Innovative Policy Approaches to Thailand's Digital Economy

Asia Internet Coalition





Executive Summary

Over-the-top (OTT) means content, a service or an application provided to the end-user over the public Internet. OTT services are classified into three main categories: 1. OTT services for entertainment 2. OTT services for communication and interaction and 3. OTT services for convenience. Although there are various categories of OTT services, the most widely discussed are OTT Video, and OTT Communication since the growth of such business groups affects traditional businesses. As a result, there have been discussions in many countries about the necessity and guidelines for regulating these OTT services. In Thailand, the NBTC continues to discuss, listen to the stakeholders' opinions, and explore the potential guidelines for regulating OTT Video services in Thailand. Consequently, the research team conducted research on the current state and future trends of Thailand's OTT Video industry, the value of OTT Video to the Thai economy and society, and the best governance practices.

In Thailand, the OTT Video market was valued at \$547 million in 2020, with \$408 million in AVoD revenue and \$139 million in SVoD revenue. The market value is expected to increase by 14% in 2021, bringing the total market value to \$625 million. In Thailand, AVoD accounts for the majority of OTT Video revenue. When it comes to digital advertising spending, OTT video platform advertising spending accounts for more than half of the total, and the share tends to rise slightly year after year. Despite the increase of OTT advertising, traditional TV advertising still holds the majority share of the market. Also, the traditional TV broadcaster still maintains a high EBITDA margin of 30% in 2019.

In addition, the research team studied the value of OTT video to Thailand both quantitatively and qualitatively. For qualitative value, we interviewed individuals involved in the OTT video services' value chain who are experts with extensive industry experience. The result shows that the benefits of OTT Video services are diverse. Those who benefit include businesses, consumers, and the economy & society. For example, (1) Businesses: Traditional businesses are able to continue operating in the face of changing consumer behavior and generating revenue from OTT platforms. Content creators have more opportunities to grow based on larger demand from the ability to penetrate the global market; (2) Consumers: Consumers can use their time more efficiently instead of waiting for a specific time to watch a preferred TV program; and (3) Economy & Society: it helps create more employment by providing better opportunities for many small producers and studios to access a larger pool of consumers. This enables them to compete with big producers and studios. Our quantitative study found that in 2020, the OTT Video industry created 45,106 job positions with a total economic impact of 74 billion THB, accounting for approximately 0.47% of total Thai GDP.

However, the growth of OTT Video services affects traditional businesses. But with the technical and business differences, legacy regulation for broadcasters should not be automatically extended to OTT. Traditional media or cable service providers often own and control the underlying network infrastructure and connection to the customer's premises consequently, consumers may have limited choices in selecting their cable providers and may have costs to switch. Meanwhile, online applications do not control the access infrastructure and operate in a highly competitive market. It is easy and often cost-free for consumers to switch between competing apps.

Executive Summary

For OTT Video businesses that provide borderless services and use advanced electronic media and technology, strict and inflexible government regulation may not be appropriate. In addition, government oversight will become obsolete over time as the rapidly changing OTT Video businesses evolve. Therefore, Self-regulation could be an appropriate regulatory mechanism for OTT Video businesses as it has more flexibility to amend rules to keep up with business changes. Instead of strictly regulating the OTT Video businesses, the government should encourage traditional businesses to adjust according to changes of consumer behavior and grow with OTT Video businesses. Moreover, the government should support and facilitate the creation of local OTT platforms that centralize content from various TV stations, in parallel with considering the current regulations, to enable Thai traditional broadcasting businesses to compete with foreign players.

In addition, the research team surveyed opinions about both SVOD and AVOD services. There were 229 respondents. The results of the survey found that the samples mostly use OTT services for communication and social media (71.2%), followed by watching series or television programs (22.7%) and facilitating their daily lives (6.1%), respectively. With the sample group who used OTT TV services, it was found that the use of AVOD services (77.3%) was more than the use of SVOD services (58.5%). As for SVOD audiences, when membership fees increase from rising operation costs, most of the population were willing to pay if the increase did not exceed 20% (61.5%). Meanwhile, 37.9% of the sample group would cancel their membership and turn to watch the content via other pirated channels instead. The average subscription fee for the AVOD sample group was 482 Baht/month. It was also found that the majority of the audience was GEN Y (45.9%), followed by GEN X (33.9%), Baby Boomer (18%), and Gen Z (2.2%), respectively.

The sample group both agreed and disagreed in a similar percentage on using state power to regulate and control providers' access to information. However, most of the sample group agreed (84.5%) that the government should use "Deregulation" or "Self-Regulation" approaches to promote the efficiency of market competition, content improvement, content diversity, and encouraging newcomers in the industry. The support and development that the sample group "totally agreed" for the OTT industry included Net Neutrality (60.2%), the national platform development (64.4%), the personnel development (68.2%), the development to attract new local and international entities to enter the industry (64.5%), the support for providers in the market to produce globally competitive content (72.4%), and independent and fair competition (74.2%).

Content



Definition of OTT



The Body of European Regulators for Electronic Communications (BEREC), provided a clear and precise definition of OTT as follows:

OTT Definition:

"Content, a service or an application that is provided to the end-user over the public Internet"

Classification of OTT

We classify OTT services into three main categories.

1 OTT services for entertainment

including Video and Music streaming.



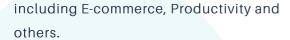




OTT services for communication and interaction

including Communication and Community.

OTT services for convenience





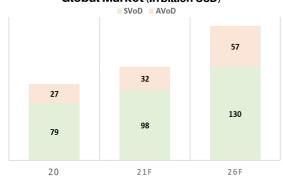
Although there are several categories of OTT services, the most widely discussed are OTT Video and OTT Communication since the growth of such business groups affects traditional businesses such as television broadcasting services and telecommunication businesses. Consequently, there have been discussions in many countries about the necessity and guidelines for regulating these OTT services.

However, in Thailand, the NBTC continues to discuss, listen to the stakeholders' opinions, and explore the potential guidelines for regulating OTT Video services in Thailand. Consequently, the research team conducted research on the current state and future trends of Thailand's OTT Video industry, the value of OTT Video to the Thaileronomy and society, and the best governance practices.

