The main issues of management are as following:

- 1) Management can be applied to any organization. The goal is to make profits.
- 2) Management involves productivity aimed at efficiency and effectiveness as the utmost goals.
- 3) Management can be applied for executives at all levels of an organization.
- 4) An organization's management requires management as a process designed to accomplish organizational tasks as planned through the integrated usage of the following four main resources: (4M's)
- (1) Human resources or personnel and practitioners of an organization.
- (2) Monetary resources or budget for hireling, salaries, and operational expenses or purchases.
- (3) Materials, i.e. equipment, tools, including operational buildings and places.
 - (4) Management or management knowledge.

Moreover, the management of each organization requires a different proportion of the resources usage, depending on the appropriateness and policies of each organization. Notably, management is very essential for organizational management. In general, organizational management comprises four important parts: (Siriwan Sereerat, Parin Laksitanon, & Suporn Sereerat, 1996).

- 1) Planning. Planning needs good cooperation from the executives and employees. In planning, an organization's external factors are included as an opportunity to determine the strength of the organization, while applying possible obstacles to forecast the weakness of an organization so that it can be reduced as much as possible. Past incidents are also analyzed to evaluate possible circumstances in the future. Planning involves the improvement of an organization's missions, the evaluation of possible coming circumstances, tendencies in determining objectives, and choosing strategies. Planning will help the business to adapt to the market's changes and can determine objectives. However, strategic planning requires a followup proactively rather than reactively. Thus, a successful organization must be able to control the future of the organization rather than to wait for the impact of the external environment. Primarily, an occurrence that affects a decision-making is very crucial in planning. Likewise, adaptability is also essential due to economic changes all over the world. The initial success of a business comes from good planning that can be genuinely implemented and yield an explicit outcome. Besides, it should be adjustable and changeable.
- 2) Organizing means to analyze what an organization needs to do to ensure good performance and can compete in the industry. An organization that can organize effectively enables the executives and employees to see the importance of organizational success. For instance, work specialization for each particular job can be done by dividing into divisions with certain delegated authority. Clear job description and required qualifications and tools for each job can make personnel learn about the nature of work, organizational structure, a span of control, and chain of command. Changes of strategies need to change the structure as well because new positions that are created or merged affect organizational structure so the use of resources and ways of achieving the goals must be specified.
- 3) leading/Directing. It is to operate to ensure the achievement of the desired goals by the coordination of personnel in the organization. To lead or direct an organization requires several skills: leadership, motivation, coordination, and

teamwork, etc. Thus, this role is no less important than other roles since the executives have to play this role effectively. Otherwise, all the plans, including prepared resources, will be useless. Accordingly, leading and directing involves knowledge, expertise, experience, and ability to motivate employees to collaboratively operate as planned.

4) Controlling. The effective use of organizational resources requires a process of inspection, follow-up, and evaluation of the employee's performance in all activities to keep the organization operates properly to reach the desired goal. An unsuccessful organization or business may be caused by a lack of control or ineffective control. Controlling is thus a vital management duty since the beginning to the end of the management process.

2.8.2 Change Management

To solve problems through change management, it is important to study thoroughly the concepts of change management. An organization has to analyze its environment and the expectation of how to achieve business capability in the future. Such an analysis is thus the main goal in driving an organization towards any change through change management with proper regulation in the right direction. An organizational change can be the total or partial change, which can be a minor or an enormous change. Anyway, a change is rather complex, complicated, and might take a long time. An efficient organization should pay importance to human resources, which require essential skills development and the right attitude to enhance the readiness for change. Especially, the prompt preparation for change is essential before moving into the process of an organizational change. Thus, for a general process, an analysis of future environment helps to foresee the future organization. Therefore, an organization should determine a vision that indicates the organization's expectations and future image. Another crucial issue of an organizational change is a resistance of change, which makes an organizational change fail. The management of resistance against change is thus very important. The executives can perform their roles as change agents by working in collaboration with managers in the related field to determine goals, methods, initiations, a follow-up, and evaluation to build an understanding about the new structure and new working systems through a variety of

channels of direct communication to the employees, including two-way communication. By doing so, it helps to enhance employees' engagement through human resource management system to drive the organization towards success.

Nowadays, the world changes towards digital transformation, information can be accessed more easily than in the past. The competitive advantage or disadvantage is determined by new technology. Thus, it can be both easy and difficult at the same time to step to be a media leader in the market. Consumers now have more factors and information helps them to make decisions on their product and service consumption, i.e., word of mouth, or social media. This reflects that while consumers can search for more information on the producers, producers know them less and do not know them thoroughly.

Therefore, in spite of change-management planning, the important thing is human resource management by focusing on the development of their knowledge skills and the right attitude simultaneously. Notably, the ability to drive any changes in human resources who perform their duties on different parts of the organization depends on their capabilities and positive attitude towards the coming policies affecting all employees at all levels. If personnel or employees have congruent opinions with an organization's vision to see how to improve or change, they then can conduct their performance more effectively. Likewise, they should have a positive attitude and determination towards changes for the better in accordance with the vision of an organization as well.

Administrators or leaders of an organization should have operation plans to reduce the negative impact caused by any change. On the other hand, they should facilitate an adaptation and acceptance of innovation, including establishing new potentials to cope with any effect from changes. Typically, changes can occur due to two main factors: 1) External factor, i.e., the government's policies, economic, political, and environmental factors, business competitors, etc. 2) Internal factors are main factors that cause changes, i.e., the organization's policies and working process, etc. (Thana Siriwallop & Chaipong Pongpanich, 2010)

Therefore, an organization cannot reach any accomplishment without the major factors, namely the readiness of human resources and corporate culture. In short,

internal factors are factors occurring in an organization and bringing about changes, i.e., policy changes in management, the adoption of new technology, etc.

2.8.3 Television Management

The radio, TV, and cable TV management composes of eight principles:

- 1) The determination of an organization's vision and policies. They are the starting point for further planning and administration of the entire operation. The right policies can lead to success. Thus, executives should be farsighted and be able to anticipate the right direction accurately to determine the right policies for an organization.
- 2) Program-schedule management is to plan how to manage broadcasting time to present a program to the target viewers, which requires management mechanism towards the maximum effectiveness in increasing the number of viewers, viewers' satisfaction, business opportunities, and competitive advantage over competitors.
- 3) Production management and program provision. Proper programs are selected to present to viewers, which is considered as an important part. Thus, the selected programs should be substantive, amusing, and tasteful. Importantly, producers can earn good turnovers or business profits from those programs.
- 4) Evaluation is conducted during the operation and inspection steps through several methods. Information might be collected by an organization, i.e., content analysis from customers' or employees' letters, phone-in, criticism, etc. or by an independent agent or organization to conduct a survey on their viewers particularly.
- 5) Personnel management of TV enterprises is different from types of organizations. Specifically, TV enterprises consist of personnel from different occupational groups. Some news and programs are protected by the Constitute. They cannot be interfered by administrators or executives. Besides, they are the profession emphasizing vocational ethics.
- 6) Marketing management. Since the main income of TV enterprises is advertising. Therefore, it is very competitive in finding income from business sources or organizations, both government and private, that need advertising. There are three

types of marketing management: through agents, ownership, or own supervision. Staffs use rental-time methods, or own production, or supplement business in a program.

- 7) Technical management is the management service to increase the effectiveness and reduce the operational costs, i.e., planning of proper use of technology, studying the instructions to maximize the use, etc.
- 8) Research and development. It has a broader meaning than only a survey of the audience's preference. Instead, it is the conduction of research essential for developing the enterprise in a broad view, i.e., programs, technology, marketing, etc. (Chitnarong Kunakridakarn, 2013).

2.8.4 New Technology Management

Technology change is inevitable and is a major drive in the developing media industry. Innovation management is found to be one of the significant studies concerning media and economic management. From the review of literature, the studies on technology and innovation management in media organizations have been published since 2000.

From the previous research, it reflects the fact that media is one of the few industries facing the phenomenon called "Disruptive Technologies." Day and Schoemaker (2000) define "Disruptive Technologies" as science-based innovation with the potential in creating new things or changing what is existing. Examples of this phenomenon are two-way TV internet, E-book, etc.

2.8.5 Risk Management

Risk management is a process used in identifying, analyzing, evaluating, and prioritizing risks that may affect the goal accomplishment of an office or organization. In risk management, certain guidelines are specified to control to prevent or minimize possible risks to the acceptable level.

Somchai Trairattanaphirom (2006) divides the steps in a risk management process into 6 steps:

- 1) Risk management planning: The step of deciding how to plan an activity project management. The main output of this step plans to manage or cope with risks.
- 2) Risk identification: The step of identifying any condition that may affect a project, including characteristics of data of each project. The main output of this step is an initial risk registration.
- 3) Qualitative risk analysis: The main output of this step is an updated and timely risk information registration.
- 4) Quantitative risk analysis: The main output of this step is a timely principal registration.
- 5) Risk response planning: The step of adopting the preparation steps to create success opportunities and minimize possible threats found in the previous steps.
- 6) Risk monitoring and control: The main outputs of this step are recommendations, certification, and preventive guidelines for risks that might occur, including needs towards changes and up-to-date registration. They include a project planning scheme and the process of a project's resource management.

Typically, risks can be classified into two major types:

- 1) Risks caused by internal factors.
- (1) Operational Risk: Equipment or human resources obstructs an operation.
- (2) Financial Risk: Problems in finance and budgets, i.e., a shortage of capital, a lack of liquidity, errors, or corruption.
- (3) Strategic Risk: Mistakes in issuing or implementing improper policies or strategies, including policy corruptions of the administrators.
- (4) Policy Risk: Risks from laws, rules, and regulations of an organization.
 - 2) Risks caused by external factors
- (1) Political Factors: Risks caused by politics, laws, and social order.
 - (2) Economic Factors: Risks from the economic condition.
 - (3) Socio-cultural Factors: Social and cultural risks.

- (4) Technological Factors: Risks caused by technological changes
- (5) International Factors: Risks at the international level, i.e., foreign currency rates.
 - (6) Natural disaster
 - (7) Risks occurring in the competitive condition

The concepts of TV management help to understand a process of media management including possible risks occurring in the media organization management, and leads to answer to the research question on the adaptation of TV in the digital economy era.

2.9 Concepts on Media Consumption Behavior

2.9.1 Consumer Behavior

Consumer Behavior means an action of an individual involving directly with the product provision and usage. It also includes a process before decision-making that influences action. (Parin Laksitanon, 2001)

Benefits of the study on consumer behaviors

Parin Laksitanon (2001) states that the benefits of the study on consumer behaviors are two-fold:

- 1) It helps to understand the overall marketing problems or Macromarking problems by studying consumers' behaviors in general and applying the knowledge to solve the problems.
- 2) It helps to point out Micro-marketing problems or the problems of some specific problems.

Generally, it is essential to solving the problems at both macro- and micro-marketing levels simultaneously.

The benefits of the study on consumer behavior can be specified into details as follows:

1. To help understand problems of the needs of the society, economic system. The mechanism by studying consumer behaviors, types of customers' needs, and a tendency of their needs.

- 2) To use a marketing mechanism to make a decision for society more correctly. Marketing directors should know how the popularity of a product occurs or influences consumers. The understanding of consumer behaviors can make more accurate anticipation of what customers need.
- 3) To help find a new market by searching for groups of consumers whose needs have not been gratified. The anticipation and search for consumers' needs are needed before producing products to be sold. Modern marketers must be consumers-oriented, especially the influence of the environment in the society on the new emerging markets.
- 4) To help to search for a market for products and understand what kind of products consumers like or dislike. If the commonalities of consumers can be found and categorized correctly by their behaviors, it can identify different groups of consumers. Such knowledge can make an organization produce customized products differently from its competitors. In other words, marketing executives should search for consumers with the same taste to be their market segments. Knowing market segments then leads to further development and improvement of the products to respond to each group of consumers' needs particularly.
- 5) To help improve marketing activities. The analysis of consumer behavior helps to improve marketing strategies due to very severe marketing competition in the present economic situation. Therefore, it is very essential to evaluate the genuine characteristics of consumers in the present markets. Then, an organization should choose proper strategies for improvement towards the increased popularity of the products.

2.9.2 Consumers' Media Consumption Behaviors

McQuail (2005) states that the media selection and exposure of consumers are influenced by several factors, and depend on consumers' distinctive behaviors and characteristics. Still, media genres also affect consumers' media consumption. MeQuail thus summarizes that consumers' media consumption behaviors are influenced by social and mass media structure.

Social Structure comprises sex, income, education, residence, working position, etc., while mass media structure, i.e., channels of media accessibility, media

content, convenience in media access, etc. Both social and mass media structures have a mutual effect and equilibrium all the time, similar to the concept of demand and supply.

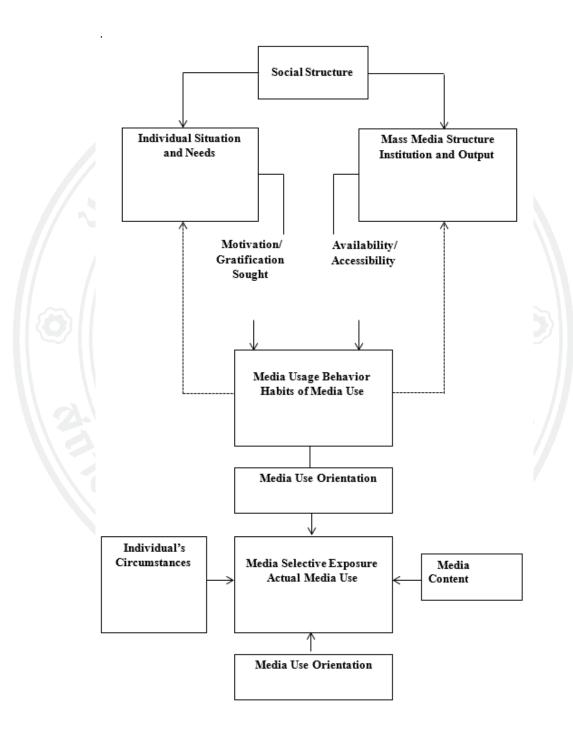


Figure 2.2 A Structural Model of Media Use

From Figure 2.2, it illustrates the relationship between habitual patterns of media use in consumers' daily lifestyle and other alternative factors. At the top of the Figure, it indicates two main factors of the social structure that influence habitual patterns of consumers' media use: situation and individuals' needs, i.e. disseminated information during a certain time, needs towards entertainment, needs of communicating with others, and individuals' characteristics, etc. For the mass media structure, it covers the available media during a certain time, the concurrence between media technology and individuals' distinctive characteristics, economy, learning needs, etc.

However, besides these two factors that affect consumers' media consumption behaviors, but other external factors are also involved, i.e., changes in media technology, interestingness, expectation, satisfaction, etc. Moreover, at the bottom part of the Figure, it also illustrates three major variables that might affect consumers' lifestyle: (Kitti Gunpai, 2013)

- 1) Media content: daily presented program content, presentation patterns, etc.
- 2) Individuals' circumstances or an individual's circumstance during a certain time, i.e., free time, readiness for media exposure, other alternative activities, etc.
- 3) The social context of media consumption, i.e., the influence of the family and friends, etc.

All of these factors exist continually all day, either predictably or unpredictably. Therefore, an individual's media consumption behaviors depend on the effect of such factors.

2.9.3 Consumers' Information Seeking in the Media Convergence Period

Owing to communication technology changes, it emerged the media convergence that enforces entrepreneurs of various businesses to adapt themselves to catch up those changes, especially the advancement of the internet networks. Even, receivers also have to shift their roles from the passive audience to the active audience or information seekers, particularly receivers aged 18-24 years old or digital natives. Digital natives are those who were born in the digital era and expose to digital media

mainly. They were raised up during the advancement of computers, mobile phones, digital devices, and the internet; thus, they are familiar with technologies.

Kanjana Kaewthep (2013) says that nowadays receivers are highly active and change their roles from passive "information receivers" to active "information seekers" who use media in an active way and are user-pull rather than "user push," who only engage in one-way communication.

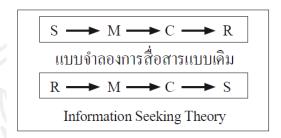


Figure 2.3 A Model of Information Seeking Theory

Information Seeking Theory has been widely used in the study on new media. New media is two-way communication in both interpersonal and group communication. For example, information can be sought from websites, movies, and songs from YouTube, etc. New media like Twitter, Facebook, Instagram, or Line all induce a gathering of social groups and cyber collaboration. Receivers can modify content differently from the original content. In the past, mass media played the role of agenda-setting and a transmitter of messages to large groups of people. Besides, they reacted or responded in the congruent direction with the transmission of a sender. However, nowadays, it is the information society era. Several issues that are big current news can be originated from online sources. Each media user can make use of 4-screen media as a tool in seeking information to gratify their needs. Therefore, the theory can explain what kind of media users choose, what kind of content they need, and why they choose certain media. Thus, the theory explaining such information-seeking behavior is called "Uses & Gratifications Approach to Mass Communication." This approach explains information seeking on new media while

the approach emphasizing the effect of the traditional media is called the "Communication Effects Approach."

2.9.4 Multi-Screen Media Exposure Behaviors

Since communication technologies have great roles in receivers, they affect changes in viewers' exposure behaviors. In the past, viewers can view only one-screen TV, but now they can view more than one screen, or so-called "second-screen" or "third-screen" since these small screens are portable to everywhere and in every time. (Suwit Sasanapichit, 2014, as cited in Supasil Kuljitjuerwong. 2014). Primarily, most urban people tend to have four-screen viewing behaviors increasingly for consuming news, documentary content, and entertainment via social media. They will select to view the programs during their convenient time through online videos, without relying on TV. Besides, multi-screen exposure, viewers also need to participate in media and to connect with other people as well. (Sakulsri Srisarakam, 2014). Still, multi-screen viewing behaviors can be divided into two types: sequential usage or to use a screen by screen continually in sequence and simultaneous usage or to use several screens simultaneously.

- 1) Sequential Usage. The example is to read the news on a Smartphone, and then search for more information on a computer. Factors affecting such a continuity are the distinguished property of each screen that can respond to a user's particular needs. Thus, the transmission from one screen to another screen occurs instantly. From the example, a Smartphone can provide facilities in accessing information as it can be portable everywhere in every time; however, it cannot carry or download information as effectively as a computer.
- 2) Simultaneous Usage. This kind of usage can be sub-divided into two types:
- (1) Multi-Tasking Usage means activities viewers do through several screens that are not related to one another or they might not contain the related content. For instance, while viewing a TV program, users may pick up a mobile phone to access social media. Another example is while listening to music on the computer, users also download games via an application on the tablet, etc.

(2) Complementary Usage means to do activities on more than one screen at a time but the content is all related or identical. For example, while searching for tourism accommodations or hotels on the tablet, users also search from web boards to look for more information from previous visitors, etc.

The reasons why viewers have multi-screen exposure behaviors are four-fold:

- 1) The development of modern technology. Technological development introduced the second-, third-, and the fourth screen, i.e., mobile phone, tablet, and computer with different sizes and characteristics varying by each type of media. Because of this, it enables users to select using any screen that is convenient for them. Moreover, each screen has been developed by plenty of producers; thus, the competition is high. Consequently, existing technologies are effective and relatively cheap. It induces users to have more options to choose from.
- 2) The development of the internet system and applications. The development of the Hi-Speed internet facilitates convenience in data processing and carrying large data files. Thus, viewers can view the whole program effectively. Besides, the development of the operating systems of applications can support more convenient and quick access to needed programs. Because of these properties, several TV programs develop their applications as another alternative channel to communicate with their viewers.
- 3) The concordance between technology and lifestyle. The emerging screens are another option that offers differences in the size and unique properties of each type of screens. For instance, a Smartphone is small, compact, and portable. A computer has screens of varying sizes but can carry huge amount of information so viewers can view several programs at the same time. A tablet is medium-sized, not too small nor too big, and portable, etc. The differences of these technologies enable viewers to choose to expose to the screens in concordance with their lifestyle. As an example, during a traffic jam, a Smartphone is convenient for viewing in the car due to its compact size, etc.
- 4) Viewers' viewing behaviors and participatory roles. Viewers of today are no longer passive, but they want to participate in sharing, passing, commenting, and jointly producing the message. In other words, viewers shift their viewing roles to be "users" at the same time as well. (Tham Chuasathapanasiri,

2014b). Once viewers feel that they play a part in media participation, they also feel like a part of a program. Once they feel united with a program, it motivates them to alter their behaviors as presented by such a program. (Sakulsri Srisarakam, 2014). However, a TV screen may not be able to support viewers' participation and feel something, i.e., satisfaction or dissatisfaction, etc. like a tablet or Smartphone. Thus, viewers can express such feelings by giving comments, pressing "likes" or "shares," and posting, etc. Thus, such content is called under the new roles of viewers as "usergenerated content" (UGC).

2.9.5 Consumers' Media Consumption Patterns

Hein and Brandtzaeg (2007, as cited in Penpak Tiawsomboonkit, 2014) classify consumers' use of technology into 5 groups:

- 1) Non-users. This group of citizens has no time using any media technology, i.e. computer and the internet, etc. They are the elderly aged over 45 years old, with low income and low-level education. They often stay at home and can hardly access information and communication technology.
- 2) Average users. This group never used any information and communication technology in the old days, but start to use it with rather low skills of computer use.
- 3) Instrumental users. It is the group that uses information and communication technology for their utilization or for information acquisition. They often use a computer, internet, and electronic services, while they can also access them well
- 4) Entertainment users. This group spends their time on entertainment, i.e., playing games. They tend to use the computer and internet with advanced skills but seldom use electronic services.
- 5) Advanced users. It is the group that spends most time using a variety of information and communication technologies with different functions and purposes. They can use them with sophisticated skills, i.e., programmers, downloading or designing a home page, etc. This group is rather young with high education and income. They are advanced users of technology.

It is apparent that consumers' media consumption behaviors depend on several factors: social structure, mass media structure, individuals' distinctive characteristics, and interests, circumstances, economic, cultural, and geographic condition, etc.

The concept of media consumption behaviors helps to understand consumers' media exposure behaviors and their media selection. Thus, it leads to answer the research question on the consumers' perspectives on TV in the new media landscape.

2.10 Communication Technological Determinism

Communication comprises a sender, message, channel, and receiver. Scholars of each school give different perspectives on these four components. For well-known communication theorists that focus on the study of channels and media based on critical theories are those in the school of Communication Technological Determinism or Toronto School. (Kanjana Kaewthep & Somsuk Hinviman, 2010).

Communication technology is a kind of technology developed by human beings to increase convenience for human interactions. For the approach of the study on communication technology and society, it can be viewed from two perspectives: (Kanjana Kaewthep & Somsuk Hinviman, 2010).

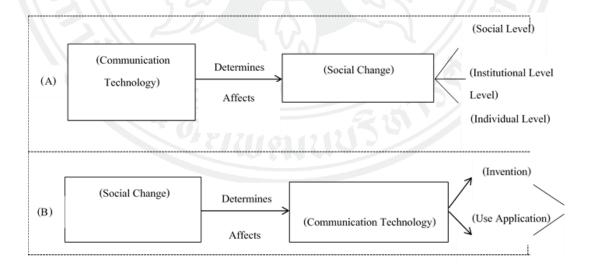


Figure 2.4 Approaches for the Study on Communication Technology and Society

From Figure 2.4, Model A is based on the assumption that when communication technology changes, what are the effects at the societal, institutional, and individual level. Namely, it is the fundamental concept of "Technology Determinism" as it believes that technology is the prime mover in driving social changes at all levels. For Model B, the assumption is different from that of the Model A. It believes that in the occurring social changes, what determines the occurrence of all technological advancement. Thus, the social condition is the prime mover while technological development is the output.

This research is based on the concept of Model A, which believes that communication technology is the prime mover that determines the outcome of human beings and society as a whole. This concept comes from Toronto School, which sees the power of media or the effect of communication technology on society. It also believes that media is the independent variable of human changes, whose effect can be divided into three levels: (Kanjana Kaewthep & Somsuk Hinviman, 2010)

- 1) Societal level. It bases on the concept that believes that if communication technology changes, it will bring changes to the society's civilization as a whole.
- 2) Institutional level. It bases on the concept that changes in communication technology will not affect at the societal level, but also at the institutional level. For instance, in the early period, the entrance of radio into a house did not yield any effect widely to the society, nor to individuals. On the contrary, it affected the relationship of people in the family institution. The husband and children of each house spent their entire day listening to the radio while the wife needed to listen to the radio that she had no option to choose. Consequently, it led to stress in the family institution
- 3) Individual Level. It based on the concept that explains that if communication technology changes, it will cause changes at the individual level too.

It can say that from the point of view of Toronto, communication technology is the prime mover that always determines human changes. Thus, since internet technologies have been introduced, they have made interaction and communication among people more quickly. On the other hand, they have also enhanced the domination of foreign imperialism more easily as well, etc.

2.10.1 Nature and Characteristics of Communication Technological Determinism

Scholars of this school pay attention to this theory differently. Still, they have some shared perspectives as Denis McQuail (2005, as cited in Kanjana Kaewthep & Somsuk Hinviman, 2010) summarizes as follows:

- 1) Communication technology is the foundation of every society. Toronto school believes that human beings have a need to communicate. Therefore, without communication technology, humans might not be able to interact with one another. Another belief is communication technology will be the foundation for maintaining the existence of a society of each period, no matter which period it is.
- 2) Each kind of communication technology will be appropriate for the social structure of each kind differently. Despite being the foundation of every society, each society calls for different kinds of communication technology foundation. For instance, in the agricultural society, local communication technology related to rituals, beliefs, or oral history will be needed. However, for the large-sized industry society, the needed communication technology is mass media that can produce and distribute a huge amount of message. On the other hand, a society that needs speed and information accessibility, the most appropriate technologies are digital media and the internet with high dispersal.
- 3) The revolution of communication technology will lead to a social revolution. This concept was initiated by a scholar named Harold Innis, who explains that any changes occurring to communication technology are always the prime mover of social revolution. To illustrate this, after Johan Gutenberg invented a printing press and published the bible and other printings to be disseminated all through Europe, this phenomenon was the printing revolution and led western civilization into gigantic transformation, etc.

2.10.2 Three Periods of the Development of Communication Technology

The development of communication technology of almost all kinds passes the following three main periods:

- 1) Invention. It is the first period in which media is invented and experimented.
- 2) Application. It is the period in which the invention is accomplished and technology starts to expand its dissemination widely
- 3) Control. After media is used to communicate widely, such media technology is often organized and controlled by the power of other benefit groups.

The examples of three stages of communication technology are broadcasting the radio in Thailand, which started in the invention period or invented by Krom Phraya Kampaengpet Akkrayothin. In the first period, it was experimented to be used for communication in a palace during the revolution period before the change in the governance system. Later, it entered the period of application to a wider scope in the form of mass media. After such a medium could reach masses of people, it was regulated by the government, i.e., the issuance of an act for control, etc., and was also controlled by private sectors, who won the wave concession and advertising broadcasting.

2.10.3 The Effects of Communication Technology

Communication technology changes affect people's consciousness of time and space, including having a direct effect on human perception. For example, the introduction of photo technology installed people's new awareness of the presence and absence of something at a certain time and place. Thus, from photo recording, photos enable us to be present in front of others without being at the same time and place. Besides, photo technology helps to expand our perceptual experiences and enables a human being to see intangible things.

2.10.4 The Core Concepts of the Scholars in the School of Communication Technological Determinism

- 2.10.4.1 Concepts of Harold Adams Innis
 - 1) Effects of Media and Society

The main concept of Harold Adams Innis, a pioneer scholar of the School. According to his concept, it focuses on the effect on society at the macro level by connecting media studies with technology, history, and culture of each

society. (Kanjana Kaewthep & Somsuk Hinviman, 2010). The main concepts of Innis are as follows:

(1) The relations between social civilization and modes of Communication

Innis believes that social civilization is always related to modes of communication. In the past, upon reaching a kind of civilization, stone inscription technology was created, i.e., the stone inscription in Thailand. During that time, political and social power was in a king's hands. Later, when the society was more advanced, a new invention for recording messages on paper was introduced. Accordingly, political and social power moved from the Monarchy to monks or priests. Changes occurred with the appearance of printing technology; thus, monopolized power started to decrease.

(2) The relations between modes of communication and power structure in society

The power structure of the Imperial system could exist and spread through the use of communication technology in parallel. Therefore, only the nations or powerful people with effective communication technology could expand the imperial across space widely. On the other hand, the wider communication systems could expand, the more marginal men were dominated.

(3) The power of elites and the manipulation of communication technology

Although communication technology will bring growth to economics and society, due to Marxism influence, Innis perceives that no technology can be created and used equally or based on Egalitarianism. On the contrary, communication technology is often the tool of some groups or elites in society. These groups of people aim to use media to dominate and manipulate the majority of people in society.

(4) Media technology and social power changes

Innis believes that every communication technology change will always yield changes in the social power structure. However, such a power transfer will not bring about changes across classes, but among the leading class only. Besides, he concludes that the more advanced new media technology is,

the more centralized power of the elites will be. Oppositely, such technologies will also expand to more receivers.

2) Concepts on Time and Space Orientation of Media

Innis points out that different kinds of media will have different time and space Orientation. It means that for the traditional media technologies, such as narration, folk media, etc. tend to be time-oriented by emphasizing cognitive insight and sustainability for an inherence from generation to generation. This orientation is highly conservative and emphasizes communication within a group, i.e., in a small community. For newer media technology, i.e., mass media, it is space-oriented or it focuses on the spreading to larger areas and pays more attention to the future than the present with business purposes mainly.

2.10.4.2 Main Concepts of Marshall McLuhan

McLuhan focuses on the analysis of media power at the micro-level or on the relationship between the effect and individuals (Kanjana Kaewthep & Somsuk Hinviman, 2010, p. 141):

1) Media and Human Senses

McLuhan defines "media" as a process of expanding human potential or media technology as a tool to increase human sensory abilities or senses towards the world. For example, a telephone is a channel for increasing the hearing ability, television for increasing the seeing ability so we can see distant images.

2) Dimensions of Communication Technological Determinism

McLuhan summarizes three dimensions in media determinism:

- (1) The effect of media on the time dimension, i.e. media can record a message across time or it can shorten communication time, such palm-leaf manuscripts, diaries, satellite imagery, etc.
- (2) The effect of media on space dimension, i.e. media that can overcome the space, such as using a pigeon as a message carrier, letters, telegrams, www., etc.
- (3) The effect of media on human experiences, i.e. TV or movies enable us to see something we have not seen before, etc.

From the effects of communication technology on three dimensions, McLuhan perceives that every time new media emerge in the society, these media will always come to organize human thinking systems and consciousness in these three dimensions.

3) The Medium is the Message

McLuhan says "The Medium is the Message." Such a statement becomes one of the main concepts in the study of communication. For McLuhan, the effect of communication on individuals does not come from the message, but from the consequences of media characteristics instead.

