

2020

Taiwan Cultural Content
Industries Survey Report

Television •

Motion Picture •

Animation •

Radio Industries

2020

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C R E A T I V E
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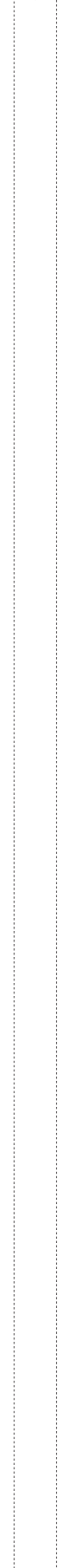
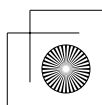
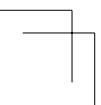
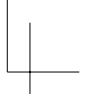
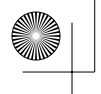
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Introduction



1. Scope of the Survey

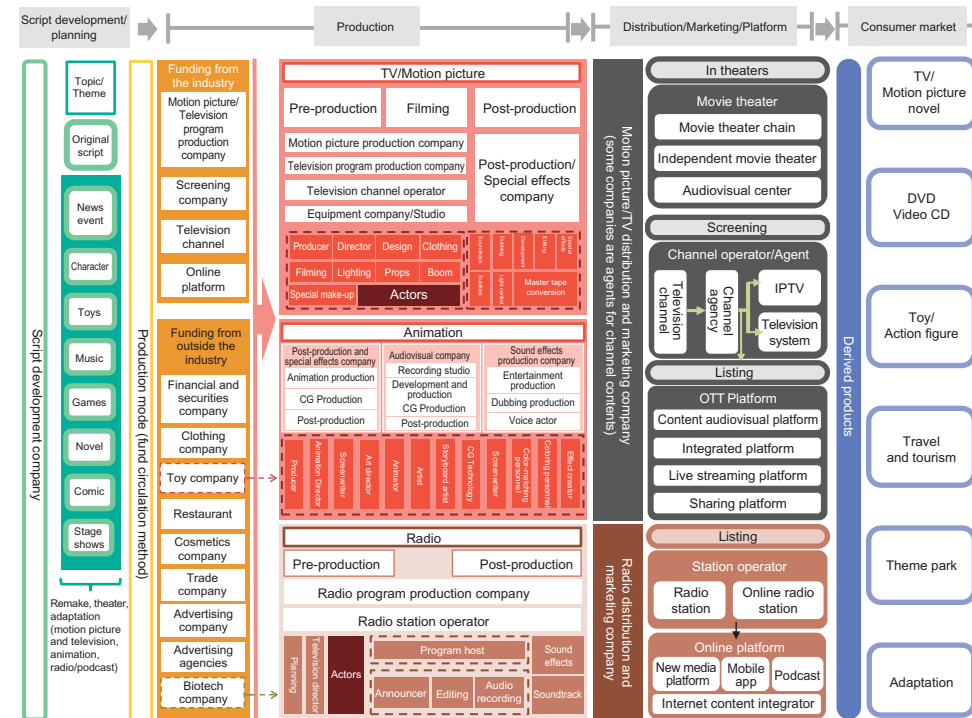
This report was created in order to accurately reflect the current cultural content industry in Taiwan. It provides the government and the industry with the latest cultural content industry development trends and serves as a basis for the establishment of industry development goals and the implementation of policies. Taiwan Creative Content Agency (TAICCA) consolidated the Ministry of Culture's industry survey projects into the Cultural Content Industry Survey Project in 2020, and divided the industry surveys into four separate volumes according to their industry relevance, including the "Books, Magazines, Comics, and Original Graphics Industries," "Motion Picture, Television, Animation, and Radio Industries," the "Popular Music Industry," and the "Games and E-sports Industries."

This is volume 2 of the Cultural Content Industry Survey Project of 2020. The scope of survey includes the motion picture, television, animation, and radio industries. The effect of digital platforms on the overall development of these industries is growing, and boundaries between creativity, production, distribution, and screening of different formats are becoming blurred. As a result of the development of IP, planning for the development of different types of content is no longer linear like the past (such as adaptations of comics/novels with wider readership into a TV series and further into a movie). Now overall planning is integrated and converged since the development phase. In addition, the content industry as a whole has brought in different sources of funding (such as advertisers and developers of downstream products).