Industry Situation and Current State of OTT Video Services

MARKET VALUE AND GROWTH

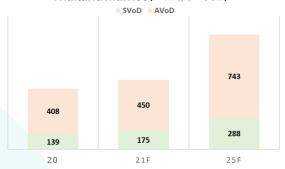
Global Market (in billion USD)



The global OTT Video industry was worth \$106 billion in 2020, with AVoD revenue of \$27 billion and SVoD revenue of \$79 billion. The market value is expected to increase by 23% in 2021, to \$130 billion, and double to a total value of \$210 billion in 2026.

Thailand Market (in million USD)

Source: Digital TV Research

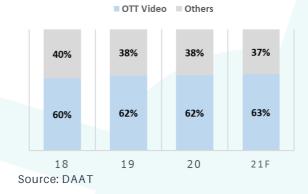


Source: Statista

In Thailand, the OTT Video market was valued at \$547 million in 2020, with \$408 million in AVoD revenue and \$139 million in SVoD revenue. The market value is expected to increase by 14% in 2021, bringing the total market value to \$625 million, with a further increase to \$1,031 million by 2025.

Proportion of Digital Advertising Spending in Thailand





In Thailand, AVoD accounts for the majority of OTT video revenue. Moreover, when it comes to digital advertising spending, OTT video platform advertising spending accounts for more than half of the total, and the share tends to rise slightly year after year.

Advertising Spending in Thailand (in million Baht) 2019 2020 2020 2020 2020 2030 2030 2040 2050 2060 2070 208

TV ADS

The COVID-19 epidemic is one of the factors driving OTT Video growth.

Source: DAAT, MAAT, Nielsen Media Research

DIGITAL ADS

104,509

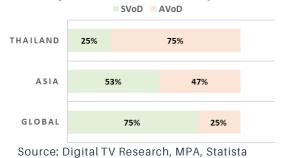
TOTAL ADS

As a result of the COVID-19 pandemic, total advertising spending decreased 14% in 2020 due to business budget cuts. Nevertheless, digital advertising spending continues to rise as people's behavior changes during the lockdown. Digital advertising is becoming the preferred choice for marketers, resulting in an 8% increase in digital advertising spending in 2020.

OTT VIDEO ADS

When comparing TV advertising spending to OTT video advertising spending, it was found that TV advertising spending fell 10% in 2020, while OTT Video advertising spending grew 7%. Although the rise of OTT advertising may accelerate the decline in traditional TV advertising, other important pre-existing factors were driving this downward trend including stiff competition among digital TV operators and piracy of content. According to Line TV, a major service provider of AVoD platforms in Thailand, the number of views on Line TV increased by more than 45 percent during the lockdown compared to the normal situation. Furthermore, Netflix, Thailand's largest SVoD platform service provider with a market share of more than 30%, discovered that average weekly viewing on Netflix increased by 115 percent during this period. Despite the increase of OTT advertising, traditional TV advertising still holds the majority share of the market. Also, the traditional TV broadcaster still maintains a high EBITDA margin of 30% in 2019.

Percentage of OTT video revenue by model in 2020

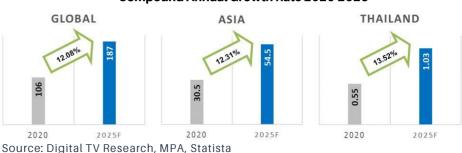


With the increasing popularity of OTT video and the growing number of new SVoD service providers in Thailand, the proportion of revenue generated by SVoD is expected to rise gradually.

The CAGR shows that the Thai market is growing in the same direction as the global and the Asia market. Thailand's growth rate is slightly higher than the others since Thailand is considered a new market compared to other countries.

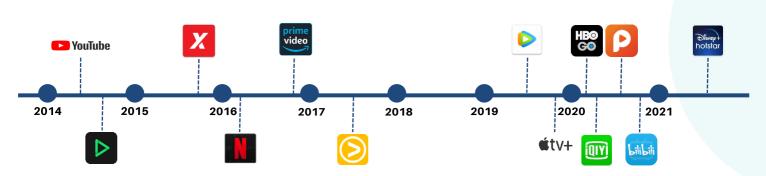
The global market and the Asia market have a higher percentage of revenue from SVoD than AVoD. Unlike in Thailand, where AVoD accounts for the majority of revenue, this is because people in SEA have relatively low incomes and are willing to watch advertising in exchange for free access to content. As a result, AVoD has surpassed SVoD in popularity in this region. Since SEA contributed only 4.17 percent of Asia's 2020 SVoD value, the majority of OTT video service providers in SEA use AVoD strategies to reach the audience. However, Netflix, an SVoD platform, is also attempting to expand its reach in Thailand by creating a more affordable package that is available in only four countries worldwide.

Compound Annual Growth Rate 2020-2025



OTT VIDEO MARKET PLAYERS

International players

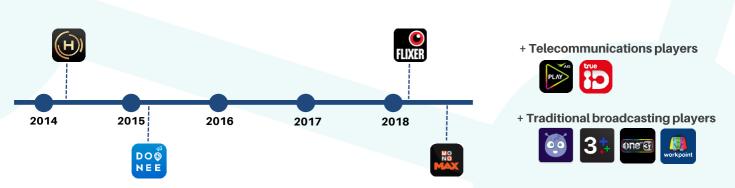


The majority of OTT video service providers in Thailand are foreign service providers. In Thailand, OTT Video service began in 2014. Since then, consumer behavior has gradually changed. In addition, technology and the internet have advanced, resulting in the growth of OTT Video in Thailand. This can be proved by the increasing number of service providers that continue to enter the Thai market, particularly in recent times.



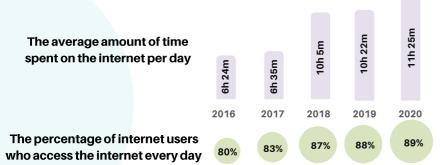
Facebook is considered a social media platform because its original purpose was for the users to stay connected with friends and family by updating their lives, and sharing and expressing what matters to them. However, more people are now using Facebook to post or share video content, similar to YouTube. In addition, professionally-created videos from TV stations are broadcasted on Facebook for people to watch live or rerun, so some content on Facebook can also be considered OTT Videos.

Local players



There are few local OTT Video service providers in Thailand, but their number has grown as telecommunications service providers with advantages in technology and customer base, such as AIS and True, have entered the OTT Video market. Furthermore, as people's behavior changes, many TV stations have provided their own OTT video platforms, such as Bugaboo TV, CH3 Plus, CH7HD, One31, Workpoint, etc.