4) The Analysis of the Periods and History of Communication Technology

McLuhan divides the periods of the development of communication technology that affects human experiences and perception into four periods:

- (1) Tribal Age: It is the period that focuses on listening, tasting, smelling, and touching. For example, we can communicate via speeches, traditional media, etc. It is the period in which speaking and listening are the most credible and important communication channels.
- (2) Literacy Age: It is the period that focuses more on the visual sensory organisms and in which seeing, reading, and writing are valued the most.
- (3) Print Age: It is the period of large production of media or mass production to make people have the same perceptual experiences at the same time.
- (4) Electronic Age: It is the period of electronic media invention and expansion, i.e. telephone, radio, television, internet, etc. The unique identity of this period is a focus on distant sensory communication, i.e., teleconference, etc., which McLuhan views this kind of communication as the beginning of the global village.

5) Hot and Cold Media

McLuhan classifies types of media by the degree of receivers' participation. "Hot Media" means media that allocates information with High Definition so there is almost no space for receivers or the audience to add any information, i.e., movies, book, photos, etc. "Cold Media" means the media that provides space for receivers or the audience to participate rather greatly as the information is of Low Definition, i.e. television, telephone, a round-table discussion, etc.

6) Media and the Global Village

The Global Village means a process of intertwining people, culture, economics, politics, and information from living apart in society like in the past. The major changes in communication technology that are intertwined with people and culture across borders happened twice. The first time happened when human beings could invent paper, wheels, and roads as innovations to shrink time and space. In other words, it is a connection with distant local societies and gradually reduces the feeling of being individual villages and regions to one same village. The second change in the global communication system occurred because of the drive of electronic media technology. Notably, the main factor of those changes is the confidence in the speed, after electric systems were originated. After that, transportation and human communication changed rapidly and broadened human wider experiences than the first change. For instance, we can perceive information from the internet network more rapidly than from reading a newspaper. The shift of communication via electronic media and rapid transportation leads to uniting human experiences. It means to make individuals, no matter where on earth they are, share the same experiences and events simultaneously from distance via electronic communication systems. Eventually, it pushes people to organize a new global system to be a global village. The uniqueness of the production and news consumption in the global village consists of three properties:

- (1) Synchrony: the acquisition of shared information and culture all over the world.
- (2) Simultaneity: the simultaneous acquisition of information and culture, no matter where each group of communicators are.

(3) Immediacy: the rapid acquisition of information and

culture

2.10.4.3 Main Concepts of Everett M. Rogers

Although Rogers is not a scholar from The School of Toronto, he considers himself as a soft technological determinist. (Kanjana Kaewthep & Somsuk Hinviman, 2010) since he possesses the fundamental assumption that communication technology factors in combination with other factors are joint prime movers of all social changes. In other words, communication technology is the main factor in changing society. However, this factor needs to work with other factors. Besides, Rogers identifies some other major characteristics of new media, i.e. computer, etc. by comparing the interpersonal and mass communication patterns, which are traditional media, as illustrated in the following Table.

Table 2.3 A Comparison of Three Types of Communication by Everett Rogers

Media Characteristics	Interpersonal Communication	New Interpersonal Communication (Aided by Some Tools)	Mass Communication
1. Information	From one sender	From several senders to	From one sender
flow	to 2-3 receivers	several receivers	to masses of receivers
2. Knowledge a	A sender knows a	A sender knows a receiver	A sender working
sender has on a	receiver as an	very well due to an	in an organization
receiver (s)	individual	interactive system.	so he or she hardly
			knows the receivers.
3. Grouping of	Very high	Very high	low
receivers	(individualized/	(individualized/	(massified
	demassified	demassified)	because one same
			message being
			sent to all
			receivers)

Media Characteristics	Interpersonal Communication	New Interpersonal Communication (Aided by Some Tools)	Mass Communication
4. Degree of responsiveness	High	High	Low
5. Feedback	A lot and	Some, but restricted, may	Very restricted
	immediate	be immediate or delayed	and delayed
6. Potential in	Low	Mostly, very high	Some media may
keeping			be low, i.e., radio,
information			and some may be high, i.e., books
7. Type of	Socio-emotional	Little socio-emotional	Not so social-
content	oriented	oriented, but rather task-	emotional
		oriented	oriented.
8. The use of	Highly	Some kinds of new media	Visual mass media
nonverbal		may use nonverbal	tends to use
language		language rather highly	nonverbal
			language highly,
			but not audio mass
			media.
9. Control of	Communicators	Communicators of both	Receivers cannot
information flow	of both parties	parties can control	control
	can control communication	communication equally	communication
	equally		
10. Degree of personalness.	Low	Normally low	High

From the above table, the characteristics of new media nowadays have continual effects on human experience and social changes in three ways:

1) New media provides an immediate interaction between users and technology, i.e. a person can interact with the other person on a computer screen or through chats.

- 2) New media is Individualized or demassified, i.e., for the MP3 player or online games, users are all treated as individuals, not as a group or mass of people.
- 3) New media is disconnected but can be assembled later, i.e., for the computer, several parts of different media, i.e., CD, movies, printed media, etc. that is disconnected can be assembled into one communication channel.

The researcher uses the Theory of Communication Technological Determinism as a guideline for analyzing changes in the TV industry in Thailand because the TV industry is a kind of business driven by technology. It aims to study what kind of changes are primarily caused by communication technology and how communication technology changes in the TV industry.

2.11 Related Studies

Parichart Saithanoo (2010) studied the lifestyles of media-convergence users and found that their lifestyles can be divided into five groups: 1) trust in the internet, 2) use the internet as a part of life, 3) use information from the internet in ways of living, 4) aim towards success through the use of media-converged technology, and 5) assure themselves as a self-confident user. Besides, it was found that the following variables are related with media-converged technology usage behaviors and the usage of content: 1) demographic variables, i.e., sex, age, education level, working position, and household income, and 2) psychological variables, i.e., patterns of lifestyle, characteristics, emotion, and feeling.

Supanee Kotchapansompote (2015) studied the adaptation of mass media in the media convergence era towards the editorial department and found that 1) mass media organizations tried to adapt to various platforms. The traditional media had to use new media for the presentation together with the existing communication channels so that the produced information could reach more receivers. 2) Each editorial department of mass media organizations had to adapt the news production process to get concurrence. They also established convergence editorial to speed up the news production. 3) Mass media organizations adapted their management and operation, including their organizational structure and resource management. They

also transformed the editorial structure to be the convergence editorial to reduce production costs and plan personnel management to increase employees' working multi-skills. Besides, they invested more in technology to make their presentation more interesting for the viewers.

Niccha Watcharachayakun (2016) studied the adaptation of A Day magazine in the digital age and found that the magazine adapted itself in several ways: communication channels, organizational structure, working patterns, and content presentation by expanding communication channels to correspond to consumers' changing behaviors and rapidly developed technology. Websites were made to disseminate content and information in parallel to the traditional magazine. Besides, the management of content and format was the major part that enabled A Day to be distinctive in its business operation. Besides, in terms of marketing strategies, they focused more on Niche marketing with apparent targets. Moreover, they could create their standpoint by making a difference in the production quality, both content, and production materials.

Naruemon Kongchuensin (2013) studied the adaptation of the magazines in the media convergence era: a case study of My Home magazine and found that My Home magazine adapted itself in several ways: communication channels, organizational structure, working patterns, and content presentation. Regarding communication channels, My Home gave importance to the expansion of communication channels to respond to new technologies, readers' exposure behaviors, and changing lifestyles of people in the present society. Besides, the magazine disseminated the content in parallel to that of the mainstream magazine via several kinds of media, i.e., websites, social media (such as Facebook, Instagram, YouTube), E-magazine, and TV.

Thitinan B. Common (2016) studied TV management in the media convergence era and found that digital technology has a potential in changing consumers' behavioral schemes, market shares, and patterns of media organizational management. The administrators had to use technology for their management to conform to the corporate culture. Moreover, it adjusted its communication and leadership to catch up with changes in the industry driven by technology.

Penpak Tiawsomboonkit (2014) studied the literacy of Thai TV users in the changing television landscape and found that the users had a rather low level of media literacy. Besides, it was found that demographic variables, except sexuality, were related to media literacy, while the accessibility and the use of technology had an influence and were related to the level of media literacy. The patterns of TV consumption affected media literacy. TV users in the new media landscape had a higher level of media literacy than those in the old media landscape. Likewise, active TV users had a higher level of media literacy than passive TV users. Besides, TV users with high frequency had a higher level of media literacy than those with low frequency. Regarding the issues needed for more attention to creating media literacy for TV users, they were: 1) media users lacked media literacy, especially in changing media landscape. 2) media users were not aware of the significance and necessity of media literacy. 3) media users did not expose to various program content and exposed the most to entertainment and news-narration programs. 4) Viewers' social environmental factors did not facilitate media literacy.

Supasil Kuljitjuerwong (2014) studied the adaptation of TV programs towards multi-screen media viewing behavior and found that viewers tended to have multi-screen media viewing behaviors. Besides TV screens, they view the screen of the tablet, computer, and Smartphone as another alternative for viewing more programs. Thus, TV program producers could not avoid the effect of such multi-screen viewing behaviors. Therefore, it was recommended that producers must develop their program presentation to access viewers through several screens. Thus, the content should be developed to integrate with media properties based on viewers' experience and the narration strategies across media.

Naphawan Meesri (2015) studied the factors related to digital economy mobilization and readiness in transforming into the digital economy of small- and medium-sized enterprises. It was found that public, education, social community, and enterprise factors were related to the digital mobilization at the 0.05 statistical significance level. Strategy and leadership factors, working process, business patterns, digital competency, and the government's support were found to have a positive relationship with the readiness in transforming into the digital economy at the 0.05 statistical significance level. Readiness in transforming into the digital economy of

each business sector, each level of hiring, and each level of asset value had no different mean at the 95% confidence level.

Nakarin Chanamai (2017) studied the factors and the management of TV enterprises amidst the transformation towards the digital era in Thailand. It was found that both internal and external organizational factors affected the TV management. The key factors were rapid changes in technology, increased competition in the market, a shortage of personnel with knowledge and competency, more roles of new media, changing media exposure behaviors, laws, and regulations. All of these factors led several TV stations to face problems of consumers' popularity.

Supasil Kuljitjuerwong (2017) Studied "Content is king" and increasing value to the content of digital television programs. He found that there were four issues of program content viewers wanted to view. 1) utility. Receivers were interested in and wanted to view useful information they could apply for use: to increase their credibility, facilitate their comfort or amusement, which accords with uses and gratification theory. 2) Entertainment. Receivers wanted entertaining and amusing content to release their stress. This accords with the concept of Woollacott (1986) who explains that to view an entertaining TV program is to escape from the real world that is filled with problems. 3) Attention. Receivers tended to choose content from any source based on their interest. It was recommended that to present any program content, it is necessary to analyze viewers' behaviors and hot issues, including interesting topics for specific groups. 4) Audience's content. It is to let viewers participate or be a part of the content, which made them feel a part of a program as well. Thus, it can affect the viewers' behaviors as presented by a program.

Tse (2014) studied research entitled, "Television's changing role in social togetherness in the personalized online consumption of foreign TV". It was found that although viewers preferred exposure to the content of online media. On the other hand, they were also scared to be alienated from society if not viewing from broadcasting programs following a program schedule. Moreover, it was found that viewers had two objectives in using online media to communicate with viewers who were interested in the same foreign programs and to remind them of their home town during their stay abroad from watching a program in their home town.

Sanseverino (2016) conducted a study called "TV without TV: Digital media, internet & multiple screens." It was found that changing landscape of media consumption and the drastic flow of online media and the internet, program content had been transformed from being broadcasted on the traditional media to online media. Viewers also changed their content viewing from TV to mobile phones. They also could choose a convenient time to view a program. They could stop viewing programs contemporarily and continue later. However, to view TV program content in the new genre does not mean the disappearance of TV, since it still exists, is significant and powerful.

Bullich and Guignard (2016) studied, "OTT Strategies and regulations: lessons from the US (2005-2015)." They found that the emergence of the internet induced new players in the TV industry, which yielded gigantic changes in only a couple of years. The first change was no viewing by a program schedule. Instead, viewers could select any program at any time and interact with the content. Secondly, the presentation of program content was unlike traditional media in the past. Viewers could generate their content. Besides, the number of competitors, especially in OTT-business was increased. The organizational structure among competitors in the TV industry was changed. Moreover, the major issues that caused a change were materials used in producing program content to make a program and content more interesting. The growth of OTT in the U.S.A. was stable while the TV was still a powerful media in the American media landscape.

CHAPTER 3

RESEARCH METHODOLOGY

The research "Roles of Television Industry in the New Media Landscape Under Digital Economy System" is aimed to 1) study changes in the television industry when moving into digital economy systems, 2) investigate the adaptation of the television industry in Thailand under the changing media landscape, 3) examine the roles of television in the new media landscape, and 4) explore viewers' perspective on the roles and adaptation of television in the new media landscape. Mixed methods of both qualitative and quantitative research were used for this study to collect primary and secondary data to answer the research objectives.

The steps of conducting this research are illustrated in the following Figure:

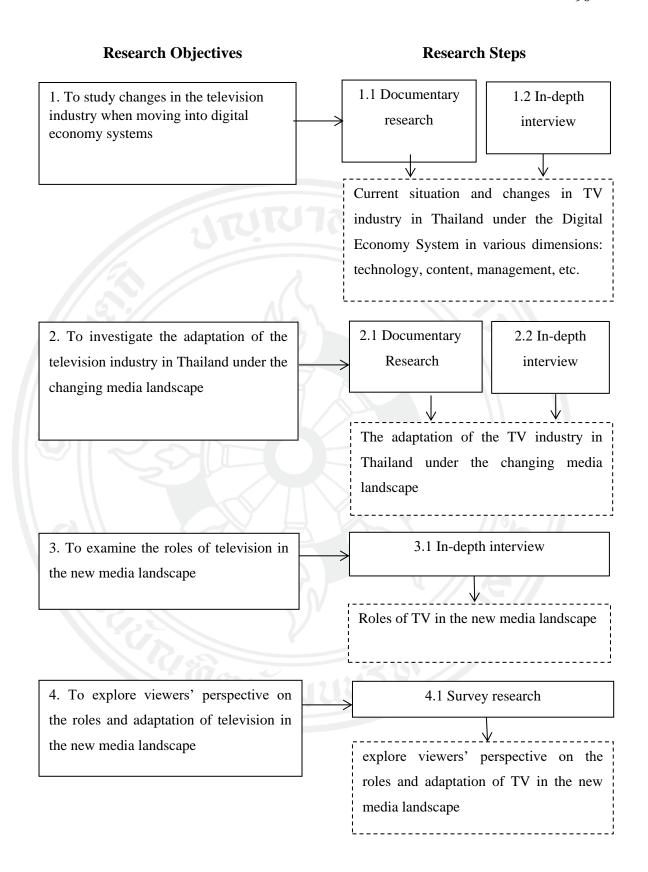


Figure 3.1 Illustrate the Research Objectives and Methodology

3.1 Data Sources of the Study

For this research, the researcher collected data from two types of information: documentary and personal data, as follows:

3.1.1 Documentary Data

Documents, studies, academic articles, program schedules, and videos related to changes in the television industry under the digital economy system, including roles of television in the new media landscape, were collected and reviewed, as illustrated in step 1.1 and 2.1 in Figure 3.1.

3.1.2 Personal Data

Personal data collected in this study is divided into five groups:

Group 1 Entrepreneurs in the television industry in Thailand

Group 2 Media experts

Group 3 Mass communication scholars

Group 4 Representatives of Digital Broadcasting Bureau, Office of the Broadcasting Commission, Television Business, and the National Telecommunications Commission.

Group 5 TV viewers

- Step 2.1 and 3.1, as illustrated in the above Figure, are the steps of an in-depth interview. The interviewees were selected by purposive sampling based on their qualifications, roles, and relevance to the television industry in Thailand. The details of five groups of the interviewees are as following:
- 1) Group 1: Entrepreneurs in the television industry in Thailand (3 persons)
- (1) Associate Professor Jumpon Rodkamdee, Chairperson of the Policy Committee, Organizational Management Division of the Public Broadcasting Organization of Thailand (Thai PBS) (June 18, 2018)
- (2) Duangrat Mahavanich, Deputy Manager of Public Relations of Channel 3, (June 21, 2018)

- (3) Tantham Rungvithu, an ASEAN journalist of TNN24 (June 9, 2018)
 - 2) Group 2: Media experts (2 persons)
 - (1) Vilai Vitayaveerasuk, an advertiser. (June 12, 2018)
- (2) Kittipong Veerataecha, Director of Y & R (Thailand). (June 28, 2018)
 - 3) Group 3: Mass communication scholars (3 persons)
- (1) Assistant Professor Kulnaree Sueroj, a faculty member of the Faculty of Journalism and Mass Communication, Thammasat University. (June 14, 2018)
- (2) Assistant Professor Warat Karuchit, a Faculty member of the Faculty of Communication Arts and Management Innovation, National Institute of Development Administration. (June 19, 2018)
 - (3) Sikares Sirakan, Ph.D., an independent scholar. (June 22, 2018)
- 4) Group 4: Representatives of Digital Broadcasting Bureau, Office of the Broadcasting Commission, Television Business, and the National Telecommunications Commission (5 persons)
- (1) Associate Professor Pana Thongmeearkom, National Telecommunications Commissioner (June 26, 2018)
- (2) Pasu Srihiran, executive director of Broadcasting Resource Management and Research Bureau (December 4, 2018)
- (3) Orasri Srirasa, the Division Director of the Digital Broadcasting Bureau. (December 6, 2018)
- (4) Worapong Nipakornphan, Director of Office of Corporate Communications. (June 7, 2019)
- (5) Parita Wongchutinat, Director of the Office of Engineering and Broadcasting Technology (August 2, 2019).
 - 5) Group 5: TV viewers

Step 4.1, as illustrated in Figure 3.1, is the step of the survey research by questionnaires collected from personal data in the fifth group or TV viewers.

The population of this study was TV viewers. Since the precise number of population of this group is unknown, the sample size was calculated by Cochran

formula of the unknown population (Cochran, 1963, as cited in Thirawut Ekakun, 2000) as follows:

$$n = \frac{Z^2 P (1-P)}{P}$$

$$E^2$$

where

n = Sample size

Z = Specified statistical reliability level (specifying Z at 95%, =

1.96)

P= the (estimated) proportion of the population which has the attribute in question (TV viewers) (Since the proportion of the population cannot be estimated, the study specified P=0.50)

E =The margin of error or deviation (for this study, E = 0.05) From the equation, the sample size is as follows:

$$n = \frac{(1.96)^2 \ 0.50 \ (1-0.50)}{(0.05)^2}$$

For convenient data collection, the researcher used 415 questionnaire respondents. The details of the data collection are presented in the next topics.

3.2 Data Collection

The data collection was divided into three parts:

3.2.1 Part 1: Documentary Research

Documentary research is the comparison and analysis of program schedules of the digital television channels with the top five ratings in September 2019, namely Channel 7HD, 3HD, MONO29, Workpoint23, and ONE31. The researcher studied the program content broadcasted from 2017 to 2019 as these years were the transitional period of broadcasting transformation from the analog to the digital

system. The program schedules in October were selected because it is the first month of each fiscal year.

The program schedules were analyzed and compared in the amount of broadcasting time of each type of program of each week, which was divided into Monday-Friday and Saturday and Sunday schedules.

3.2.2 Part 2: In-depth Interview

The in-depth interview was conducted with those involved in the television industry as following: Group 1 Entrepreneurs in the television industry in Thailand, Group 2 Media experts, Group 3 Mass communication scholars, and Group 4 Representatives of Digital Broadcasting Bureau, Office of the Broadcasting Commission, Television Business, and the National Telecommunications Commission.

The researcher made an appointment and delivered questions to the interviewees in advance to let them understand the interviewing guidelines, which could lead to the utmost research benefits.

The research tool used in this study was a semi-structured interview guide with outlined questions to allow interviewees to be able to provide the complete information for this study. The researcher could be flexible in the interview or could add some additional issues in the interview. The questions were developed from literature review of previous studies and relevant theoretical concepts by focusing on congruence with the research framework. Then, the developed questions were submitted to the advisor for inspecting the correctness of the content and language used.

The topics used in the interview guide contain the following:

- 1) General information of the interviewees.
- 2) The current situation of the television industry.
- 3) Changes in the television industry in the changing media landscape.
- 4) Roles of television in the new media landscape.

The researcher conducted an in-depth interview with the target groups. The interview was transcribed and sent back to the interviewees to check the correctness of the information.

The Validation of the Research Tool

- 1) Validity: the test of the interview conducted with key informants, and the researcher was the interviewer by herself. (Face Validity)
- 2) Reliability: The test of the congruence of the answers given by all interviewees by comparing all answers.

3.2.3 Part 3: Survey Research

For the survey research, the researcher used the information from the literature review, especially related studies on consumers' behaviors and opinions towards the roles of television and its adaptation in the new media landscape, to construct questions in the questionnaire.

After constructing the questionnaire, the researcher tested the validity and reliability of the questionnaire by the following:

- 1) Validity test was conducted by submitting the constructed questionnaire to an expert in brand building for inspecting the correctness and congruence of the questions with the research objectives and framework, including the coverage of sub-topics and language used. The researcher then revised and corrected the questionnaire as recommended before the actual use.
- 2) A reliability test was conducted by using the revised questionnaire to collect information from a pilot group of 30 samples. The reliability of the collected information was tested by measuring the internal consistency with Cronbach's Alpha Coefficient (Wichian Ketsing, 1994), and the overall alpha coefficient value is 0.899. The reliability values of each part are as follows:
 - (1) Viewers' TV viewing behaviors = 0.842
 - (2) Opinions on the roles of media = 0.845
- (3) Opinions on the adaptation of television in the new media landscape under the digital economy system = 0.889

After testing the research tool, the researcher conducted an actual data collection with 415 samples through multiple sampling. Firstly, the samples were selected by stratified sampling based on their geographic region or living area since the study wants to have samples from all regions of the country, namely Bangkok and vicinity, central, northeastern, eastern, western, southern, and northern region. Then,

2-3 provinces of each region were selected by systematic sampling or by drawing lots in proportion to the population size of each region. After that, samples found in universities, academic institutions, shopping malls, etc. in each province were randomly requested, by accidental sampling, to reply to the questionnaire. The researcher conducted the data collection by herself during September-December 2019. The collected questionnaires were inspected for their completeness, coded, analyzed, and presented.

The criteria used in interpreting mean are as follows:

Table 3.1 Illustrates the Criteria for Interpreting Mean

7/~	Mean	Level/Meaning
	4.21-5.00	Highest
	3.41-4.20	High
	2.61-3.40	Moderately
	1.81-2.60	Low
	1.00-1.80	Lowest

3.3 Data Analysis

For the analysis of qualitative research findings (documentary and in-depth interview), the findings were analyzed and concluded to respond to the research objectives and with reference to the conceptual framework of the study and the related literature review. For the quantitative analysis, the findings were coded, processed, and analyzed by SPSS for Windows (Statistical Package for the Social Science). Descriptive statistical analysis was conducted in the form of frequency, percentage, mean, and standard deviation to explain the findings of each part.

The qualitative research findings were presented in descriptive writing to answer the research questions within the specified conceptual research framework. Examples and interviews were also presented to support the findings. For the quantitative findings, they were presented in the statistical figures with clarifying explanations and interpretations based on the determined research questions.

CHAPTER 4

QUALITATIVE RESEARCH FINDINGS

The research "Roles of the Television Industry in the New Media Landscape under Digital Economy Systems" aims to 1) study changes in the television industry when moving into digital economy systems, 2) investigate the adaption of the television industry in Thailand under the changing media landscape, 3) examine the roles of television in the new media landscape, and 4) explore viewers' perspective on the roles and adaptation of television in the new media landscape. Mixed methods of both qualitative and quantitative were used to collect both primary and secondary data to answer the research objectives.

For this part, the findings of the qualitative research are presented, by dividing into two parts: 1) Findings from the content analysis, which lead to answer the research questions no. 1 and 2. 2) Findings from in-depth interviews, which lead to answer the research questions no. 1,2, and 3. The details of the findings are as following:

- 4.1 Part 1: Findings from Content Analysis through a comparison of program-schedule analysis. The results are presented in the following topics
 - 4.1.1 Informative or Documentary Programs
 - 4.1.1.1 News Programs
 - 4.1.1.2 Documentary Programs
 - 4.1.2 Entertainment Programs
 - 4.1.2.1 Sitcom or situation comedy
 - 4.1.2.2 Dramas and movies
 - 4.1.2.3 Game shows
 - 4.1.2.4 Talk shows
 - 4.1.2.5 Reality shows
 - 4.1.2.6 Sports

- 4.1.2.7 Music
- 4.1.2.8 Children
- 4.1.2.9 Variety
- 4.1.3 A Summary of the Overall Broadcasting of Each Program of Each Digital TV Channel
 - 4.1.3.1 Channel 7HD
 - 4.1.3.2 Channel 3HD
 - 4.1.3.3 Channel MONO29
 - 4.1.3.4 Channel Workpoint23
 - 4.1.3.5 Channel ONE31
 - 4.1.3.6 A Summary of all Broadcasting Programs of Digital TV

Channels

- 4.1.4 Other Program Presentations Besides the Broadcasted Programs in the Program Schedule of Each Digital TV Channel
 - 4.1.4.1 Channel 7HD
 - 4.1.4.2 Channel 3HD
 - 4.1.4.3 Channel MONO29
 - 4.1.4.4 Channel Workpoint23
 - 4.1.4.5 Channel ONE31
- 4.1.4.6 A Summary of the Additional Programs Besides the Broadcasting-Scheduled Programs of Digital TV Channels
- 4.2 Part 2: Findings from the In-Depth Interviews. The Results are Presented as follows:
 - 4.2.1 The Overall Present Situation of the Media Industry
 - 4.2.1.1 Competition in the Television Industry
 - 4.2.1.2 Formats and Content in the New Presentation
 - 4.2.1.3 A Diversity of Viewing Channels
 - 4.2.1.4 Consumers' Changing Behaviors
- 4.2.2 The Adaptation of TV Industry Organizations under the Digital Economy System
 - 4.2.2.1 Organizational Structure
 - 4.2.2.2 Communication Channels

- 4.2.2.3 Formats in Presenting Content
- 4.2.2.4 Content
- 4.2.3 Roles of Television in the New Media Landscape
- 4.2.4 Trends of Future Television Industry in the New Roles Under the New Media Landscape
- 4.2.5 Recommendations on Changes and Adaptation in the Media Industry and in the Television Industry

4.1 Part 1: Findings from the Content Analysis

From the study "Roles of Television Industry in the New Media Landscape Under the Digital Economy System," the researcher compared and analyzed program schedules of the top five digital television programs in September 2019, namely Channel 7HD, 3HD, MONO29, Workpoint23, and ONE31, to study changes in the television industry when moving into digital economy systems, and to investigate the adaption of the television industry in Thailand under the changing media landscape. The researcher divided the types of television programs into two main types as follows: (Somsuk Hinviman et al., 2014)

- 1) Informative TV programs: News and documentary programs
- 2) Entertainment programs: Sit-com, dramas, game shows, talk shows, reality, sports, music, children, and variety.
- 3) The selected programs are those broadcasted during the transition period from the analog to the digital system. The program schedule of October was chosen as it was the first month of the fiscal year of each year. Each program in each week of each selected TV channel was analyzed and compared in terms of the number of programs and amount of broadcasting time, which is classified to be the weekdays or Monday to Friday, and the weekends or Saturday and Sunday.

4.1.1 Informative Television Programs

4.1.1.1 News Programs

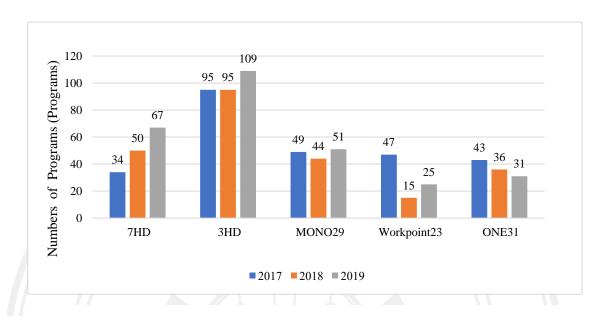


Figure 4.2 Illustrates the Amount of Broadcasting Time (Minutes) of News Programs on Monday to Friday

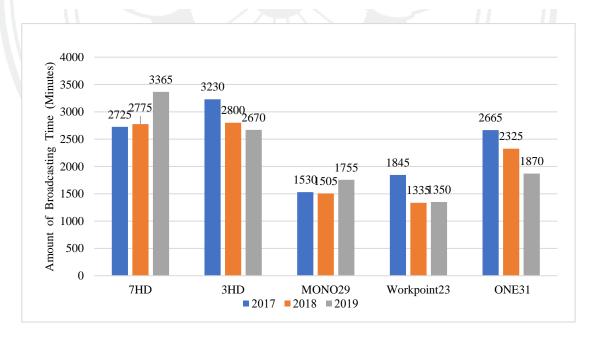


Figure 4.1 Illustrates the Number of News Programs Broadcasted on Monday to Friday

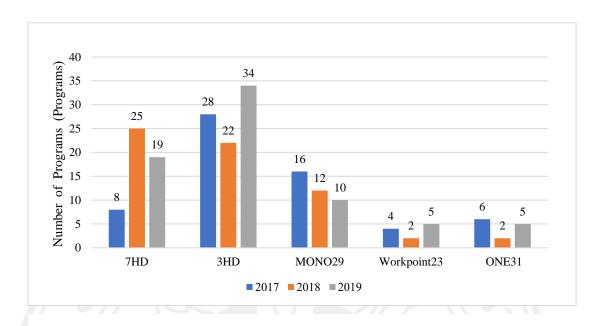


Figure 4.3 The Number of News Programs Broadcasted on Saturday and Sunday

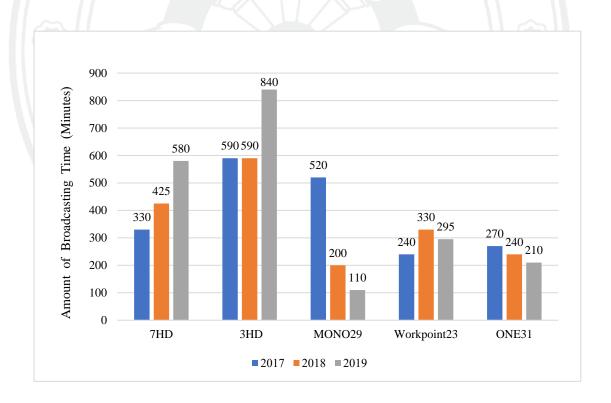


Figure 4.4 The Amount of Broadcasting Time of News Programs on Saturday and Sunday

From Figure 4.1, 4.2, 4.3, and 4.4, it is found that

Channel 7HD. The number of news programs broadcasted from Monday to Friday increased from 2017 to 2019. For broadcasting on Saturday and Sunday, the number of news programs increased from 2017 to 2018 but decreased from 2018 to 2019. However, the amount of broadcasting time increased from 2017 to 2019.