Survey subjects in the television industry include different subindustries, in which the television program production and distribution industry and online program production industry are determined based on the actual program list/ contents menu and applications for subsidies and incentives from the Bureau of Audiovisual and Music Industry Development (BAMID) of the Ministry of Culture; the television channel industry and television platform industry are determined based on data announced by the National Communications Commission (NCC). Direct satellite broadcasting television services are not included in the scope of the survey for television platform industry after considering their actual business models (most have channel licenses). They are instead given a questionnaire for television channel industry. It is estimated that there are a total of 582 companies that continue to operate in the television industry. The digital distribution and radio industry consist of approximately 22 companies that provided online broadcasting services in 2019.

The motion picture industry includes four subindustries, namely production, distribution, post-production and special effects (including equipment), and screening. Based on the list of companies that have received subsidies or incentives from the BAMID and motion pictures distributed in Taiwan in the past five years, there are currently a total of 449 companies active in the domestic motion picture industry. The animation industry consists of approximately 112

companies, which are mainly original animation companies (including online production) and animation OEM companies. The radio industry consists of 171 companies based on data announced by the NCC.



Source: Drafted by this survey.

Figure 0-1. Motion picture, television, and animation broadcasting content industry chain

● 2. Chapter Overview

“2020 Taiwan Cultural Content Industry Survey Project II: Television, Motion Picture, Animation, and Radio industries” is divided into three chapters. Chapter 1 is “Spotlight,” which presents significant and relevant statistical results of the survey that are of interest to the industries, such as revenue, export value, and content production costs. Chapter 2 is “Overview,” which presents survey results for each aspect of the television, motion picture, animation, and radio industries. Besides the number of companies, scale of capital, and manpower, it also presents the revenue structure and domestic and overseas revenue of each subindustry. Chapter 3 is “Forecast,” which presents potential trends and future prospects of digital development in these industries.

Survey plans were adjusted to understand the current status of operations and context of developments in the domestic motion picture, television, animation, and radio industries, and to build on contents and research results of the Ministry of Culture’s previous “Motion Picture and Radio Content Industry Survey and Trend Research.” In addition, they were also modified to respond to current digital convergence trends, cross-sector integration and development, and fields of concern.

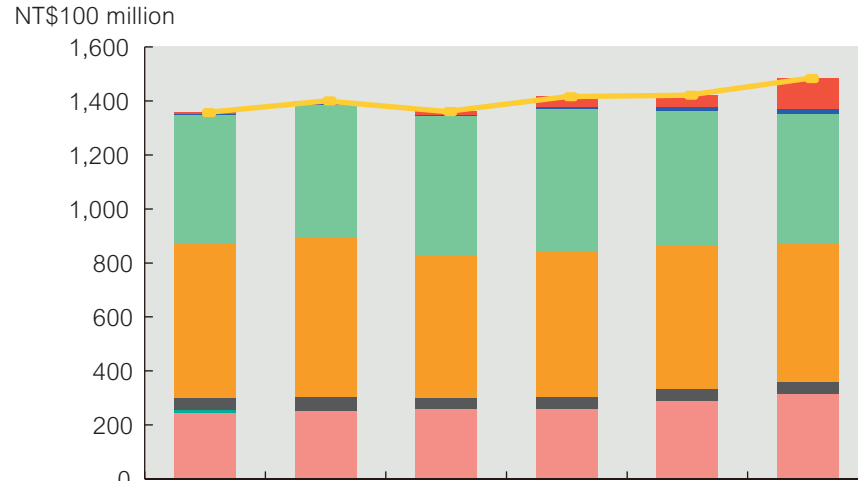
The purpose of this volume is to conduct a qualitative and quantitative survey study on various aspects of the motion picture, television, animation, and radio industries, as well as related fields. Core survey items include the actual industry scale, revenue and business model, IP licensing trends, and digital development trends. Government agencies, Taiwan Creative Content Agency, companies in the industry, and external investors can use this volume as reference to formulate related policies or determine industry developments.

Spotlight

01

● 1. Overview of the television industry revenue in Taiwan

The domestic television industry's total revenue in 2019 is estimated at NT\$148.298 billion, including revenue from television program production, program distribution, channels, platforms, online program production, and digital distribution and broadcasting, which represents an increase of 4.33% compared to 2018.