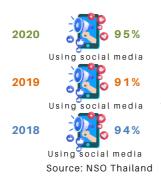
BEHAVIOR TRENDS



Source: ETDA

Internet Activity

Using social media was the most popular internet activity in 2017-2020. However, watching online videos has grown in popularity over time.



Since 2016, Thai people's internet usage has been steadily increasing. Recently, in 2020, Thai people use the internet 11 hours 25 minutes per day on average, increased by 1 hour 3 minutes from 10 hours 22 minutes in 2019, consistent with the percentage of people using the internet every day, which steadily increased as well.

Top 4 online activities in Thailand



VIDEO ON DEMAND IS DEMANDED BY THAIS



The most searched-for word on Google in 2020 was "Hnang," which means movie. Based on this data, it can be concluded that video on demand is preferred by Thais, which is consistent with GWI data indicating that 99 percent of internet users in Thailand consume media on the internet by watching online videos. Furthermore, GWI revealed the average daily time that Thai internet users spend on each media type. It was found that Thai internet users spend the most time watching broadcasting and streaming videos, averaging 3 hours and 30 minutes per day.

The percentage of internet users in Thailand that consume each type of content through the internet in 2020 $\,$



99%

68%

ON RIR

Watch online videos
Source: GWI

Listen to music

Listen to online radio

51%

The percentage of internet users in Thailand who use each type of mobile app each month in 2020

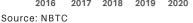


For mobile devices, which are the most preferred devices for internet access, watching online video is still their primary mobile internet activity, with 87.8 percent of these users utilizing entertainment and video apps each month. This is consistent with App Annie's ranking of Thailand's top mobile apps by consumer time spent in 2020 in which 4 VoD apps were in the top ten: YouTube (Rank 2), WeTV (Rank 6), Netflix (Rank 8), and VIU (Rank 9).

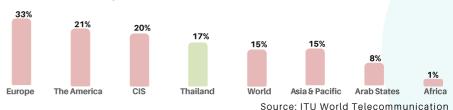
INTERNET TRENDS

The number and penetration rate of fixed broadband subscriber in Thailand





The penetration rate of fixed broadband in 2020



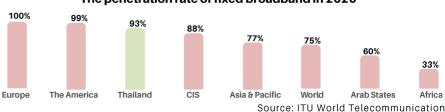
There were 11.5 million fixed broadband subscribers in 2020 in Thailand. Between 2016 and 2020, subscribers increased by about 1 million per year, and the penetration rate increased by about 1-2 percent per year, reaching 17 percent in 2020. Also, Thailand has a higher penetration rate than the global, Asia Pacific, Arab States, and Africa averages, but it still lags behind Europe, America, and the CIS.

The number and penetration rate of mobile broadband subscriber in Thailand



Source: NBTC

The penetration rate of fixed broadband in 2020



There were 63.06 million mobile broadband subscribers in 2020 in Thailand. Between 2016 and 2020, subscribers increased by about 3 million per year, and the penetration rate increased by about 3-4 percent per year, reaching 93 percent in 2020. Also, Thailand has a higher penetration rate than the CIS, Asia Pacific, the global, Arab States, and Africa averages, but it still lags behind Europe and America.

The Thai government intends to develop a high-performance digital infrastructure that encompasses the entire country to enhance fixed broadband development. The following are the objectives for each phase:

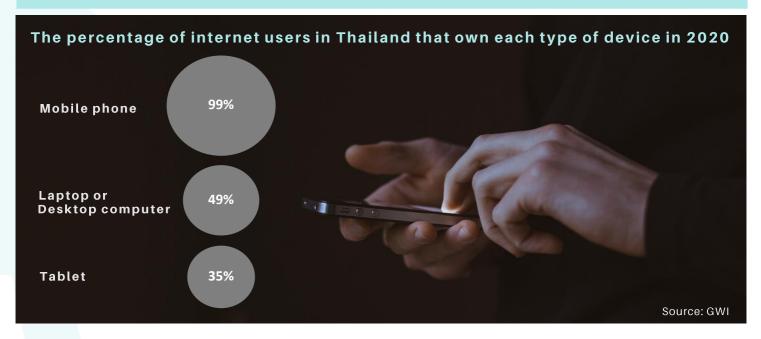
- The 5-year development goal is to have a fixed broadband internet network accessible for every household covering all areas in Thailand, with every household having access to 100Mbps high-speed internet service.
- The 10-year development goal is for high-speed internet networks to be available to all households as a utility with a service fee of less than 1% of per capita income and a minimum internet speed of 1 Gbps.

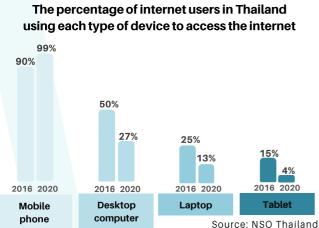
There are several important flagship projects to enhance Thailand's fixed broadband internet networks. The first one is the Net Pracharat MA project, whose objective is to expand the high-speed internet network to 24,700 villages. This project has been completed. Another project is the Last Mile Broadband project, whose objective is to provide additional Internet access in remote areas to increase the number of remote households that have access to internet services by at least 5% over the previous year. This project will be implemented in 2022-2025.



In order to enhance the development of mobile broadband in Thailand, a 5G spectrum license was auctioned in 2020. The service has already begun in some areas, with plans to expand the service areas in the future. 5G technology will assist in increasing internet speed and decreasing network latency, resulting in smooth and uninterrupted video content viewing.

DEVICE TRENDS

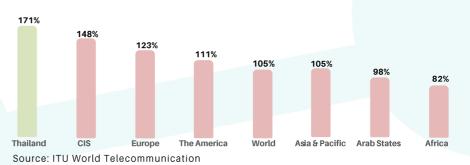




In 2020, 99 percent of internet users in Thailand accessed the internet through mobile phones. The behavior of internet users in Thailand has changed significantly from 2016, as users have shifted from laptops, desktop computers, and tablets to using mobile phone internet.

The number and penetration rate of mobile subscriber in Thailand

The penetration rate of mobile subscriber in 2020



There were 116.29 million mobile subscribers in 2020 in Thailand, down from 129.61 million in 2019. Despite the decline in the number of mobile subscribers, Thailand still has a high mobile penetration rate at 170.70%, which was higher than the global average and the average of many other regions. The high penetration rate indicates a highly competitive market, leading to relatively low service prices. At the same time, the mobile market offers a wide range of customized services to consumers. These factors make the Thai mobile phone network easily accessible for all users.