Channel 3HD. For broadcasting from Monday to Friday, the number of news programs in 2018 was equal to 2019 but increased in 2019. However, the amount of broadcasting time decreased every year. From Saturday to Sunday, the number of news programs increased in 2019. The amount of broadcasting time in 2017 and 2018 was equal, but much increased in 2019.

Channel MONO29. In 2018, the number of news programs and the amount of broadcasting time from Monday to Friday decreased in 2018 but increased in 2019. On Saturday and Sunday, both the number of news programs and the amount of broadcasting time tended to decrease every year.

Channel Workpoint23. The number of news programs and broadcasting time from Monday to Friday dropped hugely in 2018 but increased slightly in 2019. On Saturday and Sunday, the number of news programs decreased in 2018, but increased in 2019, while the broadcasting time increased in 2018, but decreased in 2019.

Channel ONE31. The number of news programs and the amount of broadcasting time from Monday to Friday tended to decrease every year. On Saturday and Sunday, the number of news programs decreased in 2018, but increased in 2019, while the amount of broadcasting time tended to decrease every year.

4.1.1.2 Documentary Programs

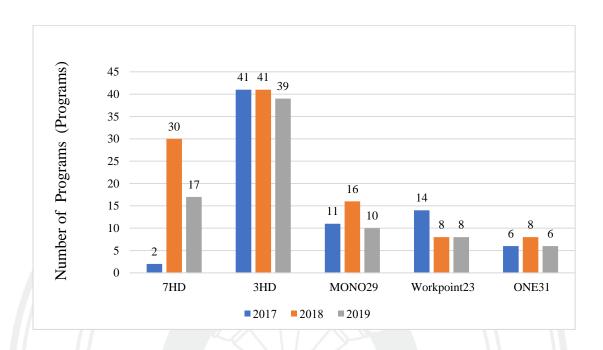


Figure 4.5 Illustrates the Number of Documentary Programs Broadcasted from Monday to Friday

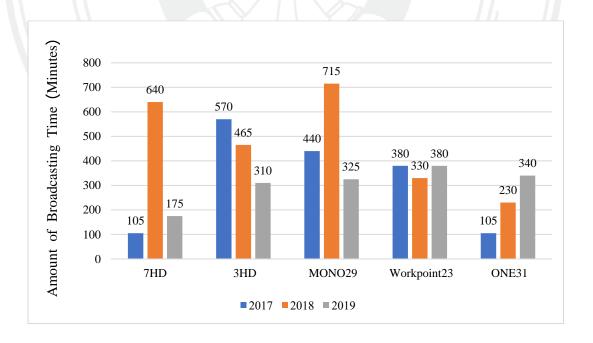


Figure 4.6 Illustrates the Amount of Broadcasting Time of Documentary Programs from Monday to Friday

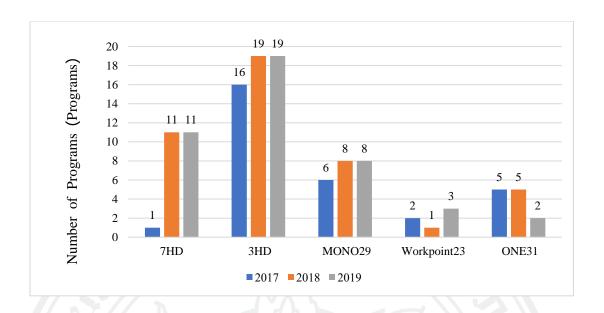


Figure 4.7 Illustrates the Number of Documentary Programs Broadcasted on Saturday and Sunday



Figure 4.8 Illustrates the Amount of Broadcasting Time of Documentary Programs on Saturday and Sunday

From Figure 4.5, 4.6, 4.7, and 4.8, it is found that

Channel 7HD. The number of documentary programs and the amount of broadcasting time from Monday to Friday increased hugely from 2017 to 2018. Still, it decreased in 2019, the same direction as the broadcasting on Saturday and Sunday.

Channel 3HD. The number of documentary programs from Monday to Friday in the past three years was almost unchanged, but the amount of broadcasting time tended to decline every year. On Saturday and Sunday, the number of news programs increased slightly from 2017 to 2018 but had no change in 2019. However, the amount of broadcasting time tended to decrease slightly every year.

Channel MONO29. The number of documentary programs and the amount of broadcasting time increased in 2018 but decreased in 2019. On Saturday and Sunday, the number of programs in 2018 and 2019 was the same but increased slightly from 2017. However, the amount of broadcasting time increased every year, especially a substantial increase in 2019.

Channel Workpoint23. The number of documentary programs in 2018 and 2019 was the same, but decreased from 2017. The amount of broadcasting time decreased in 2018 but increased in 2019. On Saturday and Sunday, the number of programs decreased in 2018 but raised in 2019. However, the amount of broadcasting time tended to increase every year.

Channel ONE31. The number of documentary programs increased slightly in 2018, but decreased in 2019, while the amount of broadcasting time tended to increase every year. On Saturday and Sunday, the number of programs in 2017 and 2018 had no change, but decreased in 2019, while the amount of broadcasting time increased in 2018, but decreased in 2019.

4.1.2 Entertainment Programs

4.1.2.1 Sitcom or Situation Comedy Programs

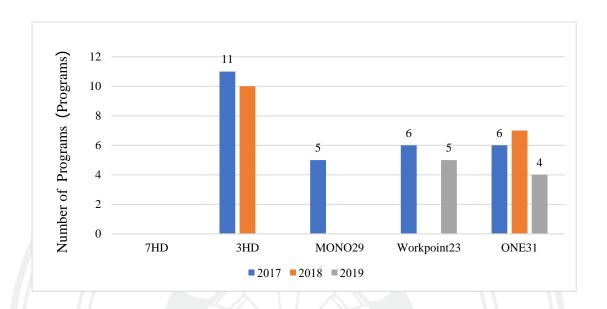


Figure 4.9 Illustrates the Number of Sitcoms Broadcasted from Monday to Friday

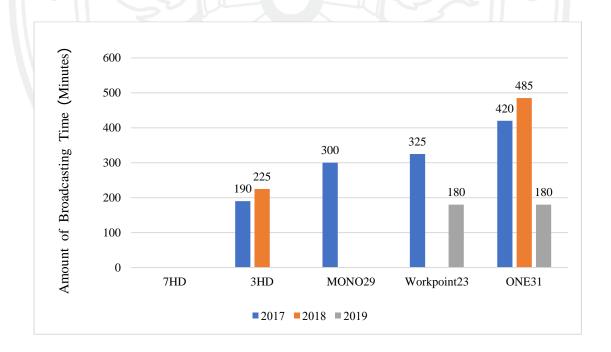


Figure 4.10 Illustrates the amount of broadcasting time of Sit-coms from Monday to Friday

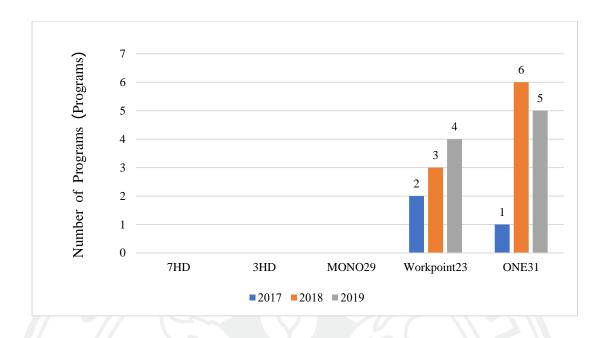


Figure 4.11 Illustrates the Number of Sitcoms Broadcasted on Saturday and Sunday

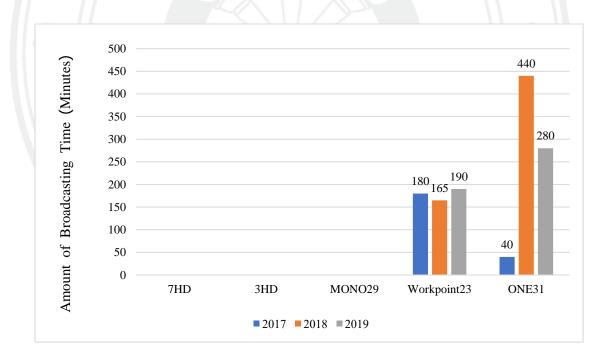


Figure 4.12 Illustrates the Amount of Broadcasting Time of Sitcoms on Saturday and Sunday

From Figure 4.9, 4.10, 4.11, and 4.12, it is found that Channel 7HD. No sitcoms were broadcasted during 2017-2019.

Channel 3HD. From Monday to Friday, the number of sitcoms in 2017 and 2018 had almost no change, but the amount of broadcasting time increased slightly. However, no sitcom was broadcasted in 2019, while no sitcom was aired on Saturday and Sunday during 2017-2019.

Channel MONO29. sitcoms were broadcasted only from Monday to Friday in 2017 only.

Channel Workpoint23. No sitcoms were broadcasted from Monday to Friday in 2018. The number of sitcoms and the amount of broadcasting time decreased in 2019 from 2017. On Saturday and Sunday, the number of programs increased every year, but the amount of broadcasting time decreased in 2018 but increased in 2019.

Channel ONE31. The number of sitcoms and the amount of broadcasting time from Monday to Friday increased in 2018 but decreased in 2019. On Saturday and Sunday, the number of programs and the amount of broadcasting time increased mostly in 2018 but decreased in 2019.

4.1.2.2 Dramas and Movies

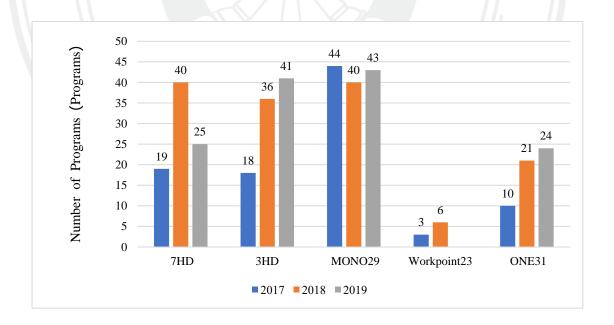


Figure 4.13 Illustrates the Number of Dramas and Movies Broadcasted from Monday to Friday

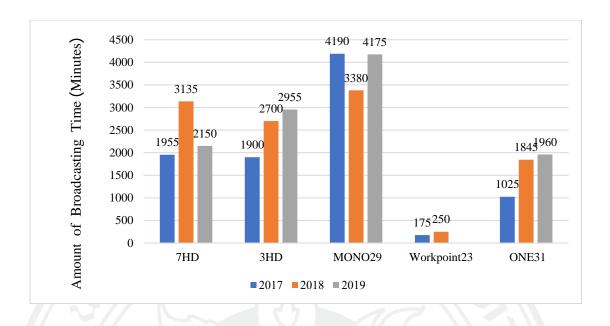


Figure 4.14 Illustrates the Amount of Broadcasting Time of Dramas and Movies from Monday to Friday

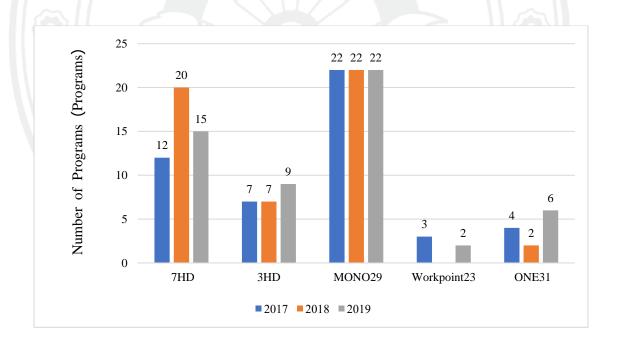


Figure 4.15 Illustrates the Number of Dramas and Movies Broadcasted from Monday to Friday

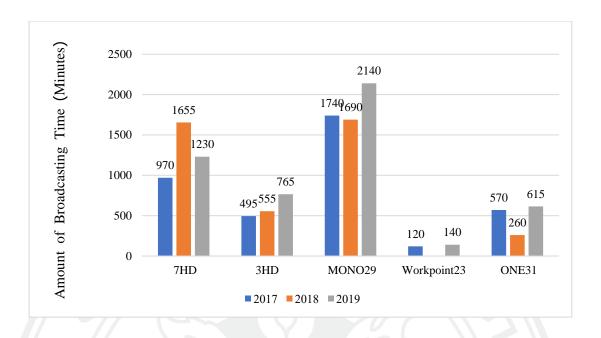


Figure 4.16 Illustrates the Amount of Broadcasting Time of Dramas and Movies on Saturday and Sunday

From Figure 4.13, 4.14, 4.15 and 4.16, it is found that

Channel 7HD. The number of dramas and movies and the amount of broadcasting time from Monday to Friday, and on Saturday and Sunday, increased in 2018, but decreased in 2019.

Channel 3HD. The number of dramas and movies and the amount of broadcasting time from Monday to Friday, and on Saturday and Sunday, tended to increase every year.

Channel MONO29. The number of dramas and movies and the amount of broadcasting time from Monday to Friday decreased in 2018 but increased in 2019. On Saturday and Sunday, the number of movies during 2017-2019 was the same, but the amount of broadcasting time decreased in 2018 but increased in 2019.

Channel Workpoint23. The number of dramas and movies broadcasted from Monday to Friday, increased in 2018, but no drama and movie were broadcasted on Saturday and Sunday in 2018. The number of dramas and movies decreased slightly in 2019 from 2017, but the amount of broadcasting time increased slightly. Remarkably, this channel broadcasted these kinds of programs much less than the other four channels.

Channel ONE31. The number of dramas and movies from Monday to Friday had a tendency to increase every year. On Saturday and Sunday, the number of programs and the amount of broadcasting time decreased in 2018 but increased in 2019.

4.1.2.3 Game Shows

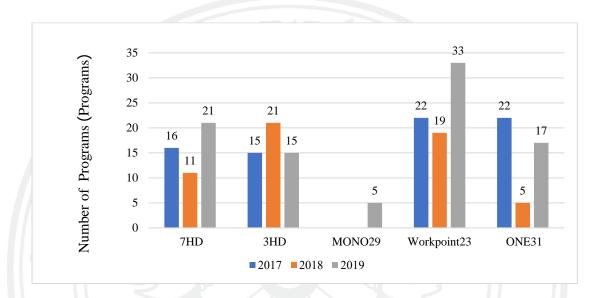


Figure 4.17 Illustrates the Number of Game Shows Broadcasted from Monday to Friday

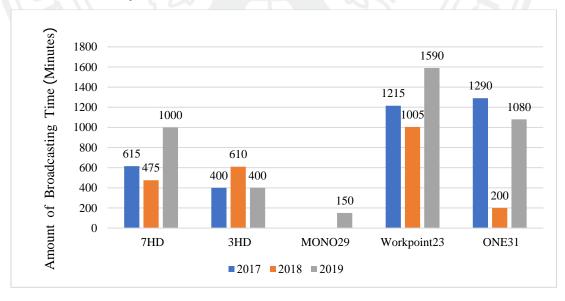


Figure 4.18 Illustrates the Amount of Broadcasting Time of Game Shows

Broadcasted from Monday to Friday

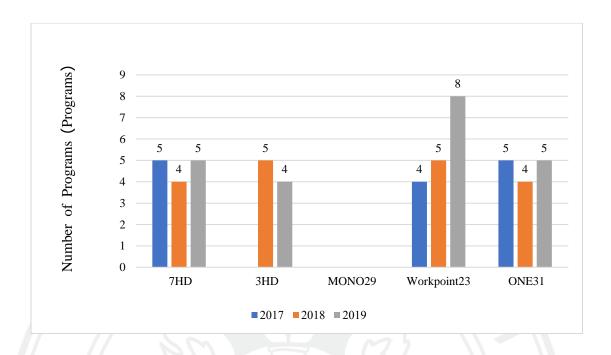


Figure 4.19 Illustrates the Number of Game Shows Broadcasted from Monday to Friday

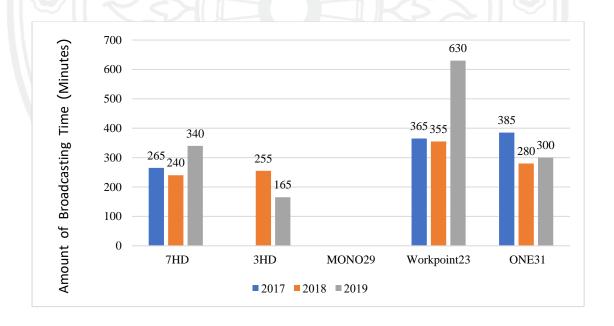


Figure 4.20 Illustrates the Amount of Broadcasting Time of Game Shows on Saturday and Sunday

From Figure 4.17, 4.18, 4.19, and 4.20, it is found that

Channel 7HD. The number of game shows and the amount of broadcasting time from Monday to Friday and on Saturday and Sunday decreased in 2018 but increased in 2019.

Channel 3HD. The number of game shows and the amount of broadcasting time from Monday to Friday increased in 2018 but decreased in 2019. No game show on Saturday and Sunday was broadcasted in 2017. The number of game shows and the amount of broadcasting time decreased in 2019.

Channel MONO29. Game shows were broadcasted from Monday to Friday in 2019 only, and no game show was broadcasted on Saturday and Sunday during these past three years.

Channel Workpoint23. The number of game shows and the amount of broadcasting time from Monday to Friday decreased in 2018 but increased in 2019. On Saturday and Sunday, the number of game shows increased every year, but the amount of broadcasting time decreased in 2018 but increased in 2019.

Channel ONE31. The number of game shows and the amount of broadcasting time from Monday to Friday decreased largely in 2018 but increased tremendously in 2019 as well. The broadcasting of game shows on Saturday and Sunday was almost similar, but with slight changes only.

4.1.2.4 Talk Shows

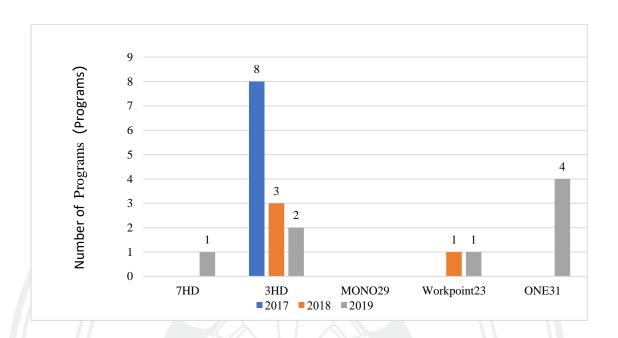


Figure 4.21 Illustrates the Number of Talk Shows Broadcasted from Monday to Friday

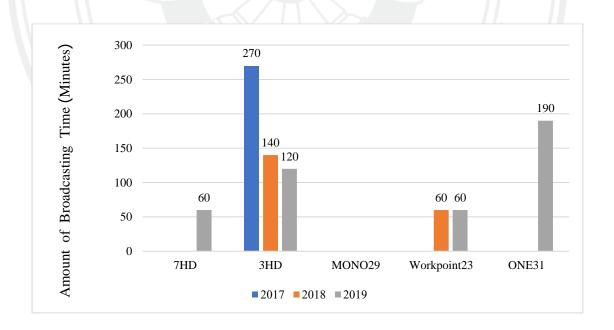


Figure 4.22 Illustrates the Amount of Broadcasting Time of Talk Shows Broadcasted from Monday to Friday

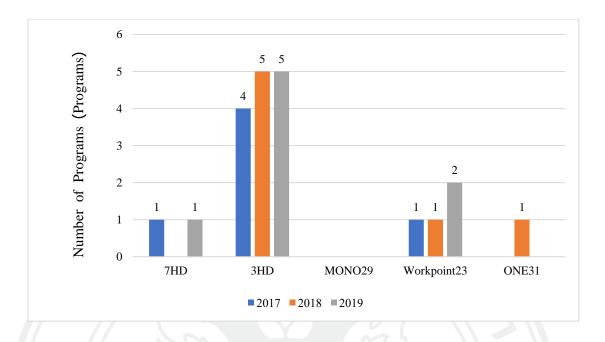


Figure 4.23 Illustrates the Number of Talk Shows Broadcasted on Saturday and Sunday

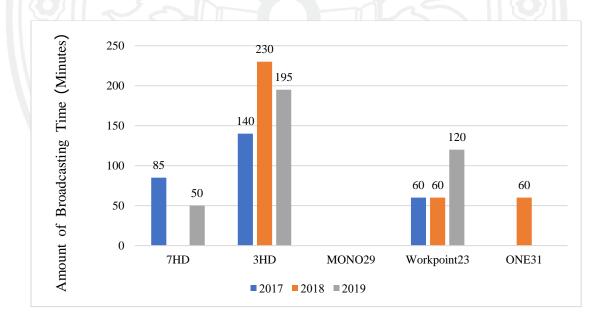


Figure 4.24 Illustrates the Amount of Broadcasting Time of Talk Shows on Saturday and Sunday

From Figure 4.21, 4.22, 4.23, and 4.24, it is found that

Channel 7HD. From Monday to Friday, only one talk show was broadcasted in 2019. On Saturday and Sunday, only one talk show was broadcasted in 2017 and 2019, but the amount of broadcasting time in 2019 decreased from 2017.

Channel 3HD. The number of talk shows and the amount of broadcasting time from Monday to Friday had a tendency to decline every year. On Saturday and Sunday, the number of game shows in 2018 and 2019 was the same, but one more talk show was broadcasted from 2017. The amount of broadcasting time in 2018 increased but decreased in 2019.

Channel MONO29. No talk show was broadcasted during 2017-2019.

Channel Workpoint23. In 2017, no talk show was broadcasted from Monday to Friday, but in 2018 and 2019, one talk show was broadcasted with the same amount of broadcasting time. Similarly, one talk show was broadcasted on Saturday and Sunday in 2017 and 2018, but one more talk show was broadcasted in 2019, but with larger amount of time.

Channel ONE31. No talk show was broadcasted from Monday to Friday in 2017 and 2018. On Saturday and Sunday, this kind of program was broadcasted in 2018 only.

4.1.2.5 Reality Show



Figure 4.25 Illustrates the Number of Reality Shows Broadcasted from Monday to Friday

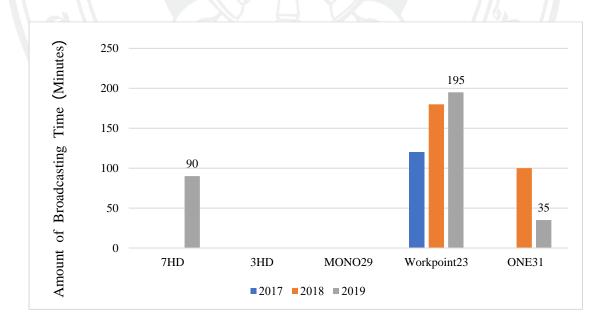


Figure 4.26 Illustrates the Amount of Broadcasting Time of Reality Shows from Monday to Friday

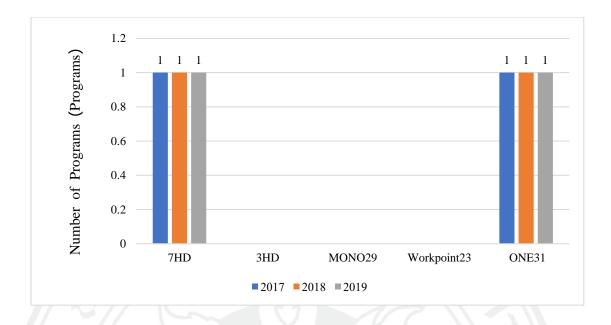


Figure 4.27 Illustrates the Number of Reality Shows on Saturday and Sunday



Figure 4.28 Illustrates the Amount of Broadcasting Time of Reality Shows on Saturday and Sunday

From Figure 4.25, 4.26, 4.27, and 4.28, it is found that

Channel 7HD. No reality show was broadcasted from Monday to Friday in 2017 and 2018, whereas only one reality show was broadcasted in 2019. On Saturday and Sunday, only one reality show was broadcasted during 2017-2019. The amount of broadcasting time decreased in 2018 but increased in 2019.

Channel 3HD and Channel MONO29. No reality show was broadcasted in these two channels.

Channel Workpoint23. From Monday to Friday in 2017, only one reality show was broadcasted in 2017 but increased one more reality show in 2018 and 2019 while the amount of broadcasting time tended to increase every year. However, no reality show was broadcasted on Saturday and Sunday during 2017-2019.

Channel ONE31. From Monday to Friday, no reality show was broadcasted in 2017, but one show in 2018 and 2019. However, the amount of broadcasting time increased in 2018 but decreased in 2019.

4.1.2.6 Sports Program

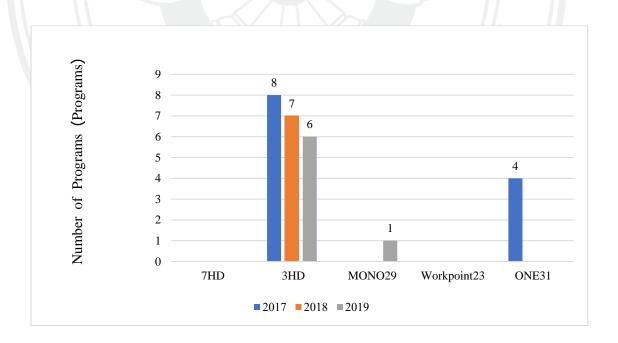


Figure 4.29 Illustrates the Number of Sports Program Broadcasted from Monday to Friday

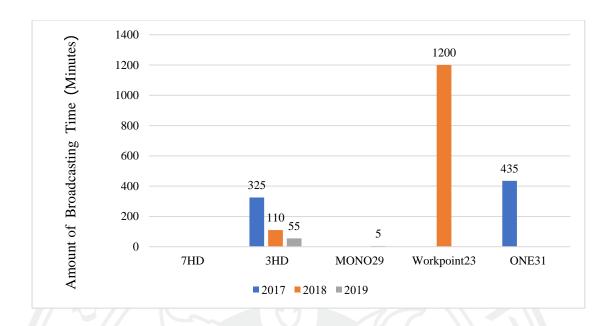


Figure 4.30 Illustrates the Amount of Broadcasting Time of Sports Programs from Monday to Friday

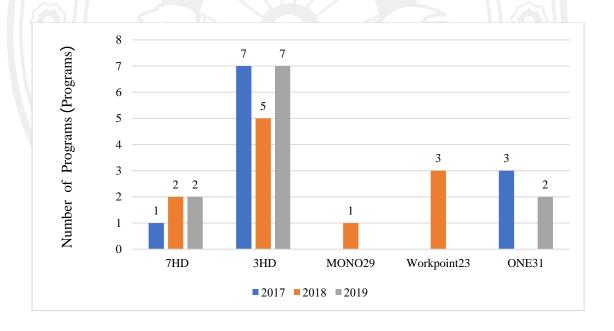


Figure 4.31 Illustrates the Number of Sports Programs Broadcasted on Saturday and Sunday

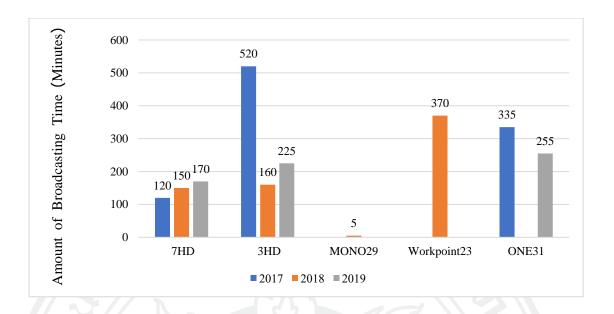


Figure 4.32 Illustrates the Amount of Broadcasting Time of Reality Shows on Saturday and Sunday

From Figure 4.29, 4.30, 4.31, and 4.32, it is found that

Channel 7HD. No sports program was broadcasted from Monday to Friday from 2017-2019. On Saturday and Sunday, one sports program was broadcasted and one more program in 2018 and 2019. The amount of broadcasting time tended to increase every year.

Channel 3HD. Both the number and the amount of broadcasting time of sports programs from Monday to Friday decreased every year. On Saturday and Sunday, both the number and the amount of broadcasting time of sports programs decreased in 2018 but increased in 2019.

Channel MONO29. From Monday to Friday, one sports program was broadcasted in 2019, but none in 2017 and 2018. On Saturday and Sunday, one sports program was broadcasted in 2018, but none in 2017 nor 2019.

Channel Workpoint23. In 2018, sports programs were broadcasted from Monday to Sunday, but none in 2017 nor 2019.

Channel ONE31. From Monday to Friday, sports programs were broadcasted in 2017, but none in 2018 nor 2019. On Saturday and Sunday, no sports program was broadcasted in 2018, but this kind of program was broadcasted in 2017

and 2019; however, the number of sports programs and the amount of broadcasting time decreased in 2019 from 2017.

4.1.2.7 Music Programs

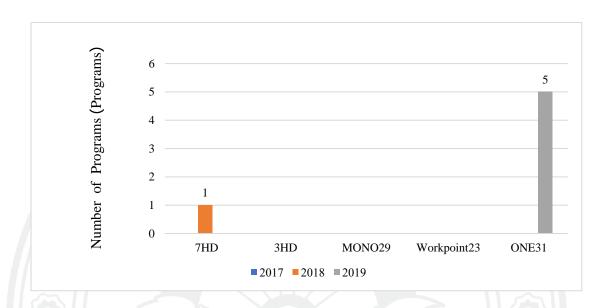


Figure 4.33 Illustrates the Number of Music Programs Broadcasted from Monday to Friday

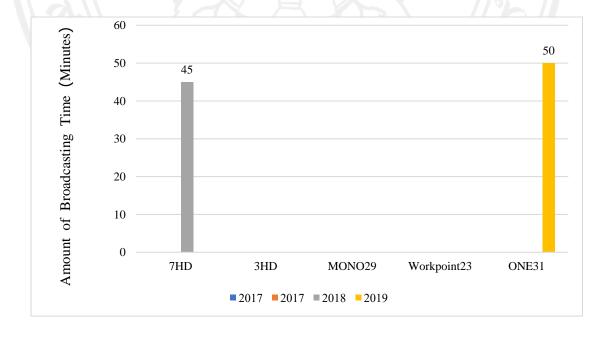


Figure 4.34 Illustrates the Amount of Broadcasting Time of Music Programs from Monday to Friday

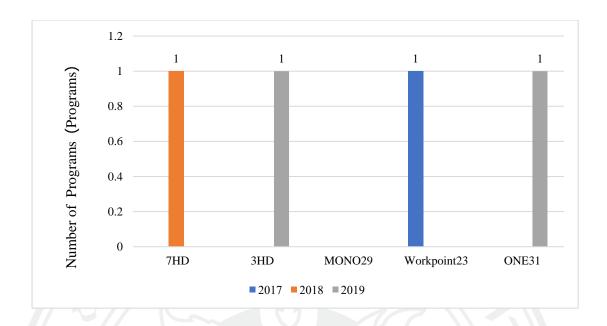


Figure 4.35 Illustrates the number of music programs broadcasted on Saturday and Sunday

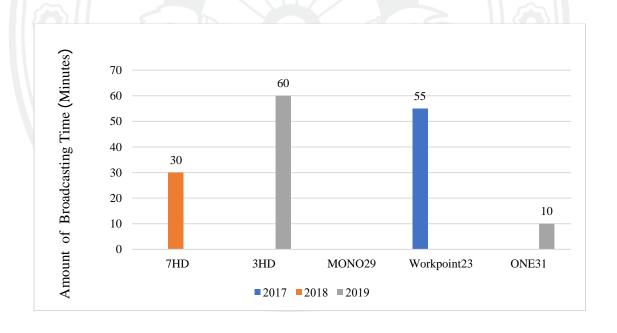


Figure 4.36 Illustrates the Amount of Broadcasting Time of Music Programs on Saturday and Sunday

From Figure 4.33, 4.34, 4.35, and 4.36, it is found that Channel 7HD. From Monday to Sunday, music programs were broadcasted in 2018, but none in 2017 nor 2019.