Industry	2014	2015	2016	2017	2018	2019
Digital distribution and broadcasting	6.56	11.50	13.08	37.47	44.99	111.71
Online program production	2.49	2.91	2.67	4.87	13.16	17.28
Television platform	473.15	489.84	517.94	533.76	495.58	483.56
Television channel	575.89	588.76	525.17	535.84	532.30	509.62
Television program distribution	43.92	52.89	44.12	44.15	46.82	45.47
Television program post-production	-	-	-	-	-	-
Television program production	244.82	254.27	257.75	259.56	288.56	315.34
Total revenue	1,356.83	1,400.18	1,360.73	1,415.65	1,421.41	1,482.98

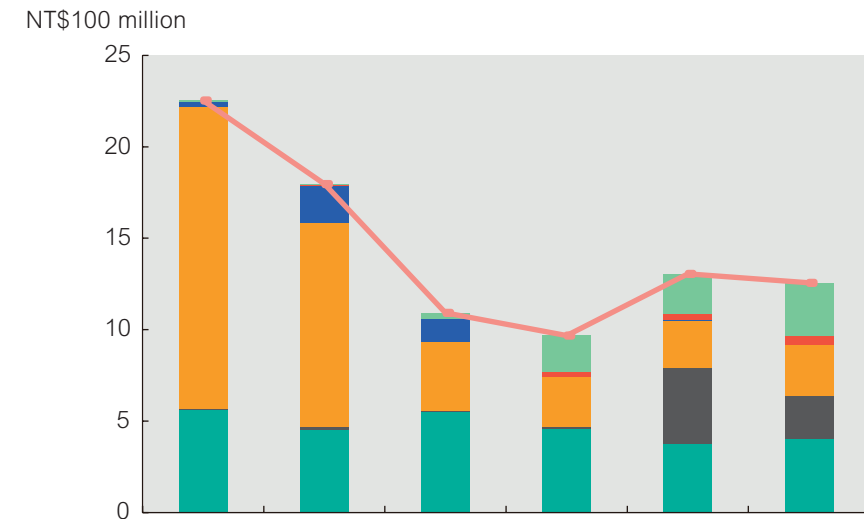
- Notes: 1. The "online program production industry" is the "online video and program production industry" referred to in the "Motion picture, Television, and Radio Industries Trend Survey Study" conducted by the BAMID, and has the same scope of data collection, analysis, and projection. The "digital distribution and broadcasting industry (including online video and live streaming platforms)" is the "online motion picture broadcasting industry" referred to in the "Motion picture, Television, and Radio Industries Trend Survey Study" conducted by the BAMID, and it has the same scope of data.
2. Statistics for the motion picture and television post-production industry cannot be divided into television post-production and motion picture post-production. After the standard industrial classification was revised in 2012, data for television post-production was included in the motion picture industry.
3. The revenue of the digital distribution and broadcasting industry in 2019 is based on revenues of companies that provide motion picture and television broadcasting services (repetition excluded), and estimates were made based on the number of users, fee plans, and market share of telecommunications operators.

Source: Estimated by the survey.

Figure 1-1. Television industry revenue in 2014-2019

● 2. Export value of the television industry in Taiwan

In terms of export performance, the domestic television industry mainly focuses on the domestic market. Its export value in 2019 was NT\$1.256 billion, a decline of 3.75% compared to 2018, in which television program production (7.69%), online program production (37.84%), digital distribution and broadcasting (33.80%), and television channels (6.87%) showed an upward trend. The television distribution industry's revenue declined by 44.07% compared to 2018. This is related to more and more television program producers and online program producers working with international OTT platforms in recent years. Platforms are investing in content instead of purchasing content, and then releasing the content globally.