Value of OTT Video to Thailand

QUALITATIVE VALUE

Based on interviews with experts in OTT video services' value chain who have extensive industry experience, each expert addressed the benefits of OTT Video services; the topics discussed by each expert are as follows.



Mr Nitikarn Prakobtham, is the founder of Orm School. He has 15 years of experience producing content on YouTube. He believes that accessing knowledge is difficult. This inspired him to create Orm School as he wanted Thai people to access great knowledge easily and free of charge. Hence, he opened Orm School Channel, which has 47 million views and over 18 million learners. Before creating content on YouTube, Nitikarn used to share his content through CDs. However, after the changes, he found that sharing content on YouTube was far better as it is more convenient to both users and content creators. He explained the value of OTT platforms through a perception of an independent creator as follows.

OTT platforms led to more income generation because the platforms were already well-known and had a large number of audiences, allowing the content to reach a large number of people with the minimal marketing effort.

Ready-to-use high-quality platforms reduced costs such as renting a server or developing an application that might not be worth the money due to a lack of economies of scale. Instead, the funds can be used entirely for creating better content.

More team members have been hired. In the case of Orm School, many tutors could earn money by teaching on the Orm School Channel.

The audience has access to knowledge that is both free and easily accessible. Orm School produced them in various versions that audiences could select their preferred teaching videos for the same topic. Moreover, most platforms do not limit the size and number of content, enabling Orm School to produce videos without limitations of duration or quantity, allowing audiences to access a wide range of content in full detail.





Mr Pantham Thongsan is a well-known director and producer of dramas, television series, and films. His work is widely recognized. Pantham was a GMM executive who worked with international OTT platforms. Pantham emphasized the significance of OTT platforms through the perspective of a professional creator, as follows:



OTT platforms raised the income of television stations. Traditionally, television stations earned money from commercials, but now they could charge copyright fees when they sold content to OTT platforms.

"As audience behavior has changed, OTT platforms are more of an opportunity for television stations than a disruption. The audiences don't watch television much anyway, no matter how many platforms there are. As a result, the television industry must adapt and change."

OTT platforms offer producers more options. For example, They could sell their content to television stations and/or OTT platforms. In the past, they had only one choice, television stations.

OTT platforms increase the demand for content. Furthermore, OTT platforms necessitate a wide range of content. As a result, it creates more opportunities for both small and large producers.

Small producers or studios that lacked the necessary funds to create their content needed to find funding sources. The traditional way was to pitch a plan to television stations. Because they had to compete with big-name producers who already produced content for television stations, their chances of getting funded were small. Through OTT platforms, there are more funding sources for producers and studios to propose their plans to. OTT platforms, therefore, increase the opportunity for small producers or studios.

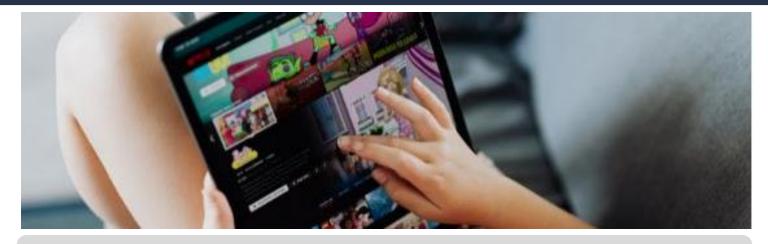
OTT platforms increase income, which leads to higher production quality as producers can dedicate more resources to their work by hiring more staffs and putting more working hours into the project.



Thai content can now be seen by international audiences through OTT platforms. As a result, these platforms provide the opportunity for any content creators to reach global audiences.

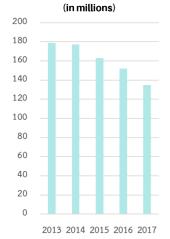
"I believe that other countries certainly still want Thai content, and the demand will continue to increase as well because Thai people can produce good-quality content at lower prices. And at the same time, there is an increasing number of available platforms for Thai content creators."





Ms. Nirawan Vilaiswan is the head of Finecast at GroupM Thailand, a leading digital agency. Ms. Nirawan is directly responsible for commercials in linear TV and OTT, so she is well-versed about the industry, its current situation, and future trends. In the interview, she explained the value of OTT platforms toward commercials, including the value of the parties involved, as follows.

Annual BitTorrent movie & TV downloads in Thailand



OTT platforms make it easier for audiences to access the content. There are numerous options to watch, allowing audiences to access content that is most beneficial to them.

"In the past, to watch a movie, you had to go to the cinema, rent a VDO tape, or buy a CD. CDs were quite expensive, so many people bought illegal CDs instead. OTT platforms allow the audiences to watch content through applications easily. If you are satisfied with the service, you can subscribe and pay a reasonable price. Some applications do not even charge money. One of the results is a reduction of copyright problems. It is obvious that illegal CD businesses are not common like before."

Source: MPA APAC

OTT platforms enable small and medium-sized businesses to advertise their products at a low cost while reaching a large number of people.

"Small and medium enterprises barely had a chance to be recognized because they could not afford to advertise their products on television. Without the advertisement, the products were hardly known by people. Now, these businesses have an opportunity to be recognized through OTT platforms with only 5-figures of money. Hence, they have chances to grow by advertising their products to broad audiences without spending a lot of money."

OTT platforms expand marketers' options if they want to specify the target group of the advertisement; this method can save more money than television advertising.

"Television advertisement is an effective way to be recognized because a lot of people can access television. Once your advertisement is broadcasted, it is nationwide. Therefore, television advertisement is suitable for mass products. On the other hand, television advertisements cannot guarantee that niche products will reach the target group. This might cause a lot of waste. Meanwhile, advertising through OTT platforms can directly reach the target group without causing too much waste and paying a lot for television advertisements."

Summary of Qualitative value for Businesses

- Traditional businesses are able to continue operating in the face of changing consumer behavior and generating revenue from OTT platforms.
- SMEs have opportunities to grow from advertising, allowing them to be widely known with a low budget.
- Businesses have advertising choices to avoid waste and unnecessary high advertisement budgets.
- Producers have more options and opportunities, especially small producers.
- People can earn income and start a business from the UGC platform.
- Content creators have more opportunities to grow based on greater demand from the ability to penetrate into the global market.