Channel 3HD. No music program was broadcasted from Monday to Friday during 2017-2019. On Saturday and Sunday, it was broadcasted in 2019, but none in 2017, nor 2018.

Channel MONO29. No music program was broadcasted on this channel.

Channel Workpoint23. No music program was broadcasted from Monday to Friday from 2017 to 2019. On Saturday and Sunday, one music program was broadcasted in 2017, but none in 2018-2019.

Channel ONE31. Music programs were broadcasted from Monday to Sunday in 2019, but none in 2017-2018.

4.1.2.8 Children Programs

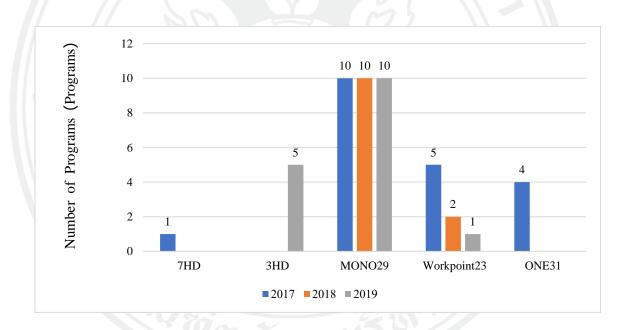


Figure 4.37 Illustrates the Number of Children Programs Broadcasted from Monday to Friday

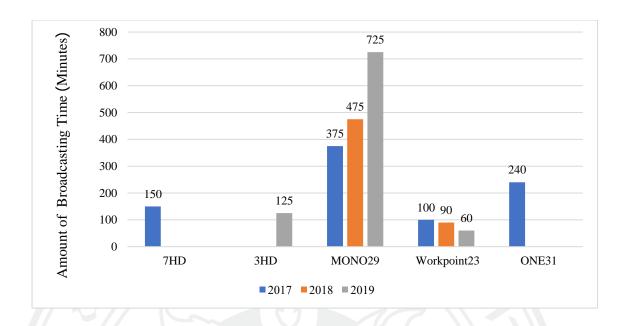


Figure 4.38 Illustrates the Number of Children Programs Broadcasted from Monday to Friday

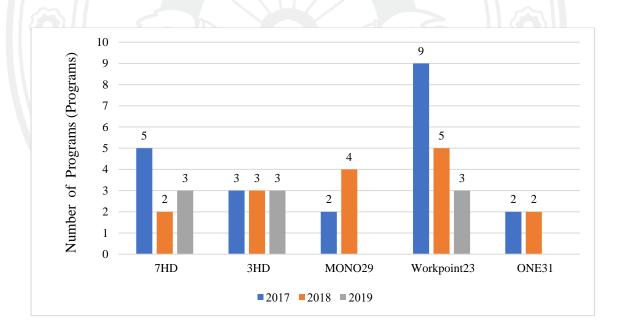


Figure 4.39 Illustrates the Number of Children Programs Broadcasted on Saturday and Sunday

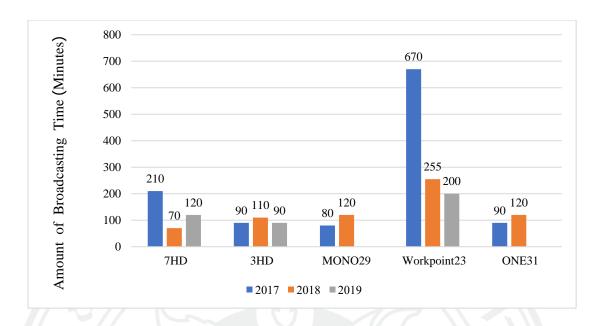


Figure 4.40 Illustrates the Amount of Broadcasting Time of Children Programs on Saturday and Sunday

From Figure 4.37, 4.38, 4.39, and 4.40, it is found that

Channel 7HD. From Monday to Friday, the children programs were broadcasted in 2017, but none in 2018-2019. On Saturday and Sunday, both the number of the children programs and the amount of broadcasting time decreased in 2018 but increased in 2019.

Channel 3HD. From Monday to Friday, children programs were broadcasted in 2019, but none in 2017-2018. On Saturday and Sunday, the number of children programs of each year was equal, but and the amount of broadcasting time increased in 2018, but decreased in 2019.

Channel MONO29. From Monday to Friday, the number of broadcasted children programs were equal each year, but the amount of broadcasting time tended to increase every year. On Saturday and Sunday, the number of broadcasted children programs and the amount of broadcasting time during 2017-2018 tended to increase, but none of the children program was broadcasted on Saturday and Sunday in 2019.

Channel Workpoint23. The number of children programs and the amount of broadcasting time from Monday to Sunday tended to decrease every year.

Channel ONE31. Children programs were broadcasted from Monday to Friday in 2017, but none in 2018-2019. On Saturday and Sunday, the number of children programs in 2017 and 2018 was the same, but the broadcasting time in 2018 increased from 2017. However, no children program was broadcasted in 2019.

4.1.2.9 Variety Program

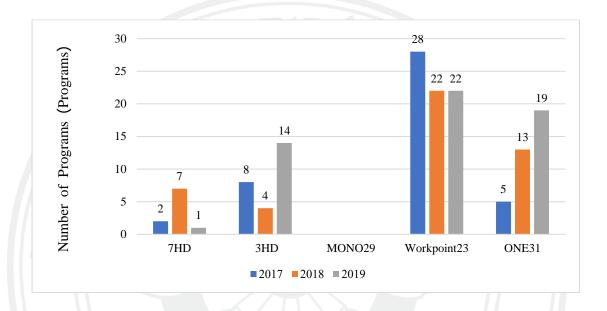


Figure 4.41 Illustrates the Number of Variety Programs Broadcasted From Monday to Friday

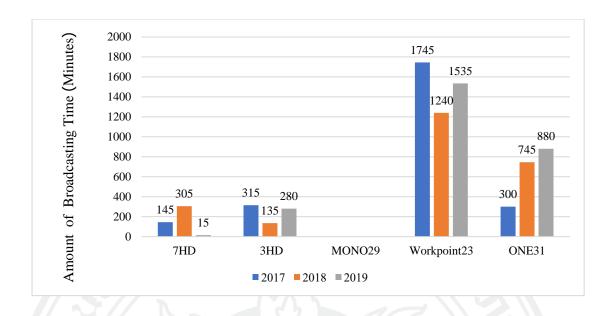


Figure 4.42 Illustrates the Amount of Broadcasting Time of Variety Programs from Monday to Friday

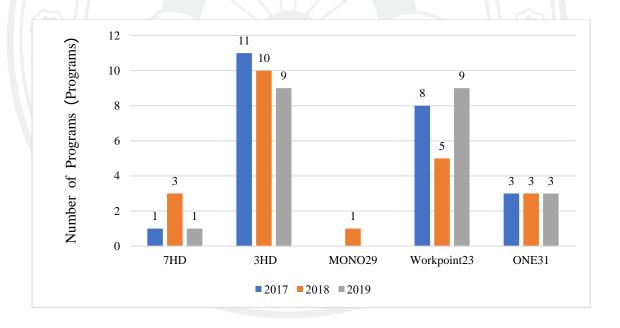


Figure 4.43 Illustrates the Number of Variety Programs Broadcasted on Saturday and Sunday

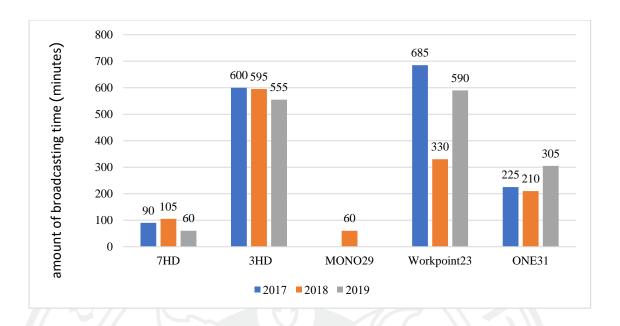


Figure 4.44 Illustrates the Amount of Broadcasting Time of Variety Programs on Saturday and Sunday

From Figure 4.41, 4.42, 4.43, and 4.44, it is found that

Channel 7HD. The number of variety programs and the broadcasting time from Monday to Sunday in 2018 increased from 2017 but decreased in 2019.

Channel 3HD. The number of variety programs and the broadcasting time from Monday to Friday in 2018 decreased from 2018, but increased in 2019. On Saturday and Sunday, both the number of programs and the broadcasting time had a tendency to decrease every year.

Channel MONO29. No variety program was broadcasted on this channel from Monday to Friday. Variety programs were broadcasted on Saturday and Sunday in 2018, but none in 2017 nor 2019.

Channel Workpoint23. The number of variety programs from Monday to Friday in 2018 and 2019 was the same, but decreased from 2017. The broadcasting time decreased in 2018 but increased in 2019.

Channel ONE31. The number of variety programs and the broadcasting time from Monday to Friday tended to increase every year. On Saturday and Sunday, the number of programs was the same during 2017-2019. The broadcasting time decreased in 2018 but increased in 2019.

Besides, it is found that according to the program schedules of some channels in 2019, it appears the broadcasting time for advertising programs with details as shown below:

Table 4.1 Illustrates the Number and the Amount of Broadcasting Time of Advertising Programs

	231	Monday-Friday		Monday-Friday
Channal	Number of	Amount of	Number of	Amount of
Channel	Programs (Programs)	Broadcasting Time	Programs (Programs)	Broadcasting Time (Minutes)
	(110grums)	(Minutes)	(110grums)	(Manues)
Workpoint23	20	375	4	120
ONE31		1 7	4	250

From Table 4.1, it is found that from analyzing the program schedules of Workpoint23 and ONE31 channels, the number of advertising programs and the broadcasting time of each channel were mostly changed/ Thus, after comparing and analyzing the occurring changes of each channel in each year, the overall broadcasting of each channel can be summarized as follows:

4.1.3 A Summary of the Overall Broadcasting of Each Program of Each Digital TV Channel

4.1.3.1 The Overall Broadcasting of Channel 7HD

Table 4.2 Illustrates the Number of Programs and the Broadcasting Time in Each Week of Channel 7HD

Types of Programs	Number of Programs/Week			Amount of Broadcastin		
		(Programs))	Time	/Week (Mir	nutes)
	2017	2018	2019	2017	2018	2019
News	42	75	86	3055	3200	3945
Documentary	3	41	28	165	880	365

Types of	Number	of Program	ns/Week	Amount of Broadcasting		
	(Programs)			Time/Week (Minutes)		
Programs	2017	2018	2019	2017	2018	2019
Sitcom	0	0	0	0	0	0
Drama/Movie	31	60	40	2925	4790	3380
Game Show	21	15	26	880	715	1340
Talk Show	1	0	2	85	0	110
Reality	1	1	2	105	80	180
Sport	1	2	2	120	150	170
Music	0	2	0	0	75	0
Children	6	2	3	360	70	120
Variety	3	10	2	235	410	75

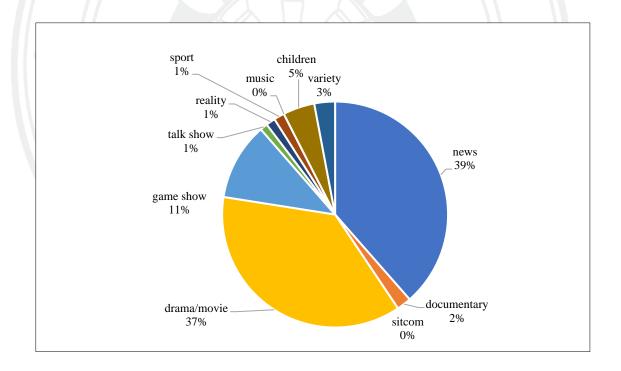


Figure 4.45 Illustrates the Amount of Broadcasting Time of Each Kind of Program of Channel 7HD Per Week in 2017

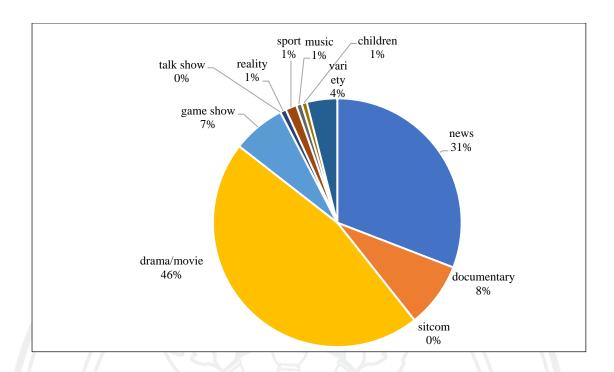


Figure 4.46 Illustrates the Amount of Broadcasting Time of Each Kind of Program of Channel 7HD Per Week in 2018

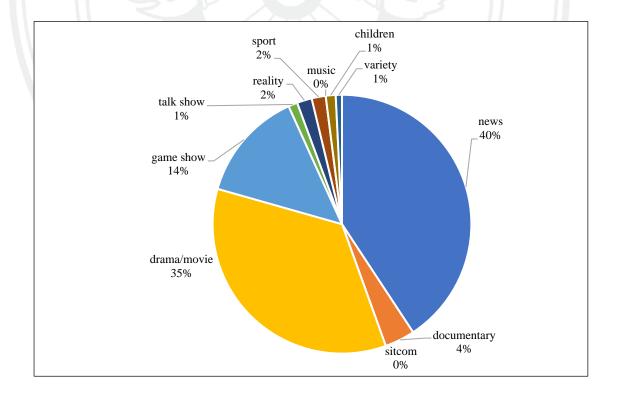


Figure 4.47 Illustrates the Amount of Broadcasting Time of Each Kind of Program of Channel 7HD Per Week in 2019

From the above Table and Figure, it is found that Channel 7HD gave importance to news and drama/movie programs, as both of these two programs had a proportion of more than 70% during 2017-2019. Besides, it is found that the number of programs and the broadcasting time of news programs tended to increase every year. For dramas and movies, the number of programs and the broadcasting time increased in 2018 but decreased in 2019, which was similar to what happened to game shows. Thus, this channel had adjusted its program schedule all the time.

4.1.3.2 The Overall Broadcasting of Channel 3HD

Table 4.3 Illustrates the Number of Programs and the Broadcasting Time of Each Kind of Program of Channel 3HD Per Week

Types of Programs	Number of Programs/Week (Programs)			Amount of Broadcasting Time/Week (Minutes)			
	2017	2018	2019	2017	2018	2019	
News	123	117	143	3820	3390	3510	
Documentary	57	60	58	900	790	605	
Sitcom	11	10	0	190	225	0	
Drama/Movie	25	43	50	2395	3255	3720	
Game Show	15	26	19	400	865	565	
Talk Show	12	8	7	410	370	315	
Reality	0	0	0	0	0	0	
Sport	15	12	13	845	270	280	
Music	0	0	2112	0	0	60	
Children	3	3	8	90	110	215	
Variety	19	14	23	915	730	835	

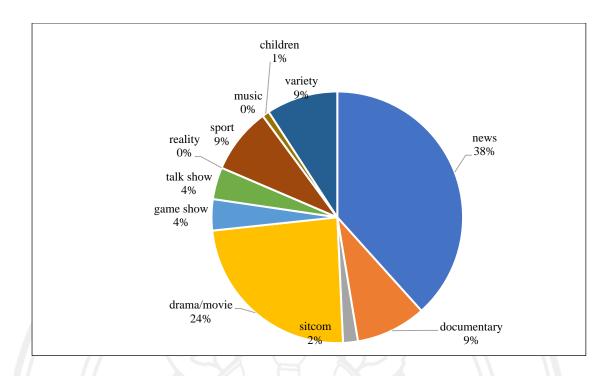


Figure 4.48 Illustrates the Amount of Broadcasting Time of Each Kind of Program of Channel 3HD Per Week in 2017

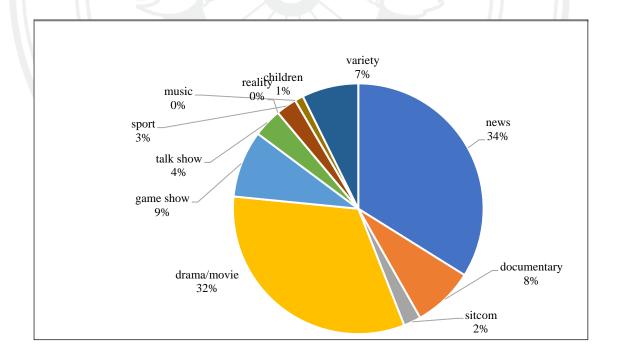


Figure 4.49 Illustrates the Amount of Broadcasting Time of Each Kind of Program of Channel 3HD Per Week in 2018

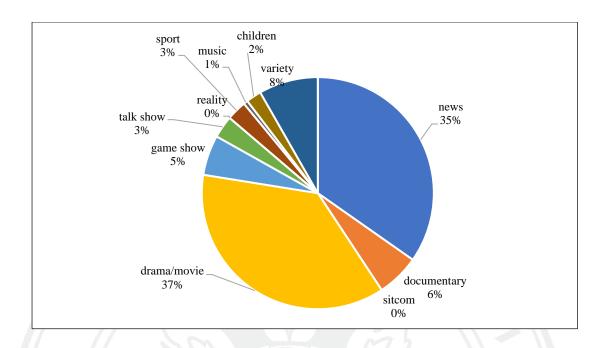


Figure 4.50 Illustrates the Amount of Broadcasting Time of Each Kind of Program of Channel 3HD Per Week in 2019

From the above Table and Figure, it is found that Channel 3HD highlighted news and drama/movie programs during 2017-2019. Notably, the number of programs and the broadcasting time of dramas increased every year. For news program, the number of programs and the broadcasting time decreased in 2018 but increased in 2019. However, no sitcom was broadcasted in 2019.

4.1.3.3 The Overall Broadcasting of Channel MONO29

Table 4.4 Illustrates the Number of Programs and the Broadcasting Time of Each Kind of Program of Channel MONO29 Per Week

Types of Programs	Number	of Program	ns/Week	eek Amount of Broadcastin Time/Week (Minutes)		
	((Programs))			
	2017	2018	2019	2017	2018	2019
News	65	56	61	2050	1705	1865
Documentary	17	24	18	720	1005	95
Sitcom	5	0	0	300	0	0
Drama/Movie	66	62	6	5930	5070	6315

Types of	Number	of Program	ns/Week	Amount of Broadcasting		
	((Programs))	Time	/Week (Minu	ıtes)
Programs	2017	2018	2019	2017	2018	2019
Game Show	0	0	5	0	0	150
Talk Show	0	0	0	0	0	0
Reality	0	0	0	0	0	0
Sport	0	1	UTA	0	5	5
Music	0	0	0	0	0	0
Children	12	14	10	455	595	725
Variety	0	1	0	0	60	0

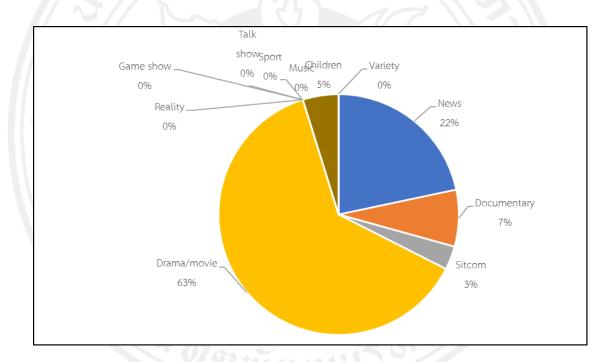


Figure 4.51 Illustrates the Amount of Broadcasting Time of Each Kind of Program of Channel MONO29 Per Week in 2017

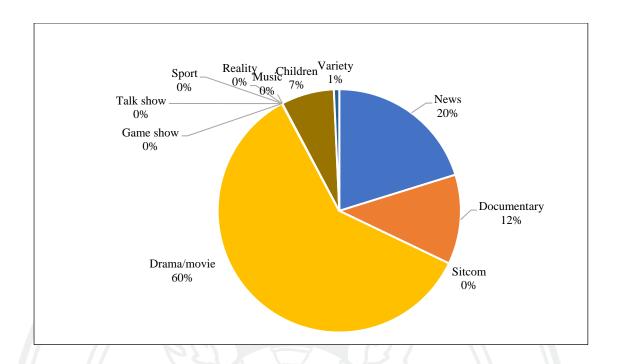


Figure 4.52 Illustrates the Amount of Broadcasting Time of Each Kind of Program of Channel MONO29 Per Week in 2018

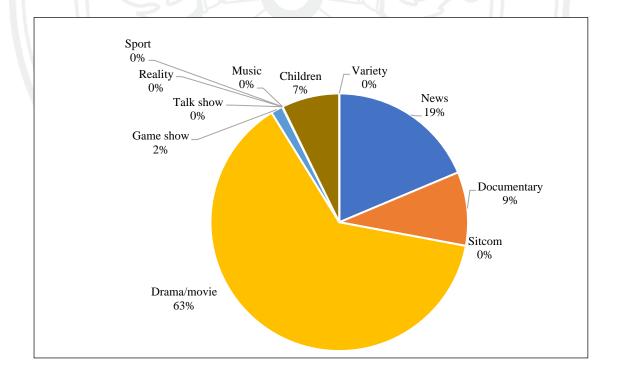


Figure 4.53 Illustrates the Amount of Broadcasting Time of Each Kind of Program of Channel MONO29 Per Week in 2019

From the above Table and Figure, it is found that Channel MONO29 gives the highest importance to dramas/movies as they gained more than 60% of the overall proportion every year. However, news programs and broadcasting time tended to decrease slightly in 2019. Despite its focus on dramas and movies, the channel also adjusted its program schedule like other channels.

4.1.3.4 The Overall Broadcasting of Channel Workpoint23

Table 4.5 Illustrates the Number of Programs and the Broadcasting Time of Each
Kind of Program of Channel Work Point 23 Per Week

Toward	Number	of Program	ms/Week	Amou	nt of Broad	casting	
Types of	(Programs)			Time/Week (Minutes)			
Programs _	2017	2018	2019	2017	2018	2019	
News	51	17	30	2085	1665	1645	
Documentary	16	9	11	410	415	490	
Sitcom	8	3	9	505	165	370	
Drama/Movie	6	6	2	295	250	140	
Game Show	26	24	41	1580	1360	2220	
Talk Show	1/ 8	2	3	60	120	180	
Reality	1	2	2	120	180	195	
Sport	0	12	0	0	1570	0	
Music	-1	0	0	55	0	0	
Children	14	7	4	770	345	260	
Variety	36	27	31	2430	1570	2125	

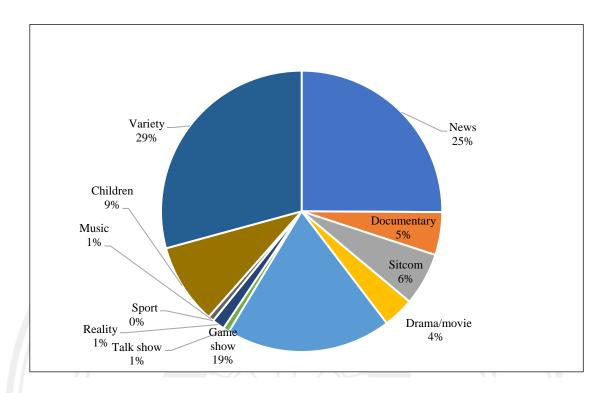


Figure 4.54 Illustrates the Amount of Broadcasting Time of Each Kind of Program of Channel Workpoint23 Per Week in 2017

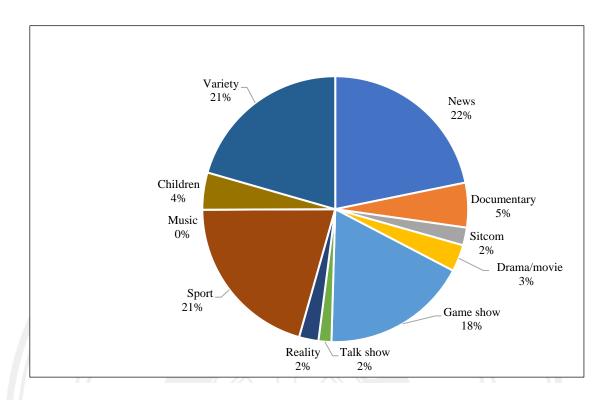


Figure 4.55 Illustrates the Amount of Broadcasting Time of Each Kind of Program of Channel Workpoint23 Per Week in 2018

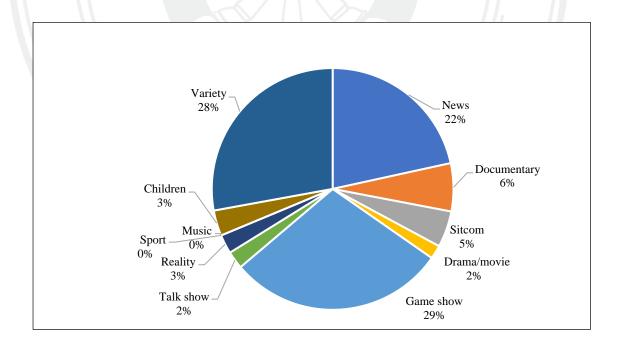


Figure 4.56 Illustrates the Amount of Broadcasting Time of Each Kind of Program of Channel Workpoint23 Per Week in 2019

From the above Table and Figure, it is found that Channel Workpoint23 gave importance to game show and variety programs the most. However, the number of programs and the broadcasting time decreased in 2018, but increased in 2019. At the same time, news programs were also broadcasted largely in this channel, considering from the number of programs and the broadcasting time. However, the news programs tended to decrease every year.

4.1.3.5 The Overall Broadcasting of Channel ONE31

Table 4.6 Illustrates the Number of Programs and Amount of Broadcasting Time of Each Kind of Program of Channel ONE31 Per Week

Types of Programs	Number of Programs/Week (Programs)			Amount of Broadcasting Time/Week (Minutes)		
	2017	2018	2019	2017	2018	2019
News	49	38	36	2935	2565	2080
Documentary	11	13	8	290	470	460
Sitcom	7	13	9	460	925	460
Drama/Movie	14	23	30	1595	2105	2575
Game Show	27	9	22	1675	480	1380
Talk Show	0	1	4	0	60	190
Reality	1	2	2	90	200	95
Sport	7	0	2	770	0	255
Music	0	0	6	0	0	60
Children	6	2	0	330	120	0
Variety	8	16	22	525	955	1185

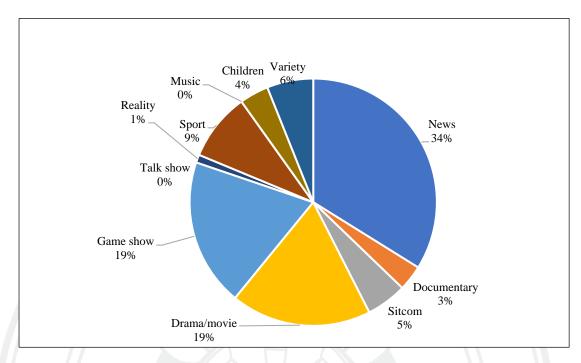


Figure 4.57 Illustrates the Amount of Broadcasting Time of Each Kind of Program of Channel ONE31 Per Week in 2017

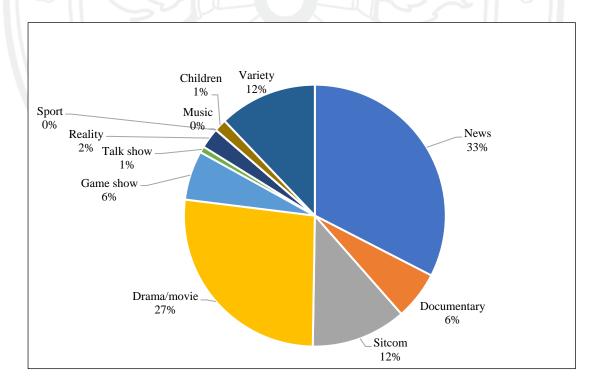


Figure 4.58 Illustrates the Amount of Broadcasting Time of Each Kind of Program of Channel ONE31 Per Week in 2018

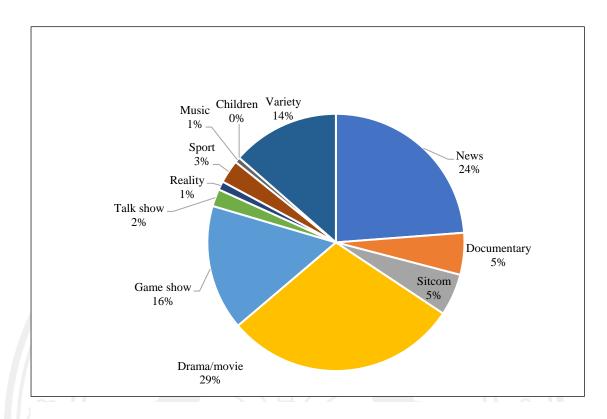


Figure 4.59 Illustrates the Amount of Broadcasting Time of Each Kind of Program of Channel ONE31 Per Week in 2019

From the above Table and Figure, it is found that Channel ONE31 gave the highest importance to news and drama/movie programs. The number of programs and the broadcasting time increased every year. On the contrary, for the news programs, the number of programs and the broadcasting time decreased every year.

4.1.3.6 A Summary of the Overall Broadcasting of Digital Television Channels

From the analysis of the program schedules of all studied five digital TV channels based on the number of their programs and their broadcasting time, Channel 7HD, 3HD, MONO29, and ONE31 gave the importance to the same types of programs. In other words, they broadcasted high numbers of news and drama/movie programs with a large amount of broadcasting time for these two types of programs the most. On the other hand, Channel Workpoint23 broadcasted games and variety programs the most.