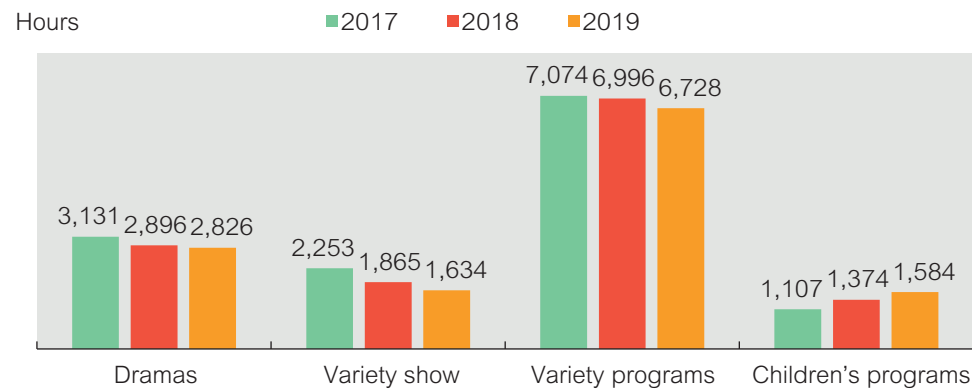
Industry	2014	2015	2016	2017	2018	2019
Television program production	5.59	4.50	5.51	4.61	3.77	4.06
Television program distribution	0.11	0.20	0.03	0.08	4.13	2.31
Television channel	16.48	11.16	3.82	2.76	2.62	2.80
Television platform	0.28	2.01	1.23	0.00	0.00	0.00
Online program production	0.01	0.07	0.04	0.25	0.37	0.51
Digital distribution and broadcasting	0.06	0.03	0.29	1.98	2.16	2.89
Total export value	22.53	17.96	10.92	9.68	13.05	12.56

Source: Estimated by the survey.

Figure 1-2. Television industry export value in 2014-2019

● 3. Television program production hours in Taiwan

A total of 12,772 hours (calculated according to the broadcasting time) of television programs were produced in Taiwan in 2019, in which the majority were general shows, accounting for approximately 52.68%, followed by dramas (including television and online), accounting for 22.13%.



Notes: The number of hours of children programs was retroactively revised.
Source: The program schedule of each channel was organized by the survey.

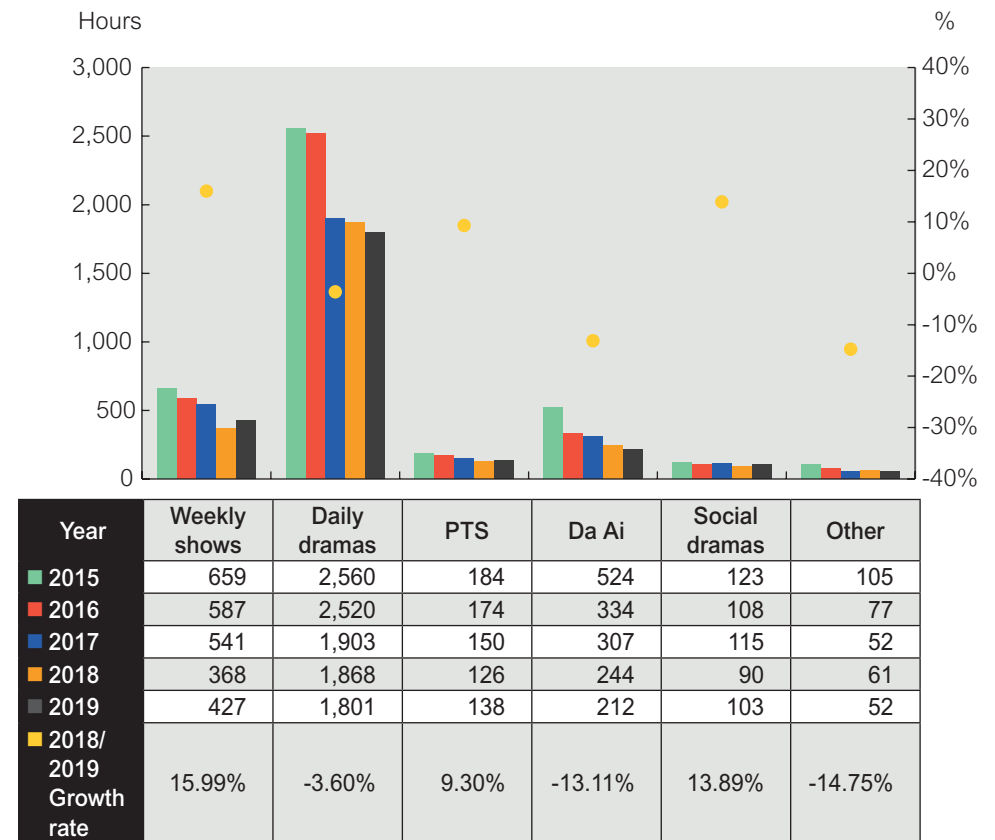
Figure 1-3. Television program production in Taiwan in 2017-2019

The number of hours of variety shows (calculated based on new programs) produced in 2019 was approximately 1,634 hours, down 12.39% compared to 2018; the number of hours of general shows (calculated based on new programs) produced in 2019 was 6,728 hours, down 3.83% compared to 2018. General shows produced in Taiwan are mainly lifestyle shows with themes such as health, cuisine, and travel.