Summary of Qualitative value for Consumers

- Consumers can spend their time more efficiently instead of waiting for a specific time to watch a preferred TV program.
- Consumers can access content easily and conveniently at a reasonable price.
- There is a variety of content. Consumers can choose what they prefer to watch to get the most advantages.
- Consumers can watch Thai content with high production quality because of the additional funding from OTT platforms.

Summary of Qualitative value for the Economy and Society

Creating More Employment

- OTT platforms provide better opportunities for many small producers and studios to access a larger pool of consumers. This enables them to compete with big producers and studios.
- Production teams are hired for a longer period, and new team members are hired as well.
- Many people can make a career and a living by being content creators for the UGC platform. Because the
 majority of them have their own teams, resulting in the creation of jobs for a different group of people.

Reducing Problems in the Society

- Businesses and problems related to copyright violation are less because OTT platforms reduce costs for consumers, making them access the content more easily. People do not need to watch content through illegal channels like before.
- The UGC platforms have plenty of useful content for Thai society. For example, Orm School Channel, which provides free knowledge, reduces educational inequality and offers students with financial difficulties access to great knowledge. Another example was the DR. JING channel which provides knowledge about mental health for teenagers. Such problems could be commonly found these days, but most teenagers could not access the treatment in time. The reason might be the high expenses, or the parents do not understand and are aware of the importance of mental health, so they do not take their children to the psychiatrists, leading to deadly results. Therefore, providing knowledge in this subject might help those students understand and help themselves in the initial stage.

QUANTITATIVE VALUE

Input-output Model

The input-output model, a type of economic model that describes the relationship of a business or industry to the economy, can be used to assess the economic effect. The model is broken down into three components: direct impact, indirect impact, and induced impact.

However, due to a lack of OTT Video industry statistical data in Thailand, the research team chose to rely on the data from the radio, television, and related services industry, the closest industry to OTT Video. The radio, television, and related services had a multiplier effect of 2.69. As a result, the research team used this multiplier to assess the OTT Video industry's economic impact.

Direct impact

Output from the activities of firms in the OTT video industry.

17,504 million Baht

Indirect + Induced impact

Output from purchases by OTT video businesses from other businesses, and the spending of wage income from the activities in the OTT Video industry.

26,271 + 2,952 million Baht



Each Baht spent on the OTT video industry will increase the Thai economy's output by **2.67 Baht.**

 $Source: TU-RAC\ analysis\ based\ on\ the\ data\ from\ Statista\ and\ the\ National\ Economic\ and\ Social\ Development\ Council\ (NESDC)$

QUANTITATIVE VALUE

Employment value

Total employment of Thai media industry

266,900 positions

The Proportion of **OTT** employment to total employment

16.90%

Employment in the OTT industry

45,106 positions

Average yearly wages per person

595,849 Baht

Employment value to the economy

26,876 million Baht

Source: TU-RAC analysis based on the data from National Statistical Office, Bank of Thailand, Nielsen Media Research and Jobs DB

0.17%

economic impact employment in the OTT Video industry is valued at 27 billion Baht or 0.17% of total Thai GDP.

The economic impact of the OTT Video industry's spending on other 0.19% industries and OTT Video employee spending is valued at 29 billion Baht or 0.19% of total Thai GDP.



economic impact of consumer spending on the OTT Video industry is valued at 18 billion Baht or 0.11% of total Thai GDP.



In 2020,

the OTT Video industry created 45, 106 job positions with a total economic impact of 74 billion THB, accounting for approximately 0.47% of total Thai GDP.

Traditional regulations are irrelevant for OTT Video Service

OTT Video services should not be regulated under the traditional law due to the different business models. Unique characteristics of OTT Video service make it impractical to use traditional broadcast regulations. These characteristics are outlined as follows.

Traditional Service licenses are required due to limited resources' allocation. On the other hand, the OTT Video service provides unlimited content distribution through various platforms.

As mentioned, traditional services require service licenses to allocate resources. The traditional license requires an annual fee that has to be paid to the NBTC for spectrum allocation. On the other hand. OTT Video service is provided by using the internet network of internet service providers, which does not directly require NBTC to allocate internet network for the OTT Video services. Therefore, OTT Video providers are not required to pay such fees.

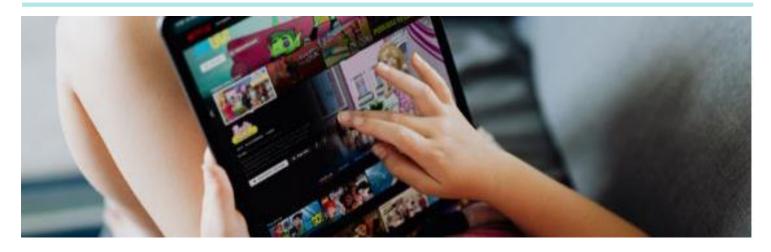


Traditional media have advertisement time limits to prevent excess commercialization and consumer exploitation as viewers have limited choice. Viewers have to watch the ads to continue enjoying TV programs. Viewers are forced to watch lengthy advertisements unwillingly and waste their valuable time. On the contrary, OTT Video gives viewers the option to watch ads. Viewers can pay for ad-free viewing to avoid ads. If it is an ad-only service, OTT Video offers a wide variety of content, and viewers can choose to watch it at their convenient time. This causes the ads to spread more pervasively, as a result, Individual viewers are not forced to watch ads for a lengthy period. Moreover, most providers have the option for viewers to skip the ads after watching for a few seconds. In addition, advertisements on OTT Video are targeted ads that are different from the ads on television. Viewers should not waste time watching ads that are irrelevant or less relevant to them. Therefore, it may not be necessary to limit the advertising time of the OTT Video service.

Traditional media have a limitation on content selection as their daily programs are predetermined. This makes the viewers unable to select their preferred content freely. Therefore, it is necessary to limit the range of suitable content on traditional media for the benefit of the audiences as a whole. Meanwhile, viewers can freely choose content to watch according to their preference on OTT video service. This can maximize the benefit of each audience. In addition, each OTT Video platform is unique. There is a wide range of contents for viewers to watch on each platform. Therefore, content restriction should not be imposed on OTT Video services.