4.1.4 Other Program Presentations Besides the Broadcasted Programs in the Program Schedule of Each Digital TV Channel

4.1.4.1 Channel 7HD

Channel 7HD developed its own platform to replace the use of foreign an online platform, i.e., YouTube, and on the other hand, no program content was uploaded into other online platforms either. The "BUGABOO.tv" website was introduced in 2011 and was developed into the form of an application in 2012. Therefore, Channel 7 can be considered as the first OTT service provider of Thailand. BUGABOO.tv is AVoD or Advertising Video on Demand, the revenue of which comes from advertising. Moreover, to increase more channels and to expand viewers' capabilities to access the content of Channel 7 increasingly, BUGABOO INTER was thus created for worldwide use through the application and website of inter.bugaboo.tv in the form of SVod or Subscription Video on Demand, which is a monthly service. The content of BUGABOO INTER contains on-air dramas, rerun dramas, and special programs that viewers can view through this channel only (Longtunman, 2019).

4.1.4.2 Channel 3HD

Channel 3HD also developed its own platform in the form of the website and the application called "Mello" in 2017. The content in Mello or called "CH3 Plus" at present, is OTT in the form of AVoD or Advertising Video on Demand, the revenue of which comes from advertising. It contains updated programs broadcasted in digital TV channels and other retrospective programs. Besides, there is some exclusively-created content for this channel, which is called "Mello Original." Nevertheless, Channel 3 also uploads program content into other platforms, i.e., YouTube, WeTV, etc., in the form of short clips to call viewers' attention and continue to watch it on the digital channel. It includes the posting of clips that can be viewed later, but it will take a longer time to upload such a clip than Mello or CH3 Plus.

4.1.4.3 Channel MONO29

Channel MONO29 has its own website and application, which is OTT in the form of AVoD or Advertising Video on Demand, the revenue of which comes from advertising. Viewers can watch both live programs and rerun programs.

However, the rerun programs that can be viewed later are only series and can be viewed back within seven days after the broadcasting on the digital TV channel.

4.1.4.4 Channel Workpoint23

Channel Workpoint23 provides live broadcasting along with rerun programs via many OTT platforms, i.e., YouTube, Facebook, and Line TV, which are in the form of AVoD or Advertising Video on Demand. Moreover, some clips are highlighted in each platform to allow viewers to choose to view only a program in which they are interested, without wasting their time watching the entire program, etc. Live OTT can also create revenue from advertising of each channel.

4.1.4.5 Channel ONE31

Channel ONE31 also provides live broadcasting along with rerun programs via many OTT platforms, i.e., YouTube, Facebook, Line TV, Viu, and WeTV, which are in the form of AVoD or Advertising Video on Demand. Channel ONE31 is one of the channels that upload programs into various platforms the most.

4.1.4.6 A Summary of Other Program Presentation Besides the
Broadcasted Programs in the Program Schedules of Digital TV
Channels

From the aforementioned information, it is found that the genres, including other channels for presenting program content by the program schedules, are all online channels, which can be divided into two main genres. First, it is the presentation of programs on one's own channel or platform, or on OTT. The online presented programs can also be broadcasted in parallel or can be viewed or rerun later. Moreover, the program content can be the entire program or only a part of what is needed to be presented. In other words, it is the appealing or attractive part that can make viewers follow to watch the entire program on the online channel or lead them to watch it from a regular program as specified in the program schedule.

4.2 Part 2: In-depth Interview

In the study "Roles of Television Media in the New Media Landscape under the Digital Economy System," the researcher conducted in-depth interviews with four groups of the samples: 1) Entrepreneurs in the television industry in Thailand, 2) media experts, 3) mass communication scholars, and 4) the National Broadcasting and Telecommunications Commission (NBTC). Thirteen samples were thus selected by purposive sampling. The purposes of the in-depth interview are 1) to study changes in the television industry in Thailand under the digital economy system, 2) to examine the adaptation of the television industry in Thailand under the changing media landscape, and 3) to explore the roles of television in the new media landscape. The findings are presented as follows:

- 4.2.1 The Overall Present Situation of the Media Industry
 - 4.2.1.1 Competition in the Television Industry
 - 4.2.1.2 Genres and Content of a New Presentation
 - 4.2.1.3 A Diversity of Viewing Channels
 - 4.2.1.4 Consumers' Changing Behaviors
- 4.2.2 The Adaptation of TV Industry Organizations under the Digital Economy System
 - 4.2.2.1 Organizational Structure
 - 4.2.2.2 Communication Channels
 - 4.2.2.3 Formats in Presenting Content
 - 4.2.2.4 Content
 - 4.2.3 Roles of Television in the New Media Landscape
- 4.2.4 A Tendency of the Television Industry in the New Media Landscape in the Future
- 4.2.5 Recommendations towards Changes and Adaptation of the Media and Television Industry

4.2.1 The Overall Present Situation of the Media Industry

To move into the digital economy era or the era in which economics is driven by digital technologies to increase the effectiveness, efficiency, value-added products and service, competitive advantages, and business opportunities, the Twelfth National Economic and Social Development Plan specifies two major development strategies in its eighth strategy in the development of science, technology, research, and innovation. The first strategy is to accelerate the promotion of research and development investment and the mobilization towards commercial and social

purposes. The other strategy is to develop business- enterprise entrepreneurs to be technology-enterprise entrepreneurs. As a consequence, entrepreneurs in every industry, especially the media industry, adopted technologies for their business use in moving into the digital economy era to comply with the said national plan. Moreover, television is also digitalized or transformed from broadcasting by the analog to the digital system, which accords with the first strategy of the National Policies and Plans for Digital Development for Economy and Society (2016-2020), as supported in the following interview.

Thailand has transformed from the analog signal transmission to digital transmission, having terrestrial television network in the digital system with 95% of households coverage. At present, 26 digital television channels are in service from 48 channels. Such a move accords with Strategy 1 of the National Policies and Plans for Digital Development for Economy and Society (2016-2020): Development of high-performing digital infrastructure throughout the country. (Orasri Srirasa, personal communication, December 6, 2018)

Technological factors bring about tremendous changes in the overall media industry, especially traditional media, i.e., television, in the present time. As a sender, all television stations have to adapt themselves to broadcasting and management apparently. For message, program content is broken down into segmented content attractive and suitable for each target group increasingly. Concerning communication channels, TV broadcasting channels moved towards more digitalization in the form of TT (Over the Top).

Nevertheless, the above changes are also caused by changes in receivers' consumption behaviors as well. Technologies transform the role of receivers as passive to an active audience, who can choose to view what they need, which is widely witnessed nowadays.

What happens since over the past ten years in the era of full digitalization is the digital transformation from the analog signal transmission. Everything is transformed into digital codes. All TV or radio signal

transmission is not limited to any particular channel. On the contrary, viewers can view multiple channels." (Pana Thongmeearkom, personal communication, June 26, 2018)

Media should adapt themselves based on the assumption that 'content is the king.' For media content, it needs to be attractive enough to draw viewers' attention to view it. It has to be innovative and creative. Platforms may not be the key issue anymore because young generations watch OTT. If content is good, no matter which platform it is, they will view it. (Parita Wongchutinat, personal communication, August 2, 2019)

Media ecology has been changed totally and abruptly by technological factors, which disrupt printed media and television greatly. It can be called "creative disruption." Thai media ecology is in the stage of stasis while in many sectors, i.e., online media turn to have increasing roles. (Sikares Sirakan, communication, June 22, 2018)

The digital era affects every media tremendously because people's lifestyles change, i.e., they can use mobile phones everywhere at any time. People watch TV decreasingly; thus, it affects the television industry. (Vilai Vitayaveerasuk, personal communication, June 12, 2018)

From the above interviews, changes in the television industry take place in the entire process of communication (S-M-C-R), namely a sender, message, channel, and receiver, which is presented in the next topics.

4.2.1.1 Competition in the Television Industry

The competition in the television industry occurs since the changes in traditional television from six analog-system TV channels to twenty-four digital TV channels. Those who are approved for an operator license can be entrepreneurs of the old analog TV channels or new entrepreneurs, both in the media circle, i.e., a program producer or publisher, and in other circles. Some licensed entrepreneurs can bid a digital TV license for more than one channel. Accordingly, entrepreneurs of each channel need to apply all available strategies to compete with others to draw ratings and advertising into the channel. Notably, the number of viewers and entrepreneurs

interested in buying advertising space, including the amount of advertising spending, which is the main revenue of each channel, remains the same.

The competition is increasing. Those who cannot survive then have to get out of the stage. Tantham Rungvithu, personal communication, June 9, 2018)

It's the same old cake, but with more competitors. The number of advertising buyers is the same, but the competition is bigger. The situation is even getting worse as the number of advertising buyers tends to decrease with more choices for buyers. Thus, competition is scorching. (Vilai Vitayaveerasuk, personal communication, June 12, 2018)

From six channels, now we have 24 channels with hot competition in advertising selling. Some TV stations overpaid their hand in their investment severely. There have been more competitors, including a lot of new ones. It is not even easy for old entrepreneurs to stay in business while it is also hard for the new ones to survive. (Kulnaree Sueroj, personal communication, June 14, 2018)

The competition does not occur to only traditional television; several online media in the form of OTT also face strong competition. At present, the production cost is decreased, i.e., YouTube, Netflix, LineTV, etc. Although they may not need to fight for advertising spending like TV, they have to compete for the number of views, as illustrated in the below interviews.

Because of the more options, the competition is big. People move to watch from other platforms. Everybody fights for eyeballs. (Kittipong Veerataecha, personal communication, June 28, 2018)

YouTube seizes the same amount or very little increase of eyeballs, but there have been many more times of media. The rest of the channels need to struggle as advertising spending decreases. (Warat Karuchit, personal communication, June 19, 2018)

In the past, communication equipment was costly. Now, it is cheaper, but with a higher capacity. Anybody can enter the market. New people can come in as creation constraints are less, so there have been a lot of competitors with a variety of styles. Many large entrepreneurs have never been expected to be competitors, but now they are. For instance, AIS now can be in the TV business, including other OTT TV channels. (Pana Thongmeearkom, personal communication, June 26, 2018)

From the above interviews, it illustrates severe competition due to high numbers of competitors among digital TV and other groups. All of these induce television and other media to adapt themselves to continue their business operation, which is presented in the next part.

4.2.1.2 Genres and Content in the New Presentation

Due to severe competition, program content is one of the utmost important factors enabling viewers to decide whether they will continue viewing an individual program. Now, there is a variety of options of both traditional and online media, which brings about diversity, newness, and more specialization based on consumers' interest.

Changes can be positive. For instance, in the production of drams, such as a drama called 'Kahol Mahoratuek' of Channel ONE31 or Thairath TV used infographic for the news report. (Sikares Sirakan, personal communication, June 22, 2018)

On the other hand, the content of some programs is produced only for attracting viewers' interest only, so the production is based on viewers' interest mainly. Therefore, the content can be violent or contains inappropriate language or action.

Considering the content quality, especially news, it seems to be lower. It is motivated to use violent content to attract viewers. Ethics becomes the last thing a producer will think of to survive. A lot of seducing content occurs. The

traditional TV turns to focus on more violent content when having to compete with YouTube. Therefore, violence, i.e., vulgar words, sexual violence, violent expressions, etc. seems to be normal and familiar, and is used increasingly. (Warat Karuchit, personal communication, June 19, 2018)

Thus, the program content nowadays changes both positively and negatively, caused by entrepreneurs' adaptation for their survival and further business operation.

4.2.1.3 A Diversity of Viewing Channels

Owing to plenty of viewing channels nowadays: traditional TV, OTT, online, etc. the traditional television cannot access masses of people like in the past. Viewers change to view from a convenient channel with specific content in which they are interested only.

Channels are more open. Previously, the only channel to transmit the intended content to the public was only through the traditional media. After the emergence of the internet, channels are much more that they become unlimited. It is the change of channels in accessing viewers. Traditional media used to have an advantage of their accessibility, but now that advantage is changed. (Pasu Srihiran, personal communication, December 4, 2018)

Changes are severe due to changes in consumers' media consumption behaviors. Now, they view everything on digital devices, not television. (Worapong Nipakornphan, personal communication, June 7, 2019)

From the above interviews, there have been a variety of viewing channels. Viewers now do not view the traditional media as they used to do. Thus, entrepreneurs of each channel must plan their strategies for presenting programs via these various channels to reach their viewers or audience.

4.2.1.4 Consumers' Changing Behaviors

Communication technologies are determinants of consumers' changing behaviors. From the passive audience who watched a TV program as specified in a

program schedule in the past, viewers can now view only the content they need anywhere at any time via their smartphones or other digital devices.

Users' lifestyles are changed. They view everything from their mobile phones everywhere at any time. TV viewers decreased tremendously, while consumers' behaviors also change all the time. People of new generations are interested in online media, especially teenagers. They will view only the program they want to see. Thus, the meaning of television from their perspective means television on YouTube, not broadcasting anymore. (Jumpon Rodkamdee, personal communication, June 18, 2018)

In the past, people watched TV 'in one place.' Though they went outside for any party, they would return to watch TV at home. Now, the new media landscape allows people to expose to information everywhere at any time. The phenomenon of "Anytime, Anywhere, and Any applications" occurs. Importantly, users can deliver anything they want. Users experience higher satisfaction. In the old days, people hurriedly returned home to watch a program timely, but now a Smartphone enables them to get information for the time, so they have no need to hurry. Besides, they can view on demand. Therefore, mobile phones and applications change, and so do people's behaviors. (Parita Wongchutinat, personal communication, August 2, 2019)

Media Landscape has changed because of users' behaviors, which are also changed primarily because of technologies, especially smartphones. (Orasri Srirasa, personal communication, December 9, 2018)

People are Connected Generation who communicate all the time. Social Media are not mass, but one-to-one communication in which people can view or read whenever they want. (Pana Thongmeearkom, personal communication, June 6, 2018)

From the above interviews, viewers' behaviors have changed tremendously from the past since communication technologies have been developed for much easier accessibility to program content. Consequently, viewers are not a passive audience anymore, but an active audience who can choose or not choose to view any program instead. Moreover, they even become content creators by themselves.

In short, from the in-depth interview, the television industry has changed all the time in every component of a communication process (S-M-C-R), namely Sender, Message, Channel, and Receiver. All changes were caused by communication technology advancement, or so-called, "Communication Technological Determinism." The critical determinants are the occurrence of the internet and smartphones. These two things bring about changes in receivers' behaviors as receivers can expose to media anytime and anywhere. Besides, they can selectively expose themselves to only needed content via a diversity of channels. Nowadays, viewing channels are not only traditional media like television in the past but cover a wide range of communication devices, i.e., computers, tablets, smartphones, etc. Accordingly, TV entrepreneurs as a sender need to adapt themselves to the highcompetition situation among entrepreneurs in the television industry and other media. The adaptation of TV entrepreneurs is presented in the next topic.

4.2.2 The Adaptation of TV Industry Organizations under the Digital Economy System

In the present situation, the media landscape has changed a lot. Severe competition is widely witnessed in the media industry, especially television. Media organization thus requires an adaptation towards competitive capabilities in the industry and further business operation. The adaptation of TV organizations in the digital economy age is presented under the below topics.

From the in-depth interview, entrepreneurs in the television industry expressed their opinions about their adaptation in the digital economy age as follows:

Media organizations have to adapt themselves gigantically. Although they did not change completely differently, they still need to change substantially, depending on each channel's character. (Kulnaree Sueroj, personal communication, June 14, 2018)

It is essential for a media organization towards adaptation. If not, it cannot survive, especially in operating TV business nowadays. The traditional

media have to change their business operation in every dimension. (Jumpon Rodkamdee, personal communication, June 18, 2018)

We have to admit that in the past, the traditional media may not be familiar with the competition. They were in a low-competition market. However, at present, competition is high, so they have to change all their ways of thinking. In the old days, big TV channels hardly chased for customers. They could produce anything. The audience watched everything they produced, especially when lots of advertising came in. Now, things are changed. Media organizations must rely on viewers much increasingly. Traditional media are not big like before. (Pasu Srihiran, personal communication, December 4, 2018)

4.2.2.1 Organizational Structure

Due to high competition in the television industry, including the higher cost of several factors, i.e., channel auction, network rental, expenses of importing technologies, and struggling for more revenue, each organization needs to restructure its organization, as illustrated in the below interviews.

An instant model for the adaptation of television entrepreneurs consists of the following: 1) Reorganization. No single organization does not do so. Each organization downsizes, lays off workers, uses outsources, modifies internal structure, changes of executives, etc. 2) Transformation. An organization transforms itself as a traditional medium to a channel for selling its own products, i.e., RS Model, etc. 3) Alliances. For example, Channel Workpoint23 does not perceive new media as an obstacle. Instead, the channel uses such a disruption as its opportunity. Thus, the channel provides On Air, Online, and On-ground service, and also jointly invests with BNK 48 to produce a program. 4) Alternative models. Each organization can apply any model for supporting its business. For instance, the exact positioning of Channel MONO29 makes the channel successful in its positioning with good ratings despite importing foreign programs. It also sells broadcasting time to

TV Direct to increase its revenue to support its business operation. (Sikares Sirakan, personal communication, June 22, 2018)

Restructuring an organization can be conducted in two dimensions:

1) Internal Restructure, i.e., downsizing or training workers to have more diverse knowledge and competence, being more MOJO (Mobile Journalism), an early retirement (before 60 years old) program to reduce costs of an organization. Besides, an organization needs to develop its production and communication technologies towards increased effectiveness.

Media organizations should restructure production technologies. Viewers want to see something that is more modern. (Kulnaree Sueroj, personal communication, June 14, 2018)

Communication technology needs to be restructured. Organizations have to catch up with new technology and update timely towards effective communication. Everything has to be prepared and keeps up with the trends. (Duangrat Mahavanich, personal communication, June 21, 2018)

SWOT analysis needs to be conducted to see an organization's status. The preliminary problem-solving is to reduce costs, restructure an organization, etc. Some channels did not choose to lay off workers, but trained them towards multitasking and MOJO instead. (Kulnaree Sueroj, personal communication, June 14, 2018)

Personnel management is needed, including recruiting more qualified workers for each channel. Nowadays, several organizations offer an early retirement program for workers. Earlier, early retirement was not common. Instead, they could work as long as they can. (Duangrat Mahavanich, personal communication, June 21, 2018)

2) External Restructure by being an alliance with other organizations for joint program production. Some investors buy stocks of some channels. Some channels conduct other business enterprises, both related and unrelated to the television industry through the accessibility to masses of people to advertise their products, etc.

It requires good alliances. Channel 3 has Tencent from China as an alliance. China is a huge market with 7,000 million viewers. Not only does it buy the license of Thai dramas, but it also includes events and concerts organization. Another case is the purchase of the "Nakin" Indian series to be broadcasted in Thailand while Indians also buy Thai dramas to be broadcasted in India as well. (Duangrat Mahavanich, personal communication, June 21, 2018.)

Channel ONE took over Channel PPTV owned by Prasart Thong Osot by buying stocks 50%. Channel GMM25 took over by Chang Beer to keep the business while a lot of workers were laid off. LineTV applies different ways from YouTube by agreeing that if any program is uploaded on the platform, it will be paid, and the level of viewing is classified. Thus, Grammy joined with LineTV. (Vilai Vitayaveerasuk, personal communication, June 12, 2018)

In brief, due to high competition in the television business and higher costs of several factors, i.e., channel auction, network rental, expenses of importing technologies. Accordingly, besides struggling for more revenue, each organization needs to restructure its organization. The restructuring can be seen in the case where some investors bought stocks of some channels or some organization downsized or trained workers to have more diverse knowledge and competence, being more MOJO (Mobile Journalism). An early retirement (before 60 years old) program was offered to reduce the costs of an organization. Besides, some organizations invested with an alliance of other organizations for joint program production. Some channels conducted other business enterprises, both related and unrelated to the television industry, through the accessibility to masses of people to advertise their products, etc. such as RS using Channel 8 for this purpose.

4.2.2.2 Communication Channels

In the age of the analog system, channel owners presented their programs through broadcasting only, based on each channel's program schedule. However, in the digital system age, communication technologies cause changes in consumers' behaviors. Thus, media entrepreneurs need to study each group of their audience or receivers, i.e., different generations, including communication channels to

which each group of their audience is exposed. Therefore, each channel cannot broadcast its program on digital television only. Still, it has to be uploaded on several platforms of online media in parallel, i.e., OTT TV (Over-The-Top Television), Line TV, YouTube, Netflix, etc. Seemingly, such channels are competitors of digital television, but on the other hand, they are trade partners as well. Primarily, these platforms cover diverse viewers of every group. Moreover, each digital TV channel has its own websites and social media, i.e., Facebook Fanpage, Mello of Channel 3, Bugaboo of Channel 7HD, etc.

Each channel should use technologies for interacting with their viewers, i.e., Thairath TV offers line officials for their audience to express their opinions, which is different from the past. The audience could only deliver their delayed feedback, i.e., by mail, which took time. (Kulnaree Sueroj, personal communication, June 14, 2018)

4.2.2.3 Formats in Presenting Content

Not only do media organizations increase their communication channels on online media, but they also have to study a variety of genres or formats of presenting their content to viewers, responding to each group's media exposure. For example, Real-Time broadcasting via digital TV is uploaded on other platforms for viewers to view some programs on demand. They can also create specific content to be uploaded on online media. It is thus essential for media entrepreneurs to study the characteristics and properties of each online media towards the most appropriateness and utmost benefits since each type of online media is equipped with different features and suitable for each particular group, etc.

It is essential to make it viral through smartphones first before viewers can view it further on television. More channels are needed. TV channels must own online media as well to facilitate those who miss on-air programs to view it later. (Worapong Nipakornphan, personal communication, June 7, 2019)

It requires the use of a diversity of platforms for uploading content. Now, receivers' media consumption behaviors changed to multi-screen and

OTT viewing. Social media, i.e., LineTV, are not competitors, but business partners for supporting and expanding the business base. Thus, it is crucial to adjust strategies for platform management since viewers do not follow program schedules anymore. They cannot wait, but want to click or enter to use or see information regularly. Some channels may perceive online media as an expansion opportunity, and some as a source for increasing revenue. To illustrate this, Channel Workpoint lived The Mask Singer via Facebook Live. It could sell LIVE advertising during the break, etc. Therefore, each channel must know, analyze each platform, and be able to upload the content differently in each platform; for example, YouTube Line TV, Facebook, Instagram, etc. Some channels still do not understand this so much. Without any adaptation, they will be too slow. Accordingly, they must understand the properties of each kind of media. Media producers nowadays must use other media in combination and know how to use their functions properly. They cannot use the only TV." (Kulnaree Sueroj, personal communication, June 14, 2018)

Media organizations should upload their programs on social media. For instance, they can edit some dramas or short clips and upload them on YouTube or other social media so that their target groups on social media can view their programs. Channel 3 uploaded some climax of the stories or programs on social media to stimulate viewers to view them later on-demand. The rating is thus higher, and the way the channel has uploaded programs on social media consistently yields some currents to call viewers back to watch television. (Vilai Vitayaveerasuk, personal communication, June 12, 2018)

Only public relations of digital TV is not sufficient as the audience cannot distinguish between the analog and digital system. Therefore, it needs more public relations to increase the audience's accessibility. No matter how good the content is, it will be useless if the audience cannot find it. (Kulnaree Sueroj, personal communication, June 14, 2018)

4.2.2.4 Content

Entrepreneurs have to develop program content to meet the changing needs of receivers. It is compulsory to study receivers' behavior consistently. The content must be novel and trendy. Besides, the content, both media-generated or imported from abroad, must be creative but ethical. The generated content must acquire new technology to attract viewers, such as the use of infographics for simulating virtual reality to make viewers understand more, etc.

Media organizations require positive adaptation, i.e., importing content from abroad without weighing the balance between local and imported content based on economic principles. Actually, imported content yields fixed costs because it may cost more for a channel's own production. The costs may be higher and uncontrollable. Particularly, it is unworkable from the perspective of the creative economy since it ruins the strength of our own industry. For importing content, there are two ways: importing the whole program or content and remaking it through a license. Besides, many channels export Thai dramas to other foreign countries. In terms of negative ways, it is the age of copying news on social media. News production lacks in-depth and insightful information. Advertising increases overwhelmingly. It may reduce the value of program content that will be beneficial for society. (Sikares Sirakan, personal communication, June 22, 2018)

What media organizations adapt themselves quite well is the adaptation of program content to suit for Thai society. Typically, content or scripts are important. Viewers are relatively picky, but I believe Thai people still prefer watching Thai programs. However, the content must be attractive. Besides, the importance of research and more intensive information acquisition should be paid more attention. For instance, a Thai drama, called Buppay Sanniwad, was successful because of thorough, accurate, and detailed information acquisition. The content must lead the attention. (Warat Karuchit, personal communication, June 19, 2018)

Entrepreneurs must compete with content. The content must be really cool since everything starts with content, so the key factor is content. (Worapong Nipakornphan, personal communication, June 7, 2019)

They must adapt, develop, and select appropriate content for and respond to consumers' needs. They should allow adapting program schedules across channels. There is no fixed formula, but at least content is the key success. The adaptation does not mean to throw away the old things. For instance, Buppay Sanniwad, a Thai drama, presents Thai history in the way of narration. It also shares memes virally to keep the trends. Thus, actually, viewers follow program content rather than follow each particular channel. Therefore, an analysis of consumers' behaviors is very vital. Media organizations must understand it clearly to be able to choose the proper content for each target group. Content is always the king and key factor. (Kulnaree Sueroj, personal communication, June 14, 2018)

The production investment of some dramas is close to that of a movie, such as Kahon Mahoratuek of Channel ONE31 or Thairath TV applies infographic for its news presentation. (Sikares Sirakan, personal communication, June 22, 2018)

4.2.3 Roles of Television in the New Media Landscape

Roles of radio and television mean the functioning of radio and television responding to individuals' or society's needs (Somsuk Hinviman et al., 2014). Harold Lasswell explains the roles of mass media in society. He states that the functions of mass media are to surveillance the environment, coordinate parts of the society, and inherit cultural heritage. Later, Charles Wright adds one more role of mass media, which is to entertain people in the society. Dennis McQuail thus summarizes five roles of mass media for society: 1) to provide information, 2) to coordinate, 3) to create continuity, 4) to entertain, and 5) to mobilize.

From the in-depth interview with the samples, some of them perceived that television functions the same roles as before, while some of them perceived that nowadays roles of television change from the past.

From a philosophical perspective, the functions of television are like an idealistic computer act containing several laws. However, sometimes people just overlook them or ignore them. Some violations are witnessed. A gap in online media or digital divide occurs. Dysfunctions can occur easily without caution or even by intention. Media thus affect society. They are powerful opinion leaders. Especially, we should be well-aware if online media function as an opinion leader. Generally, television can function some roles quite well, especially the traditional roles. For instance, Thai drama, Buppay Sanniwad, promotes culture and tourism. For effective functioning, it should be reinforced by online media. However, for dysfunctions, online can cause negative effective widespread too. (Kulnaree Sueroj, personal communication, June 14, 2018)

Definitely, they changed and changed a lot too because there has been no law to regulate it. (Warat Karuchit, personal communication, June 19, 2018)

Their roles changed because the content must rely on other channels and devices. Their functions are interdependent. (Kittipong Veerataecha, personal communication, June 28, 2018)

From the above interview, the samples perceived that the roles of television in the new media landscape had changed more or less, but they changed definitely. Importantly, television nowadays has to study viewers' needs primarily, including presentation formats. Presentation channels also need to be adapted to catch up with the trends and viewers' needs. The most important part is the program content. Moreover, television still functions as an opinion leader. It is still the medium that can be widespread and cover all groups of viewers.

On the other hand, some samples viewed that the roles of television are the same as before, but their importance might be changed. What is added is usergenerated content and the part of receivers in determining the agenda. They are no longer a passive audience but can be a sender as well.

Roles of media have not changed. They still provide information and knowledge for people in society, persuade them in the right direction, to entertain people, etc. Thus, these are their old roles. However, the significance changed. The delivery of content may be changed, but human needs never change. However, the ways for responding to human needs are also different. (Pana Thongmeearkom, personal communication, June 26, 2018)

Media play old roles. What is added is user-generated content and users' agenda-setting. Therefore, the key adaptation is to conduct a user survey. (Orasri Srirasa, personal communication, December 6, 2018)

4.2.4 A Tendency of the Television Industry in the New Media Landscape in the Future

The future of television, including radio, will never die, but exists longer. Still, it needs an adaptation and readiness to cope with coming technologies, as well as consumers' behaviors that have been changed rapidly and all the time. Besides, it requires a program presentation on online media in parallel to is broadcasting. Actually, viewers still give credits to television, particularly news agency. Therefore, from whichever source of news they obtain, they will verify it with a TV news agency again. Concerning digital TV entrepreneurs, there have been fewer channels according to market mechanisms. Only those who can survive can exist, while those who cannot have to leave the business.

Moreover, those who still can survive need to find ways to increase their revenue since the overall amount of advertising spending has not been increased, with limited advertising ceiling. One way entrepreneurs can use is through increased latent advertising. However, it is ethical for directors not to let latent advertising violate viewers' rights to viewing actual program content. It is a way of balancing business survival and its effect on society. Moreover, in the future, there might be no channel, no camp, and no affiliate division. Instead, more program content will be shared and used collaboratively for common benefits without losing each party's gains. Actors and program providers will be more independent.

First of all, I believe that the number of digital TV channels will be decreased. The market mechanism will screen those who can and cannot survive in the television business. Secondly, the latent advertising systems are increasing. Everything is latent because every channel has to find ways to earn income. However, such earning shortens the content viewers deserve to view. Each channel should concern society as well, not only the survival of its business benefits. Thus, a good balance should be emphasized. Thirdly, some content can be shared across channels or camps without losing anyone's benefits, or it's a win-win situation. Therefore, freelance systems for both actors and content providers can be increased as they will not be viewed as a brand or channel representative anymore. (Kulnaree Sueroj, personal communication, June 14, 2018)

Pure investment in media may be out of business, while broadcasting may be reduced. On the contrary, there will be 24-hour online media. TV may be on-air from time to time or rerun. (Jumpon Rodkamdee, personal communication, June 18, 2018)

Traditional media, such as television and radio, will not die but will go in parallel with some adaptation. OTT TV will go in parallel for a while, depending on each station or channel's balances. (Sikares Sirakan, personal communication, June 22, 2018)

People have 24-hours. Thus, it is a matter of time competition and consumers' attention. The competition is not among televisions, but television is competing with consumers' lifestyles instead. (Kittipong Veerataecha, personal communication, June 28, 2018)

4.2.5 Recommendations towards Changes and Adaptation of the Media and Television Industry

Due to changing media landscape, media organizations and the television industry have to adapt themselves to continuing their business and survival in this industry. From the in-depth interview, the samples proposed some recommendations as follows:

1) Media organizations have to understand media ecology or media landscape since now offline, and online are inseparable. Online media should not be perceived as competitors, but business partners instead. For instance, they can share content since each kind of media has different advantages and disadvantages. Television can create a community for media consumption. For example, family members can view TV together and share their experiences. However, online media cannot perform this role. On the other hand, what online media can do, but TV cannot, is the rapidity and Real-time presentation. The design of the co-existence between offline and online has been implemented by some channels, while some channels have not implemented it so much. 2) Online media should not be viewed as competitors, but trade or business partners. TV organizations should know how to use new media to maximize their potential. For instance, they can use Facebook to remind their audience of watching TV. 3) A compulsory requirement is to understand each channel's viewers. Besides, each channel must know its direction. Still, content is the most important part. Notably, entertainment is the function that can yield the most substantial effect, but on the other hand, it is what viewers can forget easily the most. Therefore, each channel must generate content that is valuable for the brand, society, and viewers. 4) Ethics and morality are important. It is essential to watch over the produced content not to affect society negatively. 5) Management in all dimensions is required: communication channels, viewers, the channel's positioning, and self-analysis. (Kulnaree Sueroj, personal communication, June 14, 2018).

The most important thing is to concern about the content to be delivered to receivers. It is essential to choose content that matches what the media wants to convey since nowadays, there have been so many options. Television has powerful competitors. Each program can be shortened or segmented for being uploaded on some platforms. However, it must be multiplatforms, not a single platform at all. (Jumpon Rodkamdee, personal communication, June 18, 2018).

Executives must have a vision and accept changes seriously. However, it is not just a change, but transformation, which requires a good understanding of viewers' needs. They must realize that each viewer is different, so viewers determine the content. They are the genuine content owner who determines through which channel each program should be broadcasted or uploaded. They have to think thoroughly. Primarily, they must anticipate and reach their viewers before their competitors. (Warat Karuchit, personal communication, June 19, 2018)

From the above interviews, the samples' recommendations towards changes and adaptation of organizations in the media industry and television industry can be concluded as follows:

- 1) Organizations must understand the media landscape or media ecology in which traditional and online media cannot be perceived as separable. Online media should not be perceived as competitors, but as trade or business partners. They must know and understand how to use online media correctly and maximally.
- 2) Organizations must understand their audience or viewers. Each channel must know its direction and target groups, including their audience's needs and how to make their audience have brand loyalty.
- 3) The conveyed content must respond to viewers' needs since viewers have plenty of options, not only of digital TV but also other online media. Therefore, the content must be creative, while it should not emphasize only for gaining ratings or currents.
- 4) In the organizational management, organizations must analyze themselves all the time, especially by SWOT analysis, to know their weakness so they can develop their new human resources management, including existing resources.
- 5) In the media industry, there is no fixed formula. What organizations should concern is to know who they are and at which area they are good. Otherwise, it is difficult for them to survive in this business. Notably, they have to anticipate and go beyond their competitors.

- 6) Organizations must have ethics and morality in presenting any program content, which should be focused on business survival only. Instead, a long-term goal must be anticipated.
- 7) Executives must have a vision and accept the occurring changes. Besides, they must know how to improve and adapt their organizations for sustainable business operations.
- 8) Notably, concerning the measures of NBTC for facilitating TV entrepreneurs to return their channel license, it was found that to return a channel license is a way to solve a channel's deficit. Before returning the license, NBTC has launched some measures to support entrepreneurs of every digital channel by helping to reduce half of the Multiplex (Mux) expenses in broadcasting. At present, the existing digital TVs have been still supported by such a measure. Besides, rating measurement systems and network rental fees were organized to assist entrepreneurs in the long term. All these measures can help relieve media entrepreneurs' expenses so that they can use this amount of money for further developing program content.

I think to return a channel is a profit. Before returning a channel, there was support in reducing half of Mux expenses in broadcasting. Then, a return of channel followed. The rest of the channels still pay 50% of the Mux expenses. (Worapong Nipakornphan, personal communication, June 7, 2019)

Moreover, some samples believed that television would not be merged as a part of YouTube or any other platform. Shortly, television still exists and is the predominant media in accessing people or viewers, but also having online media in parallel.

TV still exists, and so does radio. However, it has to go in parallel to online. Thus, a channel still exists, but there are also other platforms. (Worapong Nipakornphan, personal communication, June 7, 2019)

From the studies abroad, it is found that the predominant or traditional media are still the major platform. Online media play only a supplementary or supporting role. Traditional media still exists but is disseminated by OTT, i.e.,

YouTube, increasingly. However, in the long term, it is still unpredictable. (Parita Wongchutinat, personal communication, August 2, 2019)



CHAPTER 5

THE FINDINGS OF QUANTITATIVE RESEARCH

The research "Television Industry and Its Role in the New Media Landscape under the System of Digital Economy" aims to 1) study changes of television industry in Thailand under the digital economy system, 2) explore the adaptation of television industry under the changing media landscape, 3) investigate the roles of television in the new media landscape, and 4) to examine viewers' perspectives on the roles and transformation of television in the new media landscape. The research used mixed methods of both qualitative and quantitative research to collect both primary and secondary data to respond to the research objectives as much as possible.

Chapter 5 is the part of quantitative research responding to the fourth research objective or to examine viewers' perspectives on the roles and transformation of television in the new media landscape. Survey research was conducted with 415 self-administered questionnaires by a single cross-sectional design. From checking the completeness of the returned questionnaires, all 415 questionnaires were complete and usable for data processing by SPSS (Statistical Package for the Social Sciences) for Windows with a descriptive analysis. The findings of the quantitative research can be divided into four parts:

- 5.1 General Information of the Respondents
- 5.2 TV Viewing Behaviors
- 5.3 Roles of Television
- 5.4 Opinions towards the Transformation of Television in the New Media Landscape under the Digital Economy System

5.1 General Information of the Respondents

General information of the 415 respondents comprises data about sex, age, education level, occupation, hometown region, and monthly income, with details as follows:

Table 5.1 Illustrates the Number and Percentage of the Samples Classified by Sex

Sex	Number (Persons)	Percentage
Male	148	35.7
Female	255	61.4
Alternative	12	2.9
Total	415	100.0

From Table 5.1, it is found that most samples (61.4%) are female, followed by male (35.7%), and alternative sex (2.9%) respectively.

Table 5.2 Illustrates the Number and Percentage of the Samples Classified by Age

Age (Years Old)	Number (Person)	Percentage
Younger than 15		0.2
15-20	39	9.4
21-30	164	39.5
31-40	119	28.7
41-50	46	11.1
51-60	39	9.4
Older than 60	7	1.7
Total	415	100.0

From Table 5.2, it is found that most samples are 21-30 years old (39.5%), followed by 31-40 (28.7%), 41-50 (11.1%), 51-60 and 15-20 (9.4%) equally, and older than 60 (1.7%), and younger than 15 years old (0.2%) respectively.

Table 5.3 Illustrates the Number and Percentage of the Samples Classified by Education Level

Education Level	Number (Person)	Percentage
Elementary	4	1.0
Lower Secondary	13	3.1
Upper Secondary/High Vocational	28	6.7
Diploma/ Vocational.	33	8.0
A Bachelor's Degree	250	60.2
A Master's Degree	70	16.9
A Doctoral Degree	17	4.1
Total	415	100.0

From Table 5.3, it is found that most samples graduated with a bachelor's degree (60.2%), a master's degree (16.9%), diploma/vocational (8.0%), upper secondary/high vocational (6.7%), a doctoral degree (4.1%), lower secondary (3.1%), and elementary (1.0%) respectively.

Table 5.4 Illustrates the Number and Percentage of the Sample Classified by Occupation

Occupation	Number (Person)	Percentage
Student	132	31.8
Government Officer/Government	120	28.9
and State Enterprise Staff		
Private employee	121	29.2
Businessman/Entrepreneur	15	3.6
Freelance	6	1.4
Housewife	2	0.5
Others	19	4.6
Total	415	100.0

From Table 5.4, it is found that most samples are students (31.8%), followed by private employees (29.2%), government officers/government and state enterprise staffs (28.9%), others (4.6%), businessmen/entrepreneurs (3.6%), freelance (1.4%), and housewives (0.5%) respectively.

Table 5.5 Illustrates the Number and Percentage of the Samples Classified by Hometown Regions

Hometown Region	Number (Person)	Percentage
Bangkok and vicinity	107	25.8
Central	104	25.1
Northeastern	55	13.3
Eastern	30	7.2
Western	37	8.9
Southern	21	5.1
Northern	61	14.7
Total	415	100.0
	/ 	

From Table 5.5, it is found that the hometown region of most samples is Bangkok and vicinity (25.8%), followed by the central region (25.1%), northern (14.7%), northeastern (13.3%), western (8.9%), eastern (7.2%), and southern (5.1%) respectively.

Table 5.6 Illustrates the Number and Percentage of the Samples Classified by Personal Monthly Income

Personal Monthly Income (Baht)	Number (Person)	Percentage
Less than 10,000	104	25.1
10,000-20,000	140	33.7
20,001-30,000	68	16.4
30,001-40,000	41	9.9
40,001-50,000	24	5.8

Personal Monthly Income (Baht)	Number (Person)	Percentage
More than 50,000	38	9.2
Total	415	100.0

From Table 5. 6, it is found that most samples earn 10,000-20,000 baht monthly (33.7%), followed by less than 10,000 baht (25.1%), 20,001-30,000 baht (16.4%), 30,001-40,000 baht (9.9%), more than 50,000 baht (9.2%), and 40,001-50,000 baht (5.8%) respectively.

5.2 TV Viewing Behaviors

Table 5.7 Illustrates the Number and Percentage of the Samples Classified by TV Viewing Channels

TV Viewing Channel	Number (Person)	Percentage
Traditional TV (Free TV/Digital TV	338	81.4
Netflix	146	35.2
YouTube	353	85.1
Facebook Watch	178	42.9
Line TV	214	51.6
IG TV	70	16.9
Mellow	72	17.3
BUGABOO.TV	67	16.1
Viu	72	17.3
AISPLAY	37	8.9
Others	11	2.7

Note: **The total number of the samples is 415., and each can give more than one answer

From Table 5.7, it is found that most samples view TV through YouTube (85.1%), followed by traditional TV (free TV/digital TV) (81.4%), Line TV (51.6%),

Facebook Watch (42.9%), Netflix (35.2%), Mellow and Viu (17.3%) equally, IG TV (16.9%), BUGABOO.TV (16.1%), AISPLAY (8/9%), and others (2.7%) respectively.

Table 5.8 Illustrates the Number and Percentage of the Samples Classified by the Channels of Traditional TV (Free TV/Digital TV) They Watch

Channels of Traditional TV (Fre TV/Digital TV)	Number (Person)	Percentage
Channel 7 HD	191	46.0
Channel 3 HD	268	64.6
Channel Workpoint TV 23	226	54.5
Channel MONO 29	173	41.7
Channel 8	74	17.8
Channel ONE 31	247	59.5
Channel AMARIN TV 34	86	20.7
Channel Thairath TV 32	97	23.4
Channel MCOT HD 9	63	15.2
Channel Thai PBS 3	14	3.4
Channel PPTV HD 36	79	19.0
Channel True4U 24	61	14.7
Channel GMM25	150	36.1
Channel Nation TV 22	42	10.1
Channel NEW18 (NEW TV)	9	2.2
Channel TNN24	20	4.8
Channel ททบ.5 HD 1		1.7
Channel NBT 2 HD	4	1.0

Note: **The total number of the samples is 415., and each can give more than one answer

From Table 5.8, it is found that the traditional TV (free TV/digital TV) the samples watch is Channel 3 HD (64.6%), followed by ONE 31 (59.5%), Workpoint

TV 23 (54.5%), 7 HD (46%), MONO 29 (41.7%), GMM25 (36.1%), Thairath TV 32 (23.4%), AMARIN TV 34 (20.7%), PPTV HD 36 (19.0%), channel 8 (17.8%), MCOT HD 9 (15.2%), True4U 24 (14.7%), Nation TV 22 (10.1%), TNN24 (4.8%), ThaiPBS 3 (3.4%), NEW18 (NEW TV) (2.2%), 5 HD1 (1.7%), and NBT 2 HD (1%) respectively.

Table 5.9 Illustrates the Number and Percentage of the Samples Classified by Types of Program of Netflix They Watch

Types of Netflix Programs	Number (Person)	Percentage
Popular on Netflix	60	14.5
Trending Now	41	9.9
Recommended program similar to the	63	15.2
previously-watched program		
Movies produced by Netflix	121	29.2
(Netflix Originals)		
Movies, not produced by Netflix	108	26.0
TV programs produced by Netflix	37	8.9
(Netflix Originals)		
TV programs, not produced by Netflix	30	7.2
Others	6	1.4

Note: **The total number of the samples is 415., and each can give more than one answer

From Table 5.9, it is found that most samples watch movies produced by Netflix (Netflix Originals) (29.2%), followed by movies, not produced by Netflix (26.0%), recommended programs similar to the previously-watched programs (15.2%), Popular on Netflix (14.5%), Trending Now (9.9%), TV programs produced by Netflix (Netflix Originals) (8.9%), and TV programs, not produced by Netflix (7.2%), and others (1.4%) respectively.

Table 5.10 Illustrates the Number and Percentage of the Samples Classified by Types of YouTube Programs They Watch

Types of YouTube Programs	Number (Person)	Percentage
Recommended	138	33.3
Music	282	68.0
Gaming	76	18.3
News	103	24.8
Movies	159	38.3
Others	63	15.2

From Table 5.10, it is found that most samples watch music programs on YouTube (68.0%), followed by movies (38.3%), Recommended (33.3%), News (24.8%), Gaming (18.3%), and others (15.2%) respectively.

Table 5.11 Illustrates the Number and Percentage of the Samples Classified by Types of Facebook Watch Programs They Watch

Types of Facebook Watch Programs	Number (Person)	Percentage
Top Videos for you	79	19.0
Pages You Follow	96	23.1
Facebook Watch Originals	44	10.6
Featured Shows	21	5.1
Shared by Friends	73	17.6
Live	87	21.0
News	62	14.9
Others	4	1.0

From Table 5.11, it is found that most samples watch "Pages You Follow" on Facebook Watch (23.1%), followed by "Live" (21%), "Top Videos for You" (19%), "Shared by Friends" (17.6%), "News" (14.9%), "Facebook Watch Originals" (10.6%), "Featured Shows" (5.1%), and others (1%) respectively.

Table 5.12 Illustrates the Number and Percentage of the Samples Classified by Types of Line TV Programs They Watch

Types of Line TV Programs	Number (Person)	Percentage		
Recommended	25	6.0		
ORIGINALS	18	4.3		
Drama	190	45.8		
Entertainment	81	19.5		
Music	50	12.0		
Animation	40	9.6		
Lifestyles	23	5.5		
Sports	12	2.9		
Live	24	5.8		
Others	3 25	0.7		

Note: **The total number of the samples is 415., and each can give more than one answer

From Table 5.12, it is found that most samples watch drama on Line TV (45.8%), followed by entertainment (19.5%), music (12%), animation (9.6%), recommended programs (6%), live programs (5.8%), lifestyles (5.5%), originals (4.3%), sports (2.9%), and others (0.7%) respectively.

Table 5.13 Illustrates the Number and Percentage of the Samples Classified by Types of IG TV Programs They Watch

Types of IG TV Program	Number (Person)	Percentage		
For You	35	8.4		
Following	80	19.3		
Popular	55	13.3		
Others	2	0.5		

From Table 5.13, it is found that most samples watch "Following" on IG TV (19.3%), followed by "Popular" (13.3%), "For You" (8.4%), and others (0.5%) respectively.

Table 5.14 Illustrates the Number and Percentage of the Samples Classified by Types of Mellow Programs They Watch

Types of Mellow Program	Number (Person)	Percentage	
Mellow Originals	20	4.8	
Thai series	78	18.8	
International series	21	5.1	
Variety	19	4.6	
Sensational clips	21	5.1	
Teaser	6	1.4	
Others	12	2.9	

From Table 5.14, it is found that most samples watch Thai series on Mellow (18.8%), followed by international series and sensational clips (5.1%) equally, Mellow Originals (4.8%), variety (4.6%), others (2.9%), and teasers (1.4%) respectively.

Table 5.15 Illustrates the Number and Percentage of the Samples Classified by Types of BUGABOO TV Programs They Watch

Types of BUGABOO.TV Program	Number (Person)	Percentage		
Rerun drama	74	17.8		
Live sports	24	5.8		
Recommended clips	7 (13)	2.7		
Indy function	1	0.2		
Online movies	20	4.8		
Hot news/ sports	8	1.9		
Entertainment/movies news	11	2.7		
Rerun programs	13	3.1		
Special series	13	3.1		
International series	7	1.7		
Others	12	2.9		

Note: **The total number of the samples is 415., and each can give more than one answer

From Table 5. 15, it is found that most samples watch rerun drama on BUGABOO.TV (17.8%), followed by live sports (5.8%), online movies (4.8%), rerun programs and special series (3.1%) equally, others (2.9%), entertainment, movies, and recommended clips (2.7%) equally, hot news and sports news (1.9%), international series (1.7%), and Indy junction (0.2) respectively.

Table 5.16 Illustrates the Number and Percentage of the Samples Classified by Types of Viu Programs They Watch

Types of Viu Program	Number (Person)	Percentage
New programs	15	3.6
Viu Originals	7	1.7
Korean series	68	16.4
Korean variety	26	6.3
Korean movies	28	6.7
Thai-dubbed series	18	4.3
Thai series	18	4.3
Thai programs	11	2.7
Japanese series	5	1.2
K1 Headlines	2	0.5
Highlight	10	2.4
Video trailer	5	1.2
Others	4	1.0

From Table 5.16, it is found that most samples watch Korean series (16.4%) on Viu, followed by Korean movies (6.7%), Korean Variety (6.3%), Thai-dubbed series and Thai series (4.3%) equally, new programs (3.6%), Thai programs (2.7%), Highlight (2.4%), Viu Originals (1.7%), Japanese series and video trailer (1.2%) equally, others (1%), and K1 Headlines (0.5%) respectively.

Table 5.17 Illustrates the Number and Percentage of the Samples Classified by Types of AISPLAY Programs They Watch

Types of AISPLAY Program	Number (Person)	Percentage
TV	27	6.5
Free TV	26	6.3
Movies/series	49	11.8
Animation	20	4.8
Education	4	1.0
AIS 360 Channel	1	0.2
Premium Pay TV	3	0.7
HBO GO	7	1.7
Others	14	3.4

From Table 5. 17, it is found that most samples watch movies/series on AISPLAY (11.8%), followed by TV (6.5%), free TV (6.3%), animation (4.8%), others (3.4%), HBO GO (1.7%), education (1%), Premium Pay TV (0.7%), and AIS 360 Channel (0.2) respectively.

Table 5.18 Illustrates the Number and Percentage of the Samples Classified by Viewing Device They Use

Viewing Device	Number (Person)	Percentage
TV, not connected to the internet	196	47.2
TV connected to the internet	184	44.3
Mobile phone	324	78.1
Tablet/iPad	88	21.2
Computer/Laptop	144	34.7
Others	3	0.7

From Table 5.18, it is found that most samples watch TV via mobile phone (78.1%), followed by TV, not connected to the internet (47.2%), TV connected to the internet (44.3%), computer/laptop (34.7%), Tablet/iPad (21.2%), and others (0.7%) respectively.

Table 5.19 Illustrates the Number and Percentage of the Samples Classified by the Reasons for Selecting Viewing Device

Reasons for Selecting Viewing Device	Number (Person)	Percentage
Portable to everywhere and all the time	303	73.0
Easy to use	287	69.2
Simultaneous viewing with others, i.e.,	146	35.2
friends, family, etc.		
Habitual use	188	45.3
Retrospective viewing/ viewing after	252	60.7
broadcasting		
Others	6	1.4

From Table 5. 19, it is found that most samples select a viewing device because it is "portable", which they can bring to everywhere and can watch every time. (73. 0%), followed by "easy to use" (69. 2%), "retrospective viewing" or "viewing after broadcasting" (60.7%), "habitual use" (45.3%), simultaneous viewing with others, i.e., friends, family, etc. (35.2%), and others (1.4%) respectively.

TV Viewing Behaviors Classified by Age

The researcher processed the findings in a cross-tabulation table to display the relationship between age and TV viewing behaviors as follows:

- 1) Age and TV Viewing Channels
- 2) Age and TV Viewing Channels of the Traditional TV
- 3) Age and TV Viewing Devices
- 4) Age and Reasons for Selecting Viewing Devices

From the data processing, the findings are as follows:

1) Age and TV Viewing Channel

Table 5.20 Illustrates the Number of TV Viewers on Each Channel Classified by Age

	Traditional				21171	124					
Age (Years)	TV (Free/Digital TV	Netflix	YouTube	Facebook Watch	Line TV	IG TV	Mellow	BUGABOO.TV	Viu	AISPLAY	Number of Samples
Younger	1	0	1	1	1	1	0	0	0	0	1
than 15	(0.2%)	(0.0%)	(0.2%)	(0.2%)	(0.2%)	(0.2%)	(0.0%)	(0.0%)	(0.0%)	(0.0%)	(0.2%)
15.20	25	13	34	25	21	10	5	8	7	4	39
15-20	(6.0%)	(3.1%)	(8.2%)	(6.0%)	(5.1%)	(2.4%)	(1.2%)	(1.9%)	(1.7%)	(1.0%)	(9.4%)
	120 (20 00()	81	148	71	104	42	36	28	42	16	164
21-30	120 (28.9%)	(19.5%)	(35.7%)	(17.1%)	(25.1%)	(10.1%)	(8.7%)	(6.7%)	(10.1%)	(3.9%)	(39.5%)
21 40	102	32	100	49	54	10	20	14	13	11	119
31-40	(24.6%)	(7.7%)	(24.1%)	(11.8%)	(13.0%)	(2.4%)	(4.8%)	(3.4%)	(3.1%)	(2.7%)	(28.7%)
41.50	46	7	34	23	20	5	9	12	5	5	46
41-50	(11.1%)	(1.7%)	(8.2%)	(5.5%)	(4.8%)	(1.2%)	(2.2%)	(2.9%)	(1.2%)	(1.2%)	(11.1%)
51.60	37	13	32	8	14	2	2	5	5	1	39
51-60	(8.9%)	(3.1%)	(7.7%)	(1.9%)	(3.4%)	(0.5%)	(0.5%)	(1.2%)	(1.2%)	(0.2%)	(9.4%)
Older	7	0	4	ĺ	0	, 0	0	0	0	0	7
than 60	(1.7%)	(0.0%)	(1.0%)	(0.2%)	(0.0%)	(0.0%)	(0.0%)	(0.0%)	(0.0%)	(0.0%)	(1.7%)

From Table 5.20, it is found that the samples aged 15-20 years old watch TV on YouTube the most (8.2%), followed by the traditional TV and Facebook Watch (6.0%) equally. The samples aged 21-30 years old watch TV on the traditional TV the most (24.6%), followed by YouTube (24.1%). The samples aged 31-40 years old watch TV on the traditional TV the most (24.6%), followed by YouTube (24.1%). The samples aged 41-50 years old watch TV on the Traditional TV the most (11.1%), followed by YouTube (8.2%). The samples aged 51-60 years old watch TV on the traditional TV the most (8.9%), followed by YouTube (7.7%). The samples aged older than 60 years old watch TV on the traditional TV the most (1.7%), followed by YouTube (1.0%).

It thus can be concluded that the samples aged 15-20 and 21-30 years old have the same TV viewing behaviors or they watch TV on YouTube the most. For the samples of older ages than 40, they also have the same TV viewing behaviors or watch TV on traditional TV the most.

2) Age and TV Viewing on the Traditional TV

Table 5.21 Illustrates the Number of TV Viewers on Each Channel of the Traditional TV Classified by Age

Age (Years)	7HD	3HD	Work pointTV23	MONO29	channel 8	ONE31	AMARIN TV34	Thairath TV32	MCOT HD9	Thai PBS 3	PPTV HD 36	TRUE4U 24	GMM25	Nation TV 22	NEW18 (NEW TV)	TNN 24
Younger	0	1	1	0	0	1	0	0	0	0	0	0	1	0	0	0
than 15	(0.0%)	(0.2%)	(0.2%)	(0.0%)	(0.0%)	(0.2%)	(0.0%)	(0.0%)	(0.0%)	(0.0%)	(0.0%)	(0.0%)	(0.2%)	(0.0%)	(0.0%)	(0.0%)
15.20	21	22	26	17	10	18	3	5	4	2	9	11	18	2	1	1
15-20	(5.1%)	(5.3%)	(6.3%)	(4.1%)	(2.4%)	(4.3%)	(0.7%)	(1.2%)	(1.0%)	(0.5%)	(2.2%)	(2.7%)	(4.3%)	(0.5%)	(0.2%)	(0.2%)
21-30	69	107	84	62	18	105	26	29	17	2	20	19	67	8	3	3
21-30	(16.6%)	(25.8%)	(20.2%)	(14.9%)	(4.3%)	(25.3%)	(6.3%)	(7.0%)	(4.1%)	(0.5%)	(4.8%)	(4.6%)	(16.1%)	(1.9%)	(0.7%)	(0.7%)
31-40	61	80	55	47	20	62	26	27	20	4	24	15	38	11	2	3
31-40	(14.7%)	(19.3%)	(13.3%)	(11.3%)	(4.8%)	(14.9%)	(6.3%)	(6.5%)	(4.8%)	(1.0%)	(5.8%)	(3.6%)	(9.2%)	(2.7%)	(0.5%)	(0.7%)
41-50	27	35	32	25	16	30	9	15	14	3	12	11	19	4	0	0
41-30	(6.5%)	(8.4%)	(7.7%)	(6.0%)	(3.9%)	(7.2%)	(2.2%)	(3.6%)	(3.4%)	(0.7%)	(2.9%)	(2.7%)	(4.6%)	(1.0%)	(0.0%)	(0.0%)
51-60	12	20	24	21	7	27	18	18	7	3	13	5	7	12	3	11
31-00	(2.9%)	(4.8%)	(5.8%)	(5.1%)	(1.7%)	(6.5%)	(4.3%)	(4.3%)	(1.7%)	(0.7%)	(3.1%)	(1.2%)	(1.7%)	(2.9%)	(0.7%)	(2.7%)
Older	1	3	4	1	3	4	4	3	1	0	1	0	0	5	0	2
than 60	(0.2%)	(0.7%)	(1.0%)	(0.2%)	(0.7%)	(1.0%)	(1.0%)	(0.7%)	(0.2%)	(0.0%)	(0.2%)	(0.0%)	(0.0%)	(1.2%)	(0.0%)	(0.5%)

From Table 5.21, the samples aged 15-20 years old watch WorkpointTV23 the most (6.3%), followed by Channel 3HD (5.3%). The samples aged 21-30 years old watch Channel 3HD the most (25.8%), followed by ONE31 (25.3%). The samples aged 31-40 years old watch Channel 3HD the most (19.3%), followed by ONE31 (14.9%). The samples aged 41-50 years old watch 3HD the most (8.4%), followed by WorkpointTV23 (7.7%). The samples aged 51-60 years old watch ONE31 the most (6.5%), followed by WorkpointTV23 (5.8%). The samples aged over 60 years old watch NationTV22 the most (1.2%), followed by WorkpointTV23, ONE3, and AMARINTV 34 (1%) equally.

3) Age and TV Viewing Devices

Table 5.22 Illustrates the Number of Viewers Watching TV through Each Type of Viewing Devices Classified by Age

Age (Years)	TV, not Connected to the Internet	TV Connected to the Internet	Mobile Phone	Tablet/iPad	Computer/ Laptop
Younger than	0	0	1	0	0
15	(0.0%)	(0.0%)	(0.2%)	(0.0%)	(0.0%)
15.20	19	12	33	2	13
15-20	(4.6%)	(2.9%)	(8.0%)	(0.5%)	(3.1%)
21.20	74	67	138	39	85
21-30	(17.8%)	(16.1%)	(33.3%)	(9.4%)	(20.5%)
21 40	58	60	95	33	30
31-40	(14.0%)	(14.5%)	(22.9%)	(8.0%)	(7.2%)
41.50	27	20	31	3	6
41-50	(6.5%)	(4.8%)	(7.5%)	(0.7%)	(1.4%)
51.60	13	23	22	10	10
51-60	(3.1%)	(5.5%)	(5.3%)	(2.4%)	(2.4%)
011 4 60	5	2	4	1	0
Older than 60	(1.2%)	(0.5%)	(1.0%)	(0.2%)	(0.0%)

From Table 5.22, it is found that the samples aged 15-20 years old watch TV through mobile phone the most (8.0%), followed by TV, not connected to the internet (4.6%). The samples aged 21-30 years old watch TV through mobile phone the most (33.3%), followed by computer/ laptop (20.5%). The samples aged 31-40 years old watch TV through mobile phone the most (22.9%), followed by TV connected to the internet (14.5%). The samples aged 41-50 years old watch TV through mobile phone the most (7.5%), followed by TV, not connected to the internet (6.5%). The samples aged 51-60 years old watch TV through TV connected to the internet the most (5.5%), followed by mobile phone (5.3%). The samples aged over 60 years old watch TV through TV not connected to the internet the most (1.2%), followed by mobile phone (1%).

4) Age and Reasons for Selecting TV Viewing Devices

Table 5.23 Illustrates the Number of Viewers Expressing their Reasons for Selecting
TV Viewing Devices Classified by Age

Age (years)	Portable to Everywhere and Can View any Time	Easy Use	Simultaneous Viewing with Others	Habitual Use	Retrospective Viewing/Viewing after Broadcasting
Younger	1	1	0	11//	
than 15	(0.2%)	(0.2%)	(0.0%)	(0.2%)	(0.2%)
15-20	27	28	13	15	21
	(6.5%)	(6.7%)	(3.1%)	(3.6%)	(5.1%)
21-30	127	118	63	86	105
	(30.6%)	(28.4%)	(15.2%)	(20.7%)	(25.3%)
31-40	90	83	35	54	76
	(21.7%)	(20.0%)	(8.4%	(13.0%)	(18.3%)
41-50	27	25	18	15	21
	(6.5%)	(6.0%)	(4.3%)	(3.6%)	(5.1%)
51-60	28	29	14	15	24
	(6.7%)	(7.0%)	(3.4%)	(3.6%)	(5.8%)
Older than	3	3	3	2	4

	Portable to		Simultaneous		Retrospective
Age	Everywhere	Easy	Viewing with	Habitual	Viewing/Viewing
(years)	and Can View	Use	Others	Use	after
	any Time		Others		Broadcasting
60	(0.7%)	(0.7%)	(0.7%)	(0.5%)	(1.0%)

From Table 5.23, the samples aged 15-20 years old select a TV viewing device because of its easy use the most (6.7%), followed by "its portability" (6.5%). The samples aged 21-30 years old select a TV viewing device because of its portability the most (30.6%), followed by its easy use (28.4%). The samples aged 31-40 years old select a TV viewing device because of its portability the most (21.7%), followed by (20.0%). The samples aged 41-50 years old select a TV viewing device because of its portability (6.5%), followed by its easy use (6.0%). The samples aged over 60 years old select a TV viewing device because of retrospective viewing or they can view a program after broadcasting (1.0%), followed by its portability, easy use, and simultaneous viewing with others (0.7%) equally.