With the technical and business differences, legacy regulation for broadcasters should not be automatically extended to OTT. Traditional media or cable service providers often own and control the underlying network infrastructure and connection to the customer's premises, consequently, consumers may have limited choices in selecting their cable providers and may have costs to switch. Meanwhile, online applications do not control the infrastructure, and operate in a highly competitive market. It is easier and often cost-free for consumers to switch between competing apps.

Best practices and recommendations



Businesses are established to create value for consumers and profit for themselves. Besides income and profits, businesses need to focus on other matters, such as standards of goods or services, social responsibility, etc. Therefore, there is a need to oversee various businesses to ensure compliance with the standards. Also, each business is subjected to different forms of supervision according to the nature of the business.

For OTT Video businesses that provide borderless services and use advanced electronic media and technology, Strict and inflexible government regulation may not be appropriate for businesses. In addition, some government oversight will become obsolete over time as the rapidly changing OTT Video businesses evolve. Therefore, Self-regulation could be an appropriate regulatory mechanism for OTT Video businesses as it has the flexibility to amend rules to keep up with business changes.



US

- No licensing and fees
- Provision of content is subject to the content's copyright. In order to comply with Community Standards, any inappropriate content or advertisements will be reviewed and prohibited. Also, some contents may later be taken down when complaints are received. This mechanism is better than the government rigidly imposing general rules to restrict content or advertising.



MALAYSIA

- No licensing and fees
- As a guideline for self-regulation, there is the Malaysian Communications and Multimedia Content Code.



JAPAN

- No licensing and fees
- There is no content regulation, but several related laws, namely the Youth Internet Environment Act, prevent youth from accessing violent content on the internet. There are also guidelines of the Japan Interactive Advertising Association (JIAA) for advertising self-regulation.



AUSTRALIA

- No licensing and fees
- Prohibited content is monitored, and consumers can lodge a complaint to the authority for inspection



EUROPEAN UNION

• The European Electronic Communications Code (EECC) applies a lighter touch regulatory regime to OTT communications services that do not interconnect with the public telephone network compared to interconnected network-based services.

However, self-regulation still has some disadvantages in practice as it depends on each organization's willingness to participate. Also, this method lacks transparency which can contribute to the perception that the regulatory regime is not being applied fairly and that some community members benefit more than others. Therefore, if Thailand adopts such an approach to oversee the OTT Video industry, it is necessary to address these issues in order to have more effective governance. These issues can be resolved by using mechanisms to ensure transparency and providing incentives to participate, such as those shown below:

Ensuring transparency

The measures applied from the measures of the Communications and Multimedia Content Forum of Malaysia (CMCF)

Publish the guidelines and information on how self-regulatory tools work so that consumers recognize and understand them accordingly. They can also identify whether OTT service providers are adhering to the guidelines.

The measures applied from the measures of the Ministry of Information and Broadcasting (MIB)

Other stakeholders and industry experts are included in the self-regulation body to ensure that OTT service providers do not conspire with one another.

The measures applied from the measures of the Australian Communications and Media Authority (ACMA)

Complaints and complaint handling are made public to demonstrate that OTT service providers follow the guidelines and resolve complaints.

Providing incentives

The measures applied from the measures of the Australian Communications and Media Authority (ACMA)

Promote organizations that participate in self-regulation to demonstrate that they conduct business with standards and ethics. And at the same time, ACMA educates consumers to be aware of how the organization oversees businesses with standards and ethics. This will result in greater consumer interest and support for the services of the regulated organizations. Organizations that have not yet joined the governance body will eventually want to ioin the governance body to build a reputation and good image among consumers.

The measures applied from the measures of the Korea Communications Commission (KCC) and The Korean Communications Standards Commission (KCSC).

Tax deductions or tax breaks should be given to organizations that participate in self-regulation. It will incentivize organizations to join self-governance. In addition, such measures are useful in other respects as well.

- Create a fair competition between foreign juristic persons registered in Thailand, and foreign juristic persons not registered in Thailand but providing services.
- Incentivize foreign companies that provide services in Thailand without establishing a company to be interested in setting up a company in Thailand. This will ultimately bring about more employment in the country. As a result, content producers can contact or work with service providers more conveniently and efficiently.

Self-regulation is considered appropriate for the nature of OTT business and offers advantages over stakeholders as follows:

Benefits to government

Benefits to OTT video player

- Governments have lower oversight costs since they have less burden and responsibility for governance.
- Greater flexibility and can be easily adapted to industry changes, resulting in a business-friendly environment.
- · Ability to address industry- and consumer-specific issues directly.
- OTT players can participate in establishing and shaping rules and standards, leading to their willingness to comply.
- Less risk of the premature government intervention
- Lower compliance ad administrative costs
- Quick and low-cost complaints handling

Benefits to consumers

- A guarantee for consumers that the services they use are operated under appropriate standards and ethics.
- A guarantee for consumers that their complaints are heard, taken care of, and rectified.



Regarding fairness in competition between traditional businesses such as television broadcasting services and OTT Video businesses, many factors, including social and lifestyle changes and advanced technology, have caused consumer behavior in watching videos to change irreversibly. Therefore, regulating video businesses as strictly as traditional businesses can cause difficulties and ultimately affect consumers' rights to watch content freely. Consequently, instead of strictly regulating the OTT Video businesses, the government should encourage traditional businesses to adjust according to consumer behavior changes and leverage from OTT Video businesses. In many countries, OTT Video platforms have been built to house traditional broadcasting media in response to changing consumer behaviour. The traditional broadcasting business was also deregulated to compete and grow with the OTT Video business. Here are some interesting examples:

Japan:

In 2015, the five key terrestrial broadcasters teamed up to create the local OTT platform Tver, the center of broadcasting content. At present, there are more than 10 TV stations of every size broadcasting content on Tver.

UK:

In 2017, the BBC and ITV teamed up to create BritBox, a local OTT platform with content supply from 5 main UK public service broadcasters. In addition to local service, BritBox is currently expanding its service coverage to the US, Canada, Australia, and South Africa.

South Korea:

In 2019, SK Telecom and the nation's three terrestrial broadcasters—KBS, MBC, and SBS teamed up to create a local OTT platform, Wavve, the center of many contents from television stations. In addition, they also produce original content on the platform to increase their competitiveness vis-à-vis foreign platforms because creating original content is another important strategy for OTT-business to attract audiences. Creating such a local OTT platform was made possible by easing regulations from The Korea Communications Commission (KCC) to allow cross-media mergers creating a local OTT platform that competes with foreign platforms.