5.3 The Roles of Television

Table 5.24 Illustrates the Number and Percentage of the Samples Classified by their Reasons for Watching Television

Reasons for Watching TV	Number (Person)	Percentage
To search for information	256	61.7
To drive away feelings of loneliness	171	41.2
To entertain/ relax oneself	360	86.7
To apply knowledge for use in life	101	24.3
To respond to some interests	135	32.5
To establish relationships with others	47	11.3

Reasons for Watching TV	Number (Person)	Percentage
To kill time	87	21.0
Others	6	1.4

From Table 5.24, it is found that most samples watch TV for entertainment and relaxation (86.7%), followed by searching for information (61.7%), driving away feelings of loneliness (41.2%), responding to some interests (32.5%), applying knowledge to use in their life (24.3%), establishing relationships with others (11.3%), killing time (21%), and others (1.4%).

Table 5.25 Illustrates the number and percentage of the samples classified by their expectation from watching television

Expectation from TV Viewing	Number (Person)	Percentage
Amusement/Pleasure/Entertainment/Emotional	358	86.3
Support		
Useful Knowledge/Content	285	68.7
Exposure to Favorite Artists' Work	122	29.4
Acknowledgement of happenings and	271	65.3
problems in the society		
Enhanced Quality of Life/Well-Being/Bettered	92	22.2
Social Condition		
Inspiration/Creativity/Innovative	161	38.8
Ideas/Assertiveness/ Courage		
Others	5	1.2

From Table 5.25, it is found that most samples expect to receive amusement, pleasure, entertainment, and emotional support (86. 3%) followed by useful knowledge and content (68.7%), acknowledgement of happenings and problems in the society (65. 3%), inspiration, creativity, innovative ideas, assertiveness, courage (38.8%), witness of favorite artists' work (29.4%), enhanced quality of life, well-being, and bettered social condition (22.2%), and others (1.2%).

Table 5.26 Illustrates the Number and Percentage of the Samples Classified by their Opinions Towards the Roles of Television on the Society as a Whole

Opinions towards the Roles of Television	Number (Person)	Percentage
on the Society as a Whole	rumber (Ferson)	rereemage
Give Amusement/Pleasure/Entertainment/	309	74.5
Emotional Support		
Provide Useful Knowledge/Content	289	69.6
Present Favorite Artists' Work	103	24.8
Report Happenings and Problems in the	299	72.0
Society		
Enhance Quality of Life/Well-Being/And	133	32.0
Better Social Condition		
Give Inspiration/Creativity/Innovative Ideas/	169	40.7
Assertiveness/Courage		
Others	2	0.5

Note: **The total number of the samples is 415., and each can give more than one answer

From Table 5.26, it is found that most samples perceive the overall social functioning of television in giving amusement, pleasure, entertainment, and emotional support (74.5%), followed by reporting happenings and problems in the society (72%), providing useful knowledge and content (69.6%), giving inspiration, creativity, innovative ideas, assertiveness, and courage (40.7%), enhancing quality of

life and well-being, including bettering social condition (32.0%), presenting favorite artists' work (24.8%), and others (0.5%).

Roles of Television from the Point of View of Viewers Classified by Age

The researcher conducted a data analysis in a cross-tabulation table to display the relationships between age and roles of television from viewers' point of view as follows:

- 1) Age and Reasons for Watching Television
- 2) Age and the Viewers' Expectation from TV Viewing
- 3) Age and Opinions on the TV Roles for the Society as a Whole From the data analysis, the findings are as follows:
 - 1) Age and the Reason for Watching Television

Table 5.27 Illustrates the Number and Percentage of the Samples Expressing their Reason for Watching Television Classified by Age

Age (Year)	Searching for Information	Driving Away Lonelines s	Entertainment /Relaxation	Applying Knowledge to Use in Life	Responding to Some Interests	Establishing Relationship with Others	Killing Time
Younger	0	1	1	0	0	0	0
than 15	(0.0%)	(0.2%)	(0.2%)	(0.0%)	(0.0%)	(0.0%)	(0.0%)
15-20	20	17	31	7	11	11	8
	(4.8%)	(4.1%)	(7.5%)	(1.7%)	(2.7%)	(2.7%)	(1.9%)
21-30	81	78	143	33	56	15	49
	(19.5%)	(18.8%)	(34.5%)	(8.0%)	(13.5%)	(3.6%)	(11.8%)
31-40	81	42	108	26	41	8	26
	(19.5%)	(10.1%)	(26.0%)	(6.3%)	(9.9%)	(1.9%)	(6.3%)
41-50	36	18	39	15	15	5	3
	(8.7%)	(4.3%)	(9.4%)	(3.6%)	(3.6%)	(1.2%)	(0.7%)
51-60	31	13	34	18	10	8	1
	(7.5%)	(3.1%)	(8.2%)	(4.3%)	(2.4%)	(1.9%)	(0.2%)
Over 60	7	2	4	2	2	0	0
	(1.7%)	(0.5%)	(1%)	(0.5%)	(0.5%)	(0.0%)	(0.0%)

From Table 5.27, it is found that most of the samples aged 15-20, 21-30, 31-40, and 51-60 years old specify "for entertainment and relaxation" as the reason for watching television, followed by "for searching for information." In the same direction among these four age groups. While the samples aged over 60 years old watch television to search for information the most, followed by "to entertain and relax themselves."

2) Age and the Viewers' Expectation from TV Viewing

Table 5.28 Illustrates the Number and Percentage of the Samples Expressing their Expectation from TV Viewing Classified by Age

Age (Year)	Giving Amusement/ Pleasure/ Entertainment/ Emotional Support	Providing Useful Knowledge and Content	Presenting Favorite Artists' Work	Reporting Happenings and Problems in the Society	Enhancing Quality of Life/Well- Being and Better Society	Giving Inspiration, Creativity, Innovative Ideas, Assertiveness/ Courage
Younger	1	0	1	0	0	1
than 15	(0.2%)	(0.0%)	(0.2%)	(0.0%)	(0.0%)	(0.2%)
15-20	36	23	12	20	9	14
	(8.7%)	(5.5%)	(2.9%)	(4.8%)	(2.2%)	(3.4%)
21-30	147	104	59	88	29	58
	(35.4%)	(25.1%)	(14.2%)	(21.2%)	(7.0%)	(14.0%)
31-40	104	80	34	87	30	54
	(25.1%)	(19.3%)	(8.2%)	(21.0%)	(7.2%)	(13.0%)
41-50	36	37	8	34	12	13
	(8.7%)	(8.9%)	(1.9%)	(8.2%)	(2.9%)	(3.1%)
51-60	28	34	8	35	12	19
	(6.7%)	(8.2%)	(1.9%)	(8.4%)	(2.9%)	(4.6%)
Over 60	6	7	0	7	0	2
	(1.4%)	(1.7%)	(0.0%)	(1.7%)	(0.0%)	(0.5%)

From Table 5.28, it is found that most of the samples aged 15-20 and 21-30 years old expect "giving amusement, pleasure, entertainment, and emotional support" from TV viewing, followed by "providing useful knowledge and content." Most of the samples aged 31-40 years old expect "giving amusement, pleasure, entertainment, and emotional support" from TV viewing, followed by "reporting happenings and problems in the society." Most of the samples aged 41-50 years old expect "providing useful knowledge and content" from TV viewing, followed by "giving amusement, pleasure, entertainment, and emotional support." While most samples aged over 60 years old expect "providing useful knowledge and content" and "presenting happenings and problems in the society" from TV viewing respectively.

3) Age and Opinions on the TV Roles for the Society as a Whole

Table 5.29 Illustrates the Number and Percentage of the Samples Expressing their

Opinion on the Roles of TV for the Society as a Whole Classified by Age

/ T T I I I I						(4 - 10)
Age (Year)	Giving Amusement, Pleasure, Entertainment, & Emotional Support	Providing Useful Knowledge and Content	Presenting Favorite Stars' Work	Reporting Happenings and Problems in the Society	Enhancing Quality of Life/Well- being and Better Social Condition	Giving Inspiration, Creativity, Innovative Ideas, Assertiveness, and Courage
Younger	1	1	0	1	0	1
than 15	(0.2%)	(0.2%)	(0.0%)	(0.2%)	(0.0%)	(0.2%)
15-20	28	24	8	27	14	18
	(6.7%)	(5.8%)	(1.9%)	(6.5%)	(3.4%)	(4.3%)
21-30	129	110	50	116	43	60
	(31.1%)	(26.5%)	(12.0%)	(28.0%)	(10.4%)	(14.5%)
31-40	91	77	28	85	39	50
	(21.9%)	(18.6%)	(6.7%)	(20.5%)	(9.4%)	(12.0%)
41-50	34	41	11	29	13	15
	(8.2%)	(9.9%)	(2.7%)	(7.0%)	(3.1%)	(3.6%)
51-60	22	30	6	36	21	22
	(5.3%)	(7.2%)	(1.4%)	(8.7%)	(5.1%)	(5.3%)

Age (Year)	Giving Amusement, Pleasure, Entertainment, & Emotional Support	Providing Useful Knowledge and Content	Presenting Favorite Stars' Work	Reporting Happenings and Problems in the Society	Enhancing Quality of Life/Well- being and Better Social Condition	Giving Inspiration, Creativity, Innovative Ideas, Assertiveness, and Courage
Over 60	4	6	0	5	3	3
	(1.0%)	(1.4%)	(0.0%)	(1.2%)	(0.7%)	(0.7%)

From Table 5.29, the role of the TV for the society as a whole perceived the most by the samples 15-20, 21-30, and 31-40 years old is "giving amusement, pleasure, entertainment, and emotional support," followed by "reporting happenings and problems in the society." For the samples aged 51-60 years old, they specify "providing useful knowledge and content" and "giving amusement, pleasure, entertainment, and emotional support," respectively. The roles of the TV for the society as a whole of the point of view of the samples aged over 60 years old are "providing useful knowledge and content" and "reporting happenings and problems in the society" the most.

5.4 Opinions towards the Transformation of Television in the New Media Landscape under the Digital Economy System

Table 5.30 Illustrates the Number, Percentage, and Mean of the Samples' Opinion towards the Transformation of TV in the New Media Landscape under the Digital Economy System in the "Channel" Dimension

Opinion									
	Highest	Highly	Moderately	Hardly	Disagree	Total	Mean	S.D.	Meaning
	Agree	Agree	Agree	Agree					
1. Can have more channels for watching TV, both	254	129	32	-	-	415	4.53	0.636	Highest
traditional and online.	(61.2)	(31.1)	(7.7)			(100)			
2. Can look back or watch past TV programs	271	115	25	2	2	415	4.57	0.674	Highest
	(65.3)	(27.7)	(6)	(0.5)	(0.5)	(100)			
3. Can download a program to watch later	190	139	74	9	3	415	4.21	0.862	Highest
	(45.8)	(33.5)	(17.8)	(2.2)	(0.7)	(100)			
4. Can watch any program repeatedly as often as	229	143	38	4	1	415	4.43	0.719	Highest
wished.	(55.2)	(34.5)	(9.2)	(1.0)	(0.2)	(100)			
5. Can link a program, i.e., sharing preferred clip	206	157	42	10	-	415	4.35	0.758	Highest
from YouTube in social media, such as Facebook,	(49.6)	(37.8)	(10.1)	(2.4)		(100)			
etc.									
6. Can express opinions in a program increasingly,	121	205	76	11	2	415	4.04	0.790	High
such as after viewing YouTube Live, one can	(29.2)	(49.4)	(18.3)	(2.7)	(0.5)	(100)			
respond immediately.									
7. Can view other interesting programs	138	185	77	12	3	415	4.07	0.834	High
recommended by the channel owners, i.e., Netflix,	(33.3)	(44.6)	(18.6)	(2.9)	(0.7)	(100)			
YouTube, etc.									

From Table 5.30, it is found that viewers agree with the statement that "the transformation of TV in the new media landscape under the digital economy system helps viewers to have more channels to view TV, both traditional and online" at the highest level ($\bar{x}=4.53$) but agree with the statement that "it enables them to watch past TV programs" the most at the highest level ($\bar{x}=4.57$). Other statements they agree at the highest level are "can view a program repeatedly as often as wished." ($\bar{x}=4.43$), "can link a program, such as sharing preferred clips from YouTube in social media, i.e., Facebook, etc." ($\bar{x}=4.35$), and "can download a program to view later" ($\bar{x}=4.21$) respectively. The other two statements that the samples agree at the high level are "can view other interesting programs recommended by channel owners, i.e., Netflix, YouTube, etc. ($\bar{x}=4.07$), and "can express opinions in a program increasingly, i.e., after viewing YouTube Live, one can respond immediately." ($\bar{x}=4.04$) respectively.

Table 5.31 Illustrates the Number, Percentage, an of the Samples' Opinion towards the Transformation of TV in the New Media

Landscape under the Digital Economy System in the "Content" Dimension

		Le	vel of Agreen	nent					
Opinion	Agree the	Highly Agree	Moderately Agree	Hardly Agree	Disagree	Total	Mean	S.D.	Interpretation
	Most								
1. Content is more various	217	143	48	6	\\ 1	415	4.37	0.763	Highest
	(52.3)	(34.5)	(11.6)	(1.4)	(0.2)	(100)			
2. More new content is created, i.e., viewers can	144	162	91	14	4	415	4.03	0.888	High
jointly create the end of a drama.	(34.7)	(39)	(21.9)	(3.4)	(1.0)	(100)			
3. There are more various program genres/ formats	175	184	49	6	// ⁶ 1- //	415	4.27	0.741	Highest
	(42.2)	(44.3)	(11.8)	(1.4)	(0.2)	(100)			
4. Each channel develops its distinctive focus, i.e.,	171	178	60	6	\G-//	415	4.24	0.748	Highest
ONE31 emphasizes drama for teenagers up to	(41.2)	(42.9)	(14.5)	(1.4)		(100)			
working groups, Workpoint focuses on game shows,									
or Nation on news program.									
5. More advertisements are inserted during a	142	115	92	31	35	415	3.72	1.243	High
program.	(34.2)	(27.7)	(22.2)	(7.5)	(8.4)	(100)			
6. There are more online shopping, i.e., O Shopping,	122	135	88	40	30	415	3.67	1.199	High
etc., with longer broadcasting time.	(29.4)	(32.5)	(21.2)	(9.6)	(7.2)	(100)			
7. Costs for the production of programs/drama/news	92	172	118	22	11	415	3.75	0.947	High

		Level of Agreement							
Opinion	Agree the	Highly Agree	Moderately Agree	Hardly Agree	Disagree	Total	Mean	S.D.	Interpretation
	Most	1771	บาสา	128100					
are decreased, i.e., using a mobile phone for audio	(22.2)	(41.4)	(28.4)	(5.3)	(2.7)	(100)			
and visual shooting a news program.									
8. Content from other sources or channels is more	113	184	87	21	10	415	3.89	0.944	High
used without producing its own content, i.e.,	(27.2)	(44.3)	(21.0)	(5.1)	(2.4)	(100)			
presenting news from online sources, etc.									
9. The censorship on the content before broadcasting	145	142	94	22	12	415	3.93	1.023	High
is less strict i.e., vulgar language and violent content	(34.9)	(34.2)	(22.7)	(5.3)	(2.9)	(100)			
in a general program for audience of all ages.									

From Table 5.31, it is found that viewers agree with the statement, "content is more various" the most at the highest level ($\bar{x} = 4.37$) under the transformation for TV in the new media landscape related to the content dimension, followed by "there are more various program genres/ formats" at the highest level ($\bar{x} = 4.27$), "each channel develops its distinctive focus, i.e., ONE31 emphasizes drama for teenagers up to working groups, Workpoint focuses on game shows, or Nation on news program" at the highest level ($\bar{x} = 4.24$), "more new content is created, i.e., viewers can jointly create the end of a drama" at the high level ($\bar{x} = 4.03$), "the censorship on the content before broadcasting is less strict i.e., vulgar language and violent content in a general program for audience of all ages" at the high level ($\bar{x} = 3.93$), "content from other sources or channels is more used without producing its own content, i.e., presenting news from online sources, etc." at the high level ($\bar{x} = 3.89$), "costs for the production of programs/drama/news are decreased, i.e., using a mobile phone for audio and visual shooting a news program" at the high level ($\bar{x} = 3.75$), "more advertisements are inserted during a program" at the high level ($\bar{x} = 3.72$), and "there are more online shopping, i.e., O Shopping, etc., with longer broadcasting time" at the high level (\bar{x} = 3.67) respectively.

Table 5.32 Illustrates the Number, Percentage, an of the Samples' Opinion towards the Transformation of TV in the New Media Landscape under the Digital Economy System in the "Business Operation" Dimension

		Le	vel of Agreen	nent					
Opinion	Agree the Most	Highly Agree	Moderately Agree	Hardly Agree	Disagree	Total	Mean	S.D.	Interpretation
1. Operating by the old ways	60	161	144	31	19	415	3.51	0.983	High
	(14.5)	(38.8)	(34.7)	(7.5)	(4.6)	(100)			
2. Reducing expenses by downsizing the	81	182	116	23	13	415	3.71	0.947	High
number of employees and outsources in some parts	(19.5)	(43.9)	(28.0)	(5.5)	(3.1)	(100)			
3. Increasing business patterns, i.e., Amarin	97	213	91	10	4	415	3.94	0.796	High
TV and Thairath TV, changing from being	(23.4)	(51.3)	(21.9)	(2.4)	(1.0)	(100)			
content producers to be channel owners in parallel.									
4. Changing a line of business, i.e., RS	74	187	122	25	7	415	3.71	0.886	High
changed from media and printing to health and beauty business.	(17.8)	(45.1)	(29.4)	(6.0)	(1.7)	(100)			
5. Increasing broadcasting channels, i.e.,	119	191	89	12	4	415	3.99	0.840	High 200

		Level of Agreement							
Opinion	Agree the Most	Highly Agree	Moderately Agree	Hardly Agree	Disagree	Total	Mean	S.D.	Interpretation
3HD broadcasting with online channel, i.e.,	(28.7)	(46.0)	(21.4)	(2.9)	(1.0)	(100)			
Mellow.									
6. Finding alliances, i.e., Workpoint shares	109	184	100	-11	11	415	3.89	0.915	High
investment with BNK 48 in producing	(26.3)	(44.3)	(24.1)	(2.7)	(2.7)	(100)			
Victory BNK 48 program broadcasted in									
Workpoint channel									

From Table 5.32, it is found that viewers agree with the statement, "increasing broadcasting channels, i.e., 3HD broadcasting with online channel, i.e., Mellow, etc." the most at the high level (\bar{x} = 3.99) under the transformation for TV in the new media landscape related to the business operation dimension, followed by "increasing business patterns, i.e., Amarin TV and Thairath TV, changing from being content producers to be channel owners in parallel" at the high level (\bar{x} = 3.94), "finding alliances, i.e., Workpoint shares investment with BNK 48 in producing Victory BNK 48 program broadcasted in Workpoint channel" at the high level (\bar{x} = 3.89), "reducing expenses by downsizing the number of employees and outsources in some parts" and "changing a line of business, i.e., RS changed from media and printing to health and beauty business"at the high level (\bar{x} = 3.51) respectively.

Table 5.33 Illustrates the Number, Percentage, an of the Samples' Opinion towards the Transformation of TV in the New Media Landscape under the Digital Economy System in the "Communication" Dimension

	1/6	Lev	el of Agree	nent					
Opinion	Agree the Most	Highly Agree	Moderately Agree	Hardly Agree	Disagree	Total	Mean	S.D.	Interpretation
1. All online advertisings: commercial	79	152	118	45	21	415	3.54	1.074	High
breaks, latent advertising, advertising	(19.0)	(36.6)	(28.4)	(10.8)	(5.1)	(100)			
inserts, etc. are appropriate									
2. Public relations is appropriate, i.e.,	77	192	115	27	4	415	3.75	0.865	High
press conference, program launch, etc.	(18.6)	(46.3)	(27.7)	(6.5)	(1.0)	(100)			
3. Special activities organization is	107	164	116	22	6	415	3.83	0.923	High
appropriate, i.e., meeting with artists,	(25.8)	(39.5)	(28.0)	(5.3)	(1.4)	(100)			
concerts, etc.									

From Table 5.33, it is found that viewers agree with the statement, "special activities organization is appropriate, i.e., meeting with artists, concerts, etc." the most at the high level ($\bar{x}=3.83$) under the transformation for TV in the new media landscape related to communication dimension, followed by "public relations is appropriate, i.e., press conference, program launch, etc." at the high level ($\bar{x}=3.75$), and "all online advertisings: commercial breaks, latent advertising, advertising inserts, etc. are appropriate" at the high level $\bar{x}=3.54$) respectively.



CHAPTER 6

SUMMARY, DISCUSSION, AND RECOMMENDATION

The research "Television Industry and Its Roles in the New Media Landscape under the System of Digital Economy" is aimed:

- 1) To study changes in the television industry when moving into digital economy systems.
- 2) To investigate the adaption of the television industry in Thailand under the changing media landscape.
 - 3) To examine the roles of television in the new media landscape
- 4) To explore the viewers' perspective on the roles and adaptation of television in the new media landscape.

For answering the above research objectives, a mixed-method study was used as follows:

- 1) To answer the first research objective, the researcher conducted documentary research by a comparative study of the TV program tables or schedules of the selected TV channels. Besides, an in-depth interview was conducted with people related to the television industry to obtain an overview of the current situation of the media industry, occurring changes in the television business, and the competition in the television industry.
- 2) To answer the second research objective, the researcher conducted documentary research by a comparative study of the TV program tables or schedules to examine how each TV channel adapts itself and from an in-depth interview from people related to the TV circle: entrepreneurs, scholars, directors, to obtain how and in which dimension the entrepreneurs of each digital TV channel adapt themselves.
- 3) To answer the third research objective, the researcher conducted an in-depth interview with concerned people to obtain information about the roles of televisions nowadays.

4) To answer the fourth research objective, the researcher conducted survey research by questionnaire to explore viewers' viewing behaviors and opinions on the adaptation and roles of televisions.

6.1 Summary of the Research Findings

From the abovementioned research methodology, the following were found to answer the research objectives:

6.1.1 Part 1: Changes of the Television Industry in Thailand under the Digital Economy System

1) The overview of the current situation of the media industry

Under the digital economy system, it is the period in which economics is driven by digital technology to increase effectiveness, efficiency, the value of products and services, competitive capabilities, business opportunities. Primarily, according to the 8th strategy in the 12th National Economic and Social Development Plans in the part of scientific, technological, research, and innovation development, two main development plans are specified. The plans are 1) to accelerate the investment promotion on research and development towards commercial and social benefits, and 2) to develop entrepreneurs to be technology entrepreneurs. As a consequence, entrepreneurs in every industry, especially in the media industry, strive to apply technologies in their business operations to move towards the digital economy system and to comply with the twelfth National Economic and Social Development Plans. For the television industry, television has transformed itself towards digitalization. Precisely, it has converted the broadcasting from the analog to the digital system, which accords with the first strategy in the Digital Economy and Society Development Plans (2016-2020).

In the current situation, due to the influence of technological advancement, it has brought about massive changes to the media industry, especially traditional media, i.e., television. As a sender, TV stations changed their broadcasting and management explicitly. In terms of message, the message tends to be more fragmented to be suitable for and attractive to each specific group increasingly.

Concerning communication channels, the distribution of each digital TV has moved towards digital channels in the form of OTT (Over the Top).

Nevertheless, it is remarkable that all the mentioned changes are affected by changes in receivers' consumption behaviors as well as technologies changed the roles of receivers from the passive audience in the past to active audience who can choose their own viewing ways, as clearly witnessed nowadays.

(1) The competition in the television industry

Apparent competition has occurred since the transformation of the traditional TV from six analog-system to 24 digital-system channels. Those who were registered and licensed as digital TV entrepreneurs comprise the old and new entrepreneurs in the media industry, i.e., program producers or printed media executives, etc., and those from other sectors who have had no media experience before. Some entrepreneurs could bid for digital TV licenses of more than one channel. Owing to such changes, entrepreneurs of each channel have to find strategies for competing towards higher ratings and drawing advertising into its channel. The crucial reasons for severe competition in the television industry are that the number of viewers, other entrepreneurs who are interested in buying advertising space, and revenue from advertising as the primary revenue of digital TV entrepreneurs, are the same as before. More than that, the competition is not limited only in the television industry or traditional television. Still, it includes other online-media competitors, i.e., YouTube, Netflix, LINE TV, etc., whose production costs are much lower. Although these online media competitors do not affect the number of advertisements on traditional TV, they can draw several viewers into their media.

(2) Genres and content in the new presentation

Due to severe competition, program content is one of the critical factors influencing viewers' decisions to expose any program. On the other hand, their available options are more diverse, novel, and individuated based on consumers' interests.

(3) The diversity of viewing channels

As mentioned above, at present, viewing channels are plenty: traditional TV, OTT, and online. Thus, conventional TV cannot access masses of the

audiences like in the past, as viewers will select to view only channels that are convenient and contain needed content.

(4) Consumers' changing behaviors

Communication technologies induce changes in viewers' behaviors. From viewing a program as per program schedule, viewers can now see a program anywhere at any time via their mobile phones or smartphones or other devices. Besides, they will view only the programs in which they are interested.

In brief, the television industry has changed, and changes occur in every element of a communication process, namely S-M-C-R: Sender, message, channel, and receiver. Changes caused by communication technologies are thus called "Communication Technological Determinism." The major change agents are the emergence of the internet and smartphones. Both have changed receivers' behaviors tremendously. At present, viewers can expose to a program all the time anywhere. They can select to view what they need from a variety of communication channels besides the traditional television. They can watch from other devices, i.e., computers, tablets, smartphones, etc. Accordingly, TV entrepreneurs as a sender need to adapt themselves drastically under the high competition situation among TV entrepreneurs and those of other media.

6.1.2 Part 2: The Adaptation of Organizations in the Television Industry under the Digital Economy System

Due to the current situation in which the media landscape has been changed with severe competition in the media industry, especially television, TV organizations have to adapt themselves to be able to compete in the industry and continue their business. In general, organizational adaptation in the television industry under the digital economy system can be divided into the following domains:

1) Organizational Structure

Due to high competition in the TV business in combination with higher costs, i.e., channel bidding cost, network rental cost, and other expenses of applying technologies for use, each organization needs to find their additional revenue and modify their organizational structure. From the study, it was found that some investment groups bought stocks of some channels. Some organizations reduced their

organization's size, and some provided training for their personnel to be equipped with diverse knowledge and capabilities, i.e., to possess MOJO or to be a mobile journalist, etc. Besides, some organizations established an early-retirement program (or before the age of 60) to reduce costs, etc. Some organizations become a business partner or an alliance with other organizations for joint programs, and some took over other channels' stocks, etc. Moreover, some organizations extended their business line to other areas of business, but still make use of the TV channel to access their target groups, i.e., RS's use of Channel 8, etc.

2) Communication Channels

In the analog-system period, TV channels presented their programs via broadcasting only by following the scheduled program table. In the digital era, because of consumers' changing behaviors caused by communication technologies, entrepreneurs have to study deeply their tentative audience of each group and each generation, including all communication channels viewed by each group. Correspondingly, each channel will not concern only about broadcasting its programs via digital TV, but it must consider the presentation of such programs via platforms of other online media in parallel, i.e., OTT TV (Over-The-Top Television), Line TV, YouTube, Netflix, etc., Despite being its competitors by nature, other online media was found to become its business partners as well as their platforms cover a variety of viewers. Besides, some digital TV also possess online media of their own, i.e., Website, Facebook Fanpage (such as Mello of Channel 3 or Bugaboo of Channel 7HD, etc.

3) Genres of Content Presentation

Each organization does not only broaden its communication channel to cover digital media, it also strives to study different genres for presenting the content on a variety of online media, depending on exposure behaviors of each group of the audience. For example, real-time broadcasting via digital TV is also uploaded on other platforms so that viewers can watch later. Another example is to produce specific content and upload it on social media. To do so, entrepreneurs need to study distinct properties and characteristics of each online media towards the most appropriateness and utmost benefits. Typically, each kind of online media is suitable for different target groups with different personalities and needs.

4) Content

Entrepreneurs have to develop their program content to respond to receivers' needs, which changes all the time. Thus, the consistent study of receivers' behaviors is required. Primarily, the content must be different and can catch up with trendy topics followed by viewers. Besides, the content must be creative. Concerns about ethics and morality should be emphasized before presenting any content, either of the channel's production or the imported ones. Importantly, new technologies must be applied for producing program content to attract viewers, i.e., the use of infographics for simulating a virtual happening to increase viewers' understanding, etc.

6.1.3 Part 3: Roles of Television in the New Media Landscape and Trends of the Television Industry in the New Media Landscape in the Future

1) Roles of Television in the New Media Landscape

The samples perceived roles of television in the new media landscape changed more or less, but at least, they changed definitely. The reasons are that television nowadays has to study viewers' needs mainly. Besides, the presentation formats and channels must be changed to catch up with the changing period and the viewers' needs. The most important thing is the content. Besides, they perceived that television still performs as an opinion leader and is the medium that can distribute its content widely and access to all groups.

At the same time, some samples viewed that although the roles of television are the same, their significance has changed. Nowadays, receivers can determine agenda-setting by themselves, and they can generate their content. Most of all, they are not passive like in the past, but can be a sender as well.

2) Trends of the Television Industry in the New Media Landscape in the Future

The samples perceived that in the future, television, including radio, will not die. They still exist but need to adapt themselves to cope with coming technologies and rapid and constant changes in consumers' behaviors. A program must be presented through both broadcasting and online media in parallel. Television,

especially news presses, was perceived by the samples as credible. Therefore, from which sources of news did they obtain news, they would check with the TV news again. For digital TV channels, they expected to have fewer channels in the future in compliance with the market mechanism, in which only surviving channels can continue their business. Furthermore, those who survive still need to find increased revenue since advertising spending should be the same while the channels will face the limited ceiling of advertising. One way entrepreneurs will do is to have more latent advertising. However, it is essential that such latent advertising must not violate viewers' rights to view their program content fully. Thus, the significant concern is the balance between business survival and the effects on society. Besides, the samples believed that in the future, there might not be a separation or division of channels, camps, or affiliates. Some content may be shared and used jointly or commonly without affecting any benefits. On the contrary, actors and content providers will be more independent.