The convergences of traditional broadcasting businesses to create local OTT Platforms, as mentioned above, all originated from the advent of overseas competitors that attract a large audience. The industry's adaptation also causes convergences. Therefore, TV stations are likely to consolidate and distribute content on the same platforms instead of operating a stand-alone platform, which creates an economy of scale, enabling companies to save costs. In addition, more content and variety of formats will also attract more viewers. Therefore, the government should support and facilitate the creation of local OTT platforms that centralize content from various TV stations, in parallel with considering the current regulations, to enable Thai traditional broadcasting businesses to compete with foreign players. Moreover, with the popularity of Thai content from neighboring countries, building such local OTT platforms could be a great opportunity to reach the neighboring markets effectively.



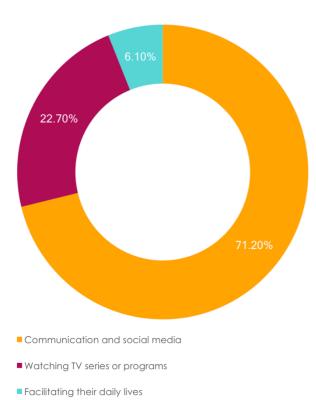
Survey Analysis

The researchers used the quantitative research method (Survey) by creating online questionnaires. The population was from the research group database, including entrepreneurs, freelancers, office workers, state enterprise employees, government officers, and college students. They were classified by generations, including Baby-Boomer (54-72 years old), Gen X (38-53 years old), Gen Y (21-37 years old) and Gen Z (8-20 years old). This population range tended to be the sample group for the study of both SVOD and AVOD types of services. Then, simple random sampling (SRS) was used and specified to conform with the budget and time (From June 15th to August 1st 2021)

From the analysis of general information of the sample group, it was found that there were 229 respondents. The questionnaire was divided into three parts which were 1) General information of the respondents. 2) Perception about using OTT TV. 3) Perception of the government's policy. Results from questionnaire analysis can be summarized as follows.

The Sample Group for the survey Generations Baby-Boomer (54-72 years old) Gen X (38-53 years old) Gen Y (21-37 years old) Gen Z (8-20 years old)

The sample group used OTT for?

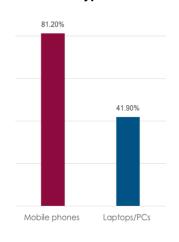


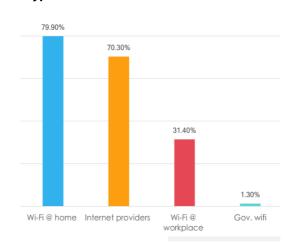
The data analysis revealed that the samples mostly use OTT services for communication and social media (71.2%), followed by watching series or television programs (22.7%) and facilitating their daily lives (6.1%), respectively.



Total respondents: 229

Type of Connections and Type of Devices & Access in 2021

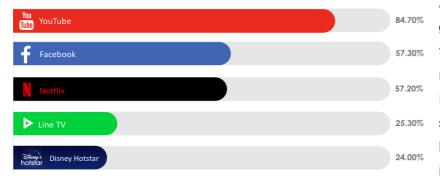




Devices that the sample group used for the services included mobile phones (81.2%) and Laptops/PCs (41.9%). For the type of connections to access the services, most of the sample group used Wi-Fi packages at homes (79.9%), followed by internet service providers (70.3%), Wi-Fi at their workplaces (31.4%), and free Wi-Fi from the government (1.3%), respectively.

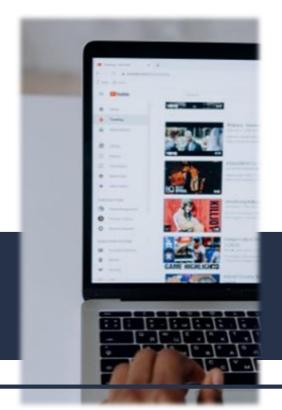
Nevertheless, the OTT research in 2017 found that the devices that the sample group used for the services included mobile phones (91.2%) and Notebook/Computer (8.8%). Meanwhile, the sample group used Internet Service Provider (41.9%) and Wi-Fi Packages at home (40.7%) in a similar percentage, followed by Wi-Fi at their office (14.6%) and Free Wi-Fi or Wi-Fi from Government (2.0%). Globally, 68.1% of all website visits in 2020 came from mobile devices, 28.9% came from Desktops, and 3% came from Tablets. (Source: Mobile vs Desktop Usage in 2020, Enge, 2021)

The most popular platforms

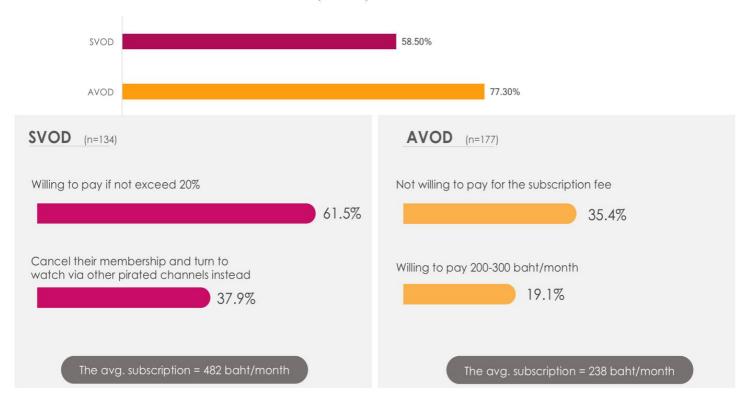


According to the data analysis on the sample group who used OTT TV services, it was found that the use of AVOD services (77.3%) was more than the use of SVOD services (58.5%). However, the number of subscriptions and subscribers has increased 13% worldwide between 2020 and 2021 and is estimated to increase 42% in 2026.

In addition, the results of the data analysis in 2021 revealed that the top 5 SVOD services via applications or OTT TV platforms receiving the most popularity included 1) YouTube (84.7%). 2) Facebook (57.3%). 3) Netflix (57.2%). 4) Line TV (25.3%). 5) Disney Hotstar (24%). While Thammasat OTT research in 2017 found that the most popular applications included 1) YouTube 2) Line 3) Facebook.