3) Recommendations on the Changes and Adaptation in the Media and Television Industry

Owing to the changing media landscape, organizations in the media and television industry have to adapt themselves so that they can continue their business and survive in the market. From an in-depth interview, the samples recommended the following:

- (1) Organizations must understand the media landscape or media ecology. On the other hand, they should not view that traditional and online media are entirely separated. Neither should they view online media as their competitors. Instead, they should view online media as business partners by a true understanding of its nature and full potentials.
- (2) Organizations must understand their viewers. Each channel must know its positioning, directions, and target groups. Besides, they should concern about how to establish viewers' brand loyalty.
- (3) The content conveyed to receivers must respond to their needs precisely since receivers have a variety of options to choose, not only digital TV but also other online media. In addition, the content must be creative and not focus on trendy content or on gaining higher ratings only.

- (4) In terms of management, organizations must analyze themselves consistently, especially by the SWOT analysis, to explore their weaknesses. From doing so, they might need to organize a new human resource system and ways of managing existing resources.
- (5) In the operating media business, no instant formula can be used. Organizations must know who they are and at which area they are good. Without such a realization, it will be difficult for them to survive in this business. Besides, organizations should be able to anticipate and initiate something before their competitors.
- (6) Organizations must be ethical and moral in their content presentation by not focusing on the survival of their business only. Instead, a long-term goal should be reached.
- (7) Organizational executives must have a vision and be tolerant of possible changes while being ready to correct and adapt the organization for their sustainable existence.

6.1.4 Part 4: Viewers' Perspectives on Roles and Adaptation of Television in the New Media Landscape

1) Viewers' TV Viewing Behaviors

From the survey questionnaires collected from 415 respondents, it was found that most samples were female aged 21-30 years old, and graduated with a bachelor's degree. Concerning TV viewing behaviors, most of them watched TV via YouTube the most, followed by traditional TV (free/digital TV). For traditional TV (free or digital TV), the samples viewed Channel 3HD the most. For each channel, the samples viewed the following the most: Netflix-original movies on Netflix, music programs on YouTube, Dramas on LINE TV, series on Mellow, re-run dramas on BUGABOO.TV, and Korean series on Viu Channel.

For viewing devices, most samples viewed via their smartphones the most because of their portability. Besides, they were able to watch a program anywhere at any time.

2) Viewers' Perspectives on TV Roles

From the survey of 415 samples, most of them viewed TV for entertainment and relaxation. They expected the most to receive amusement, pleasure, entertainment, and emotional support. For the overall roles of the TV for society, most samples perceived the roles of TV in the function of amusement, pleasure, entertainment, and emotional support.

3) Viewers' opinion towards the adaptation of TV in the new media landscape under the digital economy system

From the point of view of the samples as viewers towards the adaptation of TV in the new media landscape, they perceived the following at the very high level: "to have more channels for viewing TV from both the traditional TV and online media," "can view programs later after broadcasting," "can download programs for later viewing," "can view any program repeatedly as they need," and "can link to other channels, i.e., can link preferred clips to share in social media like Facebook."

Concerning the content, the samples perceived the following at the very high level: "content is more diverse," "there are a variety of program formats," and "each channel has its positioning in presenting content, such as Channel ONE31 focusing on dramas to respond to the needs of teenagers and working people, Workpoint on game shows, or Nation on the news."

In terms of business model or business operations, no samples perceived any statements in the questionnaire at a very high level. All statements were perceived at the high level as following: "they operate as the way they used to do," "they reduce costs by downsizing or hiring outsource for partial work," "they add a new business model, i.e., Amarin TV or Thairath TV added from content generators to be channel owners as well," "they change their business line, such as RS, from the media business and printed media to health and beauty business," "they increase more broadcasting channels, such as Channel 3HD having both broadcasting and online channel in parallel, i.e. Mellow, etc.," and "they find business partners or alliances, i.e., Workpoint invested with BNK48 to produce Victory BNK48 broadcasted on Workpoint Channel."

Regarding the samples' opinions on communication dimension, no statements in the questionnaire were perceived at the very high level, but all statements were perceived at the high level as following: "all advertising is appropriate: during the break, latent, and inserted during a program on online channels," "public relations is appropriate, i.e., a news conference of introducing a program," and "special activities are appropriate, i.e., special events, meeting - actors events, concerts, etc."

6.2 Discussion

From the findings of the research "Television Industry and Its Roles in the New Media Landscape Under the System of Digital Economy," the following is discussed based on research objectives:

6.2.1 Change in the Television Industry in Thailand

The television industry has changed in all elements of a communication process or S-M-C-R: Sender, message, channel, and receiver. Changes caused by communication technologies are thus called "Communication Technological Determinism." The primary change agents are the emergence of the internet and smartphones. Both have changed receivers' behaviors tremendously. At present, viewers can expose to a program all the time anywhere. They can select to view what they need from a variety of communication channels besides the traditional television. They can watch from other devices, i.e., computers, tablets, smartphones, etc. Accordingly, TV entrepreneurs as a sender need to adapt themselves drastically under the high competition situation among TV entrepreneurs and those of other media.

The above findings reflect the current situation of the television industry, which can be explained by Communication Technological Determinism. (Kanjana Kaewthep & Somsuk Hinviman, 2010). Based on the Technology Determinism concept or from Toronto's school of thought, it believes that the power of media or communication technologies affects society. Media is the independent variable affecting human changes in various dimensions. From the findings of the study, they show that the effect occurs at all levels: individual, institutional, and societal. Besides,

Marshall McLuhan, a scholar in the Toronto's school of thought, coins one phrase, "the medium is the message," which later becomes one of the significant concepts in the scientific circle. Such coinage assumes that content or message can be dominated by the nature and characteristics of a medium. Thus, for McLuhan, the effect of communication on individuals and society does not come from the message, but the features of media. McLuhan raises an example by illustrating that a light bulb is a kind of media but carries no message in itself. On the contrary, television contains plenty of programs. Nevertheless, the lightbulb, despite containing no message, still can have a great effect on human beings, i.e., to reorganize human cognitive processing on space and night time (it can make a night as bright as a day time).

6.2.2 The Adaptation of Organizations in the Television Industry under the Digital Economy System

From the study, it was found that each media organization has to adapt itself to be able to compete with others in the industry for its survival. The adaptation of TV organizations found in the study is as follows:

1) Organizational Structure

Due to high competition in the TV business in combination with higher costs, i.e., channel bidding cost, network rental cost, and other expenses of applying technologies for use, each organization needs to find their additional revenue and modify their organizational structure. From the study, it was found that some investment groups bought stocks of some channels, some organizations reduced their organization's size, and some provided training for their personnel to be equipped with diverse knowledge and capabilities. Some organizations become a business partner or an alliance with other organizations for joint programs, such as Channel Workpoint 23 joined with BNK48, etc. Besides, some extend their business line, but still make use of their channels, i.e., RS, as the owner of Channel 8, extents its business to direct sales and use Channel 8 for presenting its products, etc.

2) Communication Channels

Nowadays, each channel cannot present its program through broadcasting via its digital TV only, but it has to offer a program through online media as well via OTT TV (Over-The-Top Television) or other platforms in parallel.

For instance, a channel can create its platform for presenting its program. Channel 7HD can be considered as the pioneer for this movement as it established a website and applications called "Bugaboo.TV" before other channels to present its broadcasted programs on digital TV. Therefore, viewers can view both current and old programs, including special programs for this application only, at the same time with the broadcasting time, as well as view them after the broadcasting time. However, Channel 7HD will not upload programs on any other platforms; thus, viewers must view them through Bugaboo.tv only. (except the program "Iron Chef" and "Master Chef," the rerun programs of which are uploaded on YouTube with the highlight clips). Similarly, Channel 3HD has its own application called "Mello for presenting the channel's programs, both current and rerun, including special programs on Mello only. However, the difference is Channel 3HD uploads some programs on other platforms as well, i.e., YouTube. In addition, parts of programs or drams will be edited to be short clips, i.e., YouTube, to attract viewers to view the whole program from any channel. For Channel MONO29, the channel also has its website and application called "MONO29" for viewing its programs. However, viewers can view the programs backward within seven days only. Channel Workpoint23 and ONE31 have no platforms of their own, but programs will be uploaded on other platforms and OTT, such as Workpoint23 on YouTube, Facebook, and LINE TV. However, the unique presentation of Workpoint23 is to edit attractive or highlighted parts of each program and subdivide them to be short clips. It is quite an effective strategy and can attract viewers highly since they can view only those parts they prefer without wasting time sliding to choose from the whole program. Notably, Channel ONE31 is the channel that uploads its programs on a variety of OTT channels the most, i.e., YouTube, Facebook, LINE TV, Viu, and WeTV. Like other channels, Channel ONE31 also edits the highlighted parts of dramas on OTT. Remarkably, the editing of highlighted sections of programs or dramas does not only respond to viewers' needs but also produces clips for advertising each channel's programs to attract viewers and motivate them to view the whole programs, including those via traditional TV as per its program.

3) Genres of Content Presentation

Each organization must understand how to present content through each channel since there are several genres on online media, depending on the media consumption of each group. Therefore, entrepreneurs have to study the properties and characteristics of each type of online media for the utmost benefits. Typically, each type of online media has different target groups and possesses different properties. Notably, Channel 7HD seems not to adapt itself so much, but actually, it created its own platform since 2011 before other channels and even before the transformation from the analog to the digital system occurred. It does not upload programs on different platforms to avoid its revenue from both advertising and service fees to fall into foreigners' hands.

4) Content

Entrepreneurs have to develop content to respond to viewers' needs, which changes all the time. Still, content is the most factor that enables viewers to expose to the particular program. From the literature review, each channel adapts its content consistently, as witnessed in the adjusted proportion of broadcasting time of each channel every year from the viewers' feedback through ratings, comments, and numbers of views on each platform. Hence, it indicates entrepreneurs' adaptation to respond to viewers' needs and comments increasingly. Primarily, they will select the content preferred by viewers. Besides, at present, viewers are prosumers who do not view any program that they like, they also want to generate their own content. Such needs can be witnessed from a number of programs produced and uploaded on the OTT channels, i.e., Facebook Fanpage, YouTube, etc. Moreover, they want to express their ideas instantly to producers and want to share their ideas with other viewers. These behaviors accord with the concept of Viewing Behavior towards The Participation Roles of the Audience. Therefore, viewers nowadays are not a passive audience anymore. They want to participate in sharing, narrating, suggesting, and generating the content. In other words, they change their roles to "users" at the same time. (Tham Chuasathapanasiri, 2014b). After their participation, viewers will feel like a part of the program, and once such feeling occurs, they become united with the program and thus change their behaviors as presented by the program. (Sakulsri Srisarakam, 2014).

Viewers of the new generation tend to unite TV and online media as inseparable. Such viewing behaviors lead them to view TV on online media, i.e., watching a live program on online media. Obviously, the viewers' media exposure behaviors have changed completely, especially in the way that they will determine and select what they want to view.

The above findings accord with the research of Supanee Kotchapansompote (2015) entitled, "The Adaptation of Mass Media in the Media Convergence Era towards Editorial Department," which found that mass media organizations adapted their presentations on more various platforms. Therefore, mainstream media had to apply new media for their presentation in parallel. Besides, they adapted their management and operation by modifying their organizational structure through reducing production costs, increasing working skills towards more versatility, and investing more in technologies. Similarly, from the research of Niccha Watcharachayakun (2016) entitled "The Adaptation of A Day Magazine in Digital-Age Mass Communication Administration," it was found that mass media organizations adapted themselves in several aspects: organizational structure, working style, content presentation, and expansion of communication channels, to respond to changing consumers' behaviors.

Apparently, all TV channels have to adapt themselves drastically to survive in their business, especially since the primary revenue of each channel comes from advertising spending paid for ratings. High ratings can attract product owners to advertise their products on the channel at each broadcasting time. On the other hand, for Thai PBS, which is the channel of the Office of the Prime Minister and is a government office, it obtains financial support from the government tax collected from liquor and tobacco. Thus, the channel can produce quality programs with creative content that can respond to the established objective of the channel, which is to develop society to a good and ethical through accurate information of the channel. (Broadcasting Policy and Research Bureau, Office of the Broadcasting Commission Television Business and the National Telecommunications Commission, 2018).

On the contrary, business channels have to find ways to increase their ratings to scramble for the amount of advertising spending. By expanding the interestingness of a program, sometimes the channels do not concern about ethical issues, i.e., violent

or sexual content. Some channels present too many and too lengthy direct-sales programs. From the researcher, viewers deserve viewing more creative and useful content, instead of viewing violent and unethical programs caused by the rating competition for business survival of the channels.

6.2.3 Roles of Television in the New Media Landscape

1) From the Perspective of Entrepreneurs, Scholars, Media Experts, and NBTC

From the interview with the samples, functions of television in the new media landscape change, but do not change so much. Importantly, at present, televisions study viewers' needs primarily, including genres of the content presentation and communication channels to suit the changing time and viewers' needs. The most important is the content. Besides, television still functions as an opinion leader and can distribute its broadcasting widely, covering all groups of audiences. The findings accord with the concept of Harold Lasswell on the roles of mass media on society (Somsuk Hinviman et al., 2014) as follows: 1) surveillance of the society or to inform what is happening in society, 2) coordination or to coordinate social members to be reported in common of what is happening in society, and 3) cultural inheritance or to maintain culture from generation to generation. Moreover, television is still a reliable source of information. The samples reported that although they exposed to any information from other online sources, they checked the received data from TV again to make sure if the information was fake news or not. Thus, it is the main reason why TV is perceived as performing the role of an opinion leader.

At the same time, some samples perceived the equal roles of televisions as before, However, the significance of the roles changes since receivers can determine the agenda-setting and generate their content. They are no longer a passive audience anymore, but can also be senders. They can also participate in sharing, narrating, suggesting, and generating the content. In other words, they change their roles to "users" at the same time. In addition, they can also have immediate participation by providing comments, likes, and shares, including posting. Thus, the receivers' generated content is therefore called "User-Generated Content" or UGC. (Tham Chuasathapanasiri, 2014b).

2) From the Perspectives of Viewers on Roles of Television

From the survey, it was found that most samples watched TV for entertainment and Relaxation and their expectation are the same or to receive amusement, entertainment, pleasure, and emotional support. Regarding the roles of television on society as a whole, the samples perceived the same as their roles for individuals. According to Dennis McQuail, mass media plays a role in entertaining and providing relaxation for people in society (Somsuk Hinviman et al., 2014).

6.2.4 TV Viewing Behaviors

From the survey, it was found that most viewers viewed TV via YouTube the most, followed by traditional TV (Free TV/ digital TV). For viewing devices, most samples viewed TV by using smartphones because they were portable so they could view a program at a convenient time. These findings reflect that consumers' behaviors have changed. Traditional TV (Free TV/digital TV) is not the main channel for viewing TV programs anymore due to technological changes, especially the emergence of smartphones. The current viewing behaviors of consumers can be explained by the concept of Individuals' Media Usage Habits (Kitti Gunpai, 2013), which depend on two factors caused by social structure. The first factor is the situation and needs, i.e., the needs of information for entertainment, the needs of communicating with other people, etc. The second factor is mass media structure, i.e., existing or available media at a specific time, the congruence between media technology and individuals' unique personalities, or the needs for learning, etc. Besides, other external situations may get involved, i.e., changes in media technology, interestingness, expectation, satisfaction, etc.

Furthermore, from the statistical analysis of this study, age and viewing behaviors are correlated. It was found that the samples aged 15-20 years old and 21-30 years old had the same viewing behavior patterns. Namely, they viewed TV through YouTube the most. Besides, the viewing was on-demand. In other words, viewers can choose to view any program at any time they need. Such findings accord with Information Seeking Theory, which specifies that receivers change their role from passive audience to active audience, especially the viewers aged 18-24 years old or the Digital Native group. (Kanjana Kaewthep, 2013).

On the other hand, receivers aged 31-40, 41-50, 51-60, and over 60 years old were found to view TV in the same pattern. Specifically, they watched TV from traditional TV the most, or they followed each channel's program schedule. Thus, for these groups, television still plays a role in agenda-setting for society.

6.3 Recommendation

6.3.1 Recommendation for Application

From the findings, some recommendations are proposed for each sector as follows:

1) For the Organizations Responsible for Regulating TV

The concerned organizations should be strict in regulating the broadcasted content, i.e., vulgar and violent words, improper behaviors, and non-useful news or programs for society. Instead, the concerned organizations should have regulatory measures and strict punishments. Besides regulatory measures, they should issue some policies to promote quality and beneficial programs for the audience. Although the establishment of Thai media fund is one of the good measures, some program producers may have no opportunity to access such funds. Accordingly, they should implement more active measures to allocate funds for the well-endowed producers, who may have no time for proposing their programs for funds promotion.

2) For the Industry

To continue the TV business successfully, TV entrepreneurs should adapt themselves to the following:

(1) Organizational structure: each channel should adapt its organizational structure properly without a fixed formula, especially due to each channel's distinct external and internal factors. Thus, each channel has to analyze itself consistently, possibly by the SWOT analysis. Furthermore, what is essential for every channel is the development of its personnel's versatile knowledge and capabilities. From analyzing the situations for evaluating and determining strategies, each station will find what is essential for the station and enables the station to strive for its survival, i.e., downsizing the organization, empowerment of augmented

knowledge and multi-functional capabilities for its personnel towards the organization's increased capacity and potential.

- (2) Communication channels: Nowadays, since viewers are an active audience who can interact instantly with each channel, including expressing their ideas and interacting with other viewers, each channel should possess varied and wide coverage of communication channels to respond to changing viewers' exposure behaviors. Each channel should apply all possible communication channels of new media, such as Facebook, Instagram, Twitter, etc., which can access a diversity of audiences.
- (3) Content: each channel should create content to respond to its viewers' needs. Thus, each channel needs to study the needs of its target groups. They should know precisely who the target groups are so that the channel can determine its program production suitably. Moreover, the broadcasted content should be beneficial and creative, while the issues of ethics and appropriateness, including the impact of the broadcasted content to viewers or society, should be focused. Primarily, the balance between creative content and rating competition should be well considered. Besides, the appropriate proportion of the numbers of domestically-produced and imported programs should be aware to promote the Thai TV industry and to develop the potentials of personnel and TV programs in Thailand. It is crucial that program producers, besides analyzing and understanding viewers' needs, should not be too submissive to their needs since they expect the leadership and creativity of TV channels as well. The media should avoid using intoxicating programs that induce delusion or misconduct for attracting the audience.
- (4) Genres of content presentation: Digital TV channels should study proper genres in broadcasting their programs since each target audience has different exposure and viewing behaviors. For instance, after broadcasting on digital TV, the programs should be broadcasted through the Over-the-Top or OTT service instantly, or the content should be produced for the OTT channel particularly, etc.

Notably, the media must be a social leader in ethics and morality. Especially, at present, in online media, everybody can generate his or her content; thus, fake news and hate speeches appear widely. Media organizations then should

play a significant part in helping to solve the problem, while enhancing viewers' media literacy.

3) Recommendations for Civil Society

Concerning changes in the television industry, not only do TV entrepreneurs need to adjust themselves, but also scholars and social developers and the universities offering curriculum in mass communication or media studies. Universities should update their curriculum and produce graduates to possess essential qualifications suitable for the changing society, including providing supplementary courses responding to each changing period. Particularly, nowadays, almost everything is digitalized. The adjustment can help all involved in the television industry can continue their business successfully. So that all involved in the television circle can adjust their business operation towards their future growth.

6.3.2 Recommendation for Further Studies

- 1) This research covers only the adaptation of digital TV entrepreneurs, so others involved in the industry, such as content creators and providers, etc. may be further studied since they are the groups who have to provide content to digital televisions directly. Future studies should focus on the production groups that have been affected severely in the industry to help them develop themselves and the media industry in the future.
- 2) In this study, the content analysis was conducted on program schedules only. Therefore, in the future, the research or analysis of the program content, including the inserted advertisements should be further studied to see if they are appropriate and beneficial for viewers from the broadcasted programs or not.

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APPENDIX

QUESTIONNAIRE

"Television Industry and Its Role in the New Media Landscape under the System of Digital Economy"

Instruction

- 1. This questionnaire is part of a doctoral candidate's dissertation in the Graduate School of Communication Arts and Management Innovation, the National Institute of Development Administration. (NIDA)
- 2. The information obtained from this questionnaire will be confidential and used for academic purposes only. Your kind cooperation in answering the questionnaire with true information will be beneficial for this study. The content of the questionnaire comprises the following:
 - Part 1: General information of the respondent
 - Part 2: Questions on TV viewing behaviors
 - Part 3: Questions on the roles of television
- Part 4: Questions on viewers' opinions towards the transformation of TV in the new media landscape under the digital economy system.

Recruitment Question

During the past six	months, did you watch televisio	n?
() No.	() Yes	

*If you did not, please kindly discontinue this questionnaire. If so, please kindly continue answering it**

Part 1: General Information of the Respondent 1.1 Sex

() 1. Less than 10,000

() 4. 30,001 – 40,000

1.1 S	ex			
	() 1. Male	() 2. Female	() 3. A	Alternative
1.2 A	ge (Years Old)			
	() 1. Younger than 15	5 () 2. 15-20	() 3. 21-30	() 4. 31-40
	() 5. 41-50	() 6. 51-60	() 7. Older tha	an 60
1.3 E	ducation Level			
	() 1. Never attend Sci	hool	() 2. Elementa	ary
	() 3. Lower Secondar	у	() 4. Upper Se	econdary/ Vocational.
	() 5. Diploma/High V	ocational	() 6. A Bachel	lor's Degree
	() 7. A Master's Deg	ree	() 8. A Doctor	ral Degree
1.4 O	ccupation			
	() 1. Student	() 2. Gov	ernment/ State I	Enterprise Officer or Staff
	() 3. Private Employe	ee () 4. Bus	inessman/Entrep	preneur
	() 5. Freelance	() 6. Hou	sewife	
	() 7. Others η (Please	Specify)
1.5 H	ometown Region			
	() 1. Bangkok and Vi	cinity	() 2. Central	() 3. Northeastern
	() 4. Eastern	5)	() 5. Western	() 6. Southern
	() 7. Northern			
1.6 P	ersonal Monthly Incom	ne (Baht)		

() 2. 10,000 – 20,000

() 5. 40,001 – 50,000

() 3. 20,001 – 30,000

() 6. More than 50,000

Part 2: Questions on TV Viewing Behavior

2.1 TV viewing channel (mor	e than one option is	applicable	e)
() 1. Traditional TV (Free/digi	tal TV) () 2. Netflix	X	() 3. YouTube
() 4. Facebook Watch	() 5. Line T	V	() 6. IG TV
() 7. Mellow	() 8. BUGA	ABOO.TV	() 9. Viu
() 10. AISPLAY	() 11. Othe	rs (Please S	Specify)
2.2 <u>From 2.1</u> Please kindly m	ark $$ in the TV cha	nnel you v	iew (more than one
option is applicable)			
2.2.1 Traditional TV (Fre	e /Digital TV)		
() 1. Channel 7 HD () 2. Channel 3 HD	() 3. Wo	orkpoint TV 23
() 4. MONO 29 () 5. Channel 8	() 6. ON	TE 31
() 7. AMARIN TV 34 () 8. Thairath TV 32	() 9. MC	COT HD 9
() 10. ThaiPBS 3) 11. PPTV HD 36	() 12. Tı	rue4U 24
() 13. GMM25 () 14. Nation TV 22	() 15. N	EW18 (NEW TV)
() 16. TNN24 () 17. Channel .5 HD	1 () 18. N	BT 2 HD
() 19. Others (Please specia	fy)		
2.2.2. Types of Netflix Pro	ogram		
() 1. Popular on Netflix			
() 2. Trending Now			
() 3. Recommended progra	ım similar to previous	sly-watch p	rograms
() 4. Movies produced by I	Netflix (Netflix Origi	nals)	
() 5. Movies, not produced	by Netflix		
() 6. TV Shows produced b	y Netflix (Netflix Or	riginals)	
() 7. TV Shows, not produc	ced by Netflix		
() 8. Others (Please specify	7)		••••
2.2.3 Types of YouTube P	rogram		
() 1. Recommended) () 2. Music () 3. G	aming ()	4. News
() 5. Movies () 6. Others (Please S	pecify)	

2.2.4 Types of Facebook Watch	Program
() 1. Top Videos for you	() 2. Pages You Follow
() 3. Facebook Watch Originals	() 4. Featured Shows
() 5. Shared by Friends	() 6. Live
() 7. News	() 8. Others (Please Specify)
2.2.5 Types of Line TV Program	
() 1. Recommended	() 2. Originals
() 3. Drama	() 4. Entertainment
() 5. Music	() 6. Animation
() 7. Lifestyle	() 8. Sports
() 9. Live broadcasting	() 10. Others (Please Specify)
2.2.6 Types of IG TV Program	
() 1. For You	() 2. Following
() 3. Popular	() 4. Others (Please specify)
2.2.7 Types of Mellow Program	
() 1. Mellow Originals	() 2. Thai Series
() 3. International Series	() 4. Variety
() 5. Highlighted Video	() 6. Teaser
() 7. Others (Please specify)	
2.2.8 Types of BUGABOO.TV P	Program
() 1. Rerun Drama	() 2. Live Sports
() 3. Recommended Clip	() 4. Indy Junction
() 5. Online movie	() 6. Hot News/Sports
() 7. Entertainment/Movie News	() 8. Rerun Program
() 9. Special Series	() 10. International Series
() 11 Rugahoo Channel	() 12 Others (Please Specify)

	2.2.9 Types of Viu Program		
	() 1. New Program	() 2.	Viu Originals
	() 3. Korean Series	()4.	Korean Variety
	() 5. Korean Movies	()6.	Thai-Dubbed Series
	() 7. Thai Series	()8.	Thai Program
	() 9. Hong Kong Series	()10). Hong Kong Variety
	() 11. Japanese Series	() 12	2. K1 Headlines
	() 13. Highlight	() 14	4. Video Trailer
	() 15. Others (Please Specify)		
	2.2.10 Types of AISPLAY Progra	am	
	() 1. TV	()2.	Free TV
	() 3. Movies/series	()4.	Animation
	() 5. Education	()6.	AIS 360 Channel
	() 7. Premium Pay TV	()8.	HBO GO
	() 9. Others (Please specify)		
	2.2.11 Types of Other Channels'	Prog	rams (Please Specify)
2.3	3 Through which device do you vie	ew TV	? (More than one option is applicable)
	() 1. TV, not connected to the inte	rnet	() 2. TV, connected to the internet
	() 3. Mobile phone		() 4. Tablet/iPad
	() 5. Computer/laptop		() 6. Others (Please specify)
2.4	4 From 2.3, why do you watch TV	throu	igh such devices? (More than one
	option is applicable)		
	() 1. Portable to everywhere and a	ll the	time
	() 2. Easy Use		
	() 3. Simultaneous viewing with o	thers,	friends, family, etc.
	() 4. Habitual use		
	() 5. Retrospective viewing/viewing	ng afte	er broadcasting
	() 6. Others (Please specify)		

Part 3: Questions on Roles of TV 3.1 Reasons for watching TV (More than one option is applicable) () 1. To search for information () 2. To drive away feelings of loneliness () 3. To entertain/relax () 4. To apply knowledge to use in life () 5. To respond to some interests () 6. To establish relationships with others () 7. To kill time () 8. others (Please specify.....) 3.2 The expectation, you think, can be obtained from watching TV (More than one option is applicable) () 1. Amusement, pleasure, entertainment, and emotional support () 2. Useful content and knowledge () 3. Exposure to favorite artists' work () 4. Acknowledgment of happenings and problems in society () 5. Enhanced quality of life, well-being, and better social condition () 6. Inspiration, creativity, innovative ideas, assertiveness, and courage () 7. Others (Please specify.....) 3.3 Do you think what are the roles of television for society as a whole? (More than one option is applicable) () 1. Amusement, pleasure, entertainment, and emotional support () 2. Useful content and knowledge

() 3. Exposure to favorite artists' work

() 4. Acknowledgment of happenings and problems in society

() 5. Enhanced quality of life, well-being, and better social condition

() 6. Inspiration, creativity, innovative ideas, assertiveness, and courage

() 7. Others (Please specify.....)

<u>Part 4: Questions on the opinions on the transformation of television in the new</u> <u>media landscape under digital economy system</u>

Please mark $\sqrt{}$ in the column that matches the level of your opinion

5 = Agree the Most, 4 = Highly Agree, 3 = Moderately Agree, 2 = Hardly Agree, 1 = Disagree

Opinion on the Transformation of TV in the New	I	evel o	f Agı	eeme	nt
Media Landscape	5	4	3	2	1
4.1 Channel		ð			
- Can have more channels for watching TV, both traditional and online.					
- Can watch past TV programs	75				
- Can download a program to watch later	Z				
- Can watch any program repeatedly as often as wished.				(C)	3
- Can link a program, i.e., sharing a preferred clip from YouTube in social media, such as Facebook, etc.		-5		6	
 Can express opinions in a program increasingly, such as after viewing YouTube Live, one can respond immediately. 	7	2		3.7	
- Can view other interesting programs recommended by the channel owners, i.e., Netflix, YouTube, etc.	51	13			
4.2 Content			<u> </u>		
- Content is more various					
- More new content is created, i.e., viewers can jointly create the end of a drama.					
- There are more various program genres/ formats					

Opinion on the Transformation of TV in the New	L	evel o	f Agr	eeme	nt
Media Landscape	5	4	3	2	1
- Each channel develops its distinctive focus, i.e., ONE31 emphasizes drama for teenagers up to working groups, Workpoint focuses on game shows or Nation on a news program.					
- More advertisements are inserted during a program	7				
- There is more online shopping, i.e., O Shopping, etc., with longer broadcasting time.					
- Costs for the production of programs/drama/news are decreased, i.e., using a mobile phone for audio and visual shooting a news program	}			7	
- Content from other sources or channels is more used without producing its own content, i.e., presenting news from online sources, etc.	3	A	۷	6	}
- The censorship on the content before broadcasting is less strict i.e., vulgar language and violent content in a general program for audiences of all ages.	787	//		36/2/	
4.3 Business model		5			T
- Operating by the old ways	51				
- Reducing expenses by downsizing the number of employees and outsources in some parts					
 Increasing business patterns, i.e., Amarin TV and Thairath TV, changing from being content producers to be channel owners in parallel. Changing a line of business, i.e., RS changed 					
from media and printing to health and beauty business.					

Level of Agreement							
5	4	3	2	1			
7							
	C						
7							
	<u> </u>			3			
9	5		8				
vive?							
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***Thank you very much for your time in responding to this

questionnaire***

BIOGRAPHY

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EXPERIENCES

ACADEMIC Master's Degree in Business Administration

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