SVOD and **AVOD** services (n= 229)



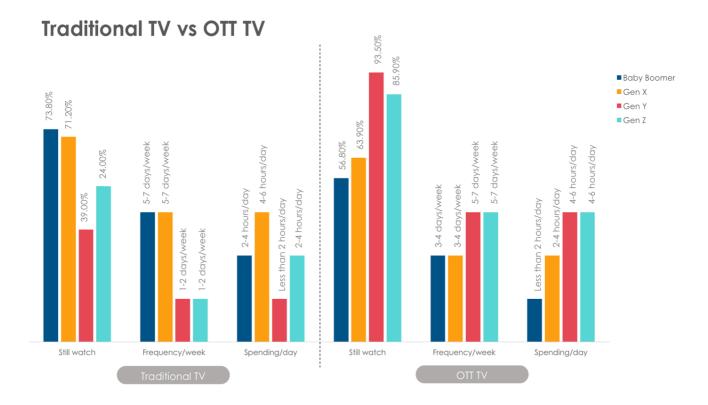
As for SVOD audiences, when membership fees increase from rising operation costs, most of the population were willing to pay if the increase did not exceed 20% (61.5%). In comparison, 37.9% of the sample group would cancel their membership and turn to watch the content via other pirated channels instead. The average subscription fee for the AVOD sample group was 482 Baht/month. It was also found that the majority of the audience was GEN Y (45.9%), followed by GEN X (33.9%), Baby Boomer (18%), and Gen Z (2.2%), respectively.

As for AVOD audiences (n = 177), it was found that most of the population were not willing to pay for the subscription to watch content from OTT TV service providers (35.4%). In comparison, some audiences were willing to pay 200-300 Baht/month (19.1%). Also, the average subscription fee for the AVOD sample group was 238 Baht/month. By comparing different generations, it was found that the majority of the audience was GEN X (49.5%), followed by GEN Y (20.8%), Baby Boomer (26.9%), and Gen Z (2.8%), respectively.



According to the data analysis, 82.7% of the sample group who used OTT watched TV programs after they aired. In addition, 56.1% watched copyrighted TV programs or movies, and 34.1% watched live TV programs. Regarding the content sources, 80.4% of the sample group watched the content from Thailand, 57.5% watched the content from the United States, and 53.5% watched the content from South Korea.

As for watching live programs through Traditional TV, it was found that 60.3% of the sample group watched TV programs through televisions while 39.7% of them did not.





If categorized by generations, it was found that 73.8% of Baby Boomer watched TV programs through televisions while 26.2% of them did not. They averagely watched 5-7 days per week and spent 2-4 hours per day. In comparison, 56.8% of this group watched OTT TV. On average, they watched 3-4 days per week and spent less than 2 hours per day.

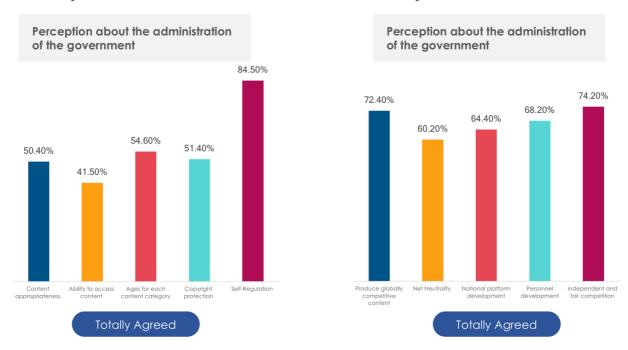
It was found that 71.2% of GEN X watched TV programs through televisions while 28.8% did not. They watched 5-7 days per week and spent 4-6 hours per day. In comparison, 63.9% of this group watched OTT TV. They watched 3-4 days per week and spent 2-4 hours per day.

Meanwhile, 39% of GEN Y watched TV programs through televisions while 61% did not. They watched 1-2 days per week and spent less than 2 hours per day. In contrast, 93.5% of this group watched OTT TV. They watched 5-7 days per week and spent 4-6 hours per day.

In comparison, It was found that 54% of GEN Z watched TV programs through televisions while 46% of them did not. They watched 1-2 days per week and spent 2-4 hours per day. In contrast, 85.9% of this group watched OTT TV. They watched 5-7 days per week and spent 4-6 hours per day.

Comparing with the research of Kogut & Kalmbach (2020, Beyond Cable and OTT: The Video Habits of Millennials and Gen Z), it was found that 70% of Gen Z were more likely to visit YouTube daily. 20% of them visited several times a week. Meanwhile, 49% of Millennials visited YouTube daily. 29% of this group visited several times a week. Also, 35% of Gen X visited YouTube daily, 31% visited several times a week, and 4% of Gen X did not use the platform at all.

Perception about the Government's Policy



According to the data analysis about the perception of the government's policy, the questions were divided into two parts, including 1) Perception about the administration of the government in different aspects. 2) Perception about the support and development for the OTT industry. Results from the data analysis indicated that most of the sample group "totally agreed" if the government sector would develop the policies for these perspectives: managing content appropriateness (50.4%), ability to access content (41.5%), the age restriction for different content categories (54.6%), copyright protection (51.4%), refraining from charging subscription fees to promote providers in the market (50%), and clear and effective tax policy for Thai and international entrepreneurs in the industry (43.9%).

In addition, the sample group both agreed and disagreed in a similar percentage on using state power to regulate and control providers' access to information. However, most of the sample group agreed (84.5%) that the government sector would use "Deregulation" or "Self-Regulation" approaches to promote the efficiency of market competition, content improvement, content diversity, and encouraging newcomers in the industry. The support and development that the sample group "totally agreed" for the OTT industry included Net Neutrality (60.2%), the national platform development (64.4%), the personnel development (68.2%), the development to attract new local and international to enter the industry (64.5%), the support for providers in the market to produce globally competitive content (72.4%), and independent and fair competition (74.2%).



Research Team

Pol.Lt.Col. Chavanut Janekarn

Ph.D. in Criminology, University of Kent, UK Project Leader

Asst. Prof. Suthikorn Kingkaew

Ph.D. in Management Studies, University of Cambridge, UK Deputy Project Leader

Dr. Gornkrit Sakronsatian

Ph.D. in Public Administration, National Institute of Development Administration, Thailand Researcher

Wichittra Chittrakarn

Master of Science in Accounting, Thammasat University, Thailand Researcher

Ratsupang Supcharoen

Master of Public Administration, National Institute of Development Administration, Thailand Coordinator