Approximately 1,584 hours of children programs (calculated based on new programs) were produced in 2019, up 15.28% compared to 2018¹. YOYO TV produced the most programs, mainly including music and dance and science shows. The viewer age of children programs produced by YOYO TV and MOMO Kids is mainly 12 years old and under. Comparatively, programs produced by Public Television Service have a wider viewership age, mainly 12 to 18 years old.

1. The number of hours of children shows produced in 2018 was retroactively adjusted to 1,374 hours.

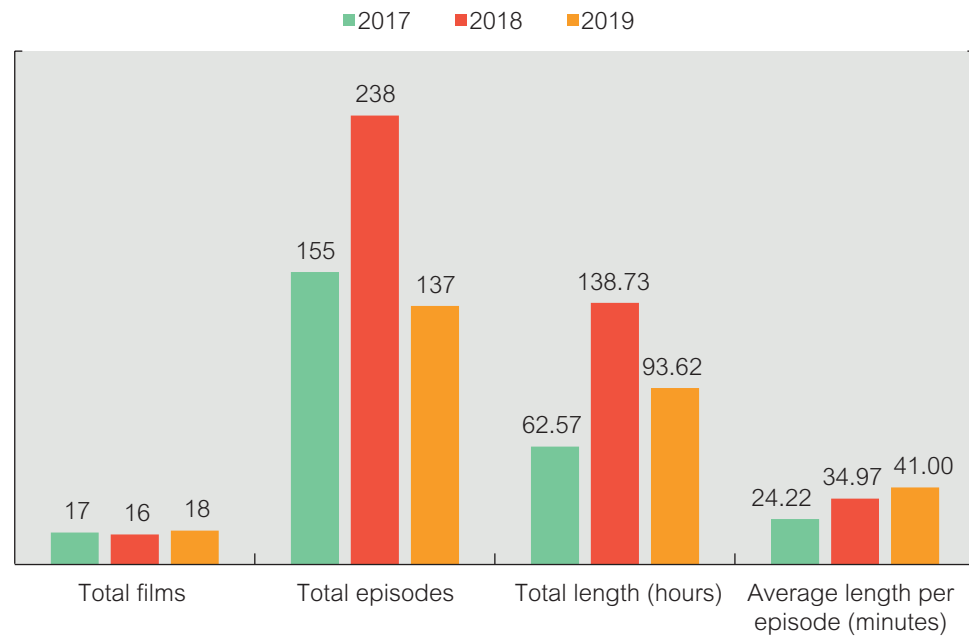
A total of 2,732 hours (calculated based on broadcasting time) of programs were produced in 2019, a slight decrease of 0.92% compared to 2018. In terms of broadcast hours for each program type, weekly shows accounted for 427 hours; daily dramas accounted for 1,801 hours; Public Television Service accounted for 138 hours (excluding donated shows), Da Ai TV series accounted for 212 hours, social dramas accounted for 103 hours; other genres (including Da Ai Enlightenment of the Zen and Taiwanese opera programs) accounted for 52 hours.



Notes: "Other genres" includes Da Ai Enlightenment of the Zen and Taiwanese opera programs.
Source: The program schedule of each channel was organized by the survey.

Figure 1-4. Comparison of the number of hours of television programs produced in 2015-2019

A total of 18 online dramas (premiered online) were produced in Taiwan in 2019 and had a total of 137 episodes, a significant decrease compared to 2018. As for hours of programs produced, 93.62 hours were produced in 2019, a decrease of 32.52% compared with the previous year. The average length of each episode increased to 41 minutes, and was mainly due to dramas that were simultaneously broadcast on television (approximately 60 minutes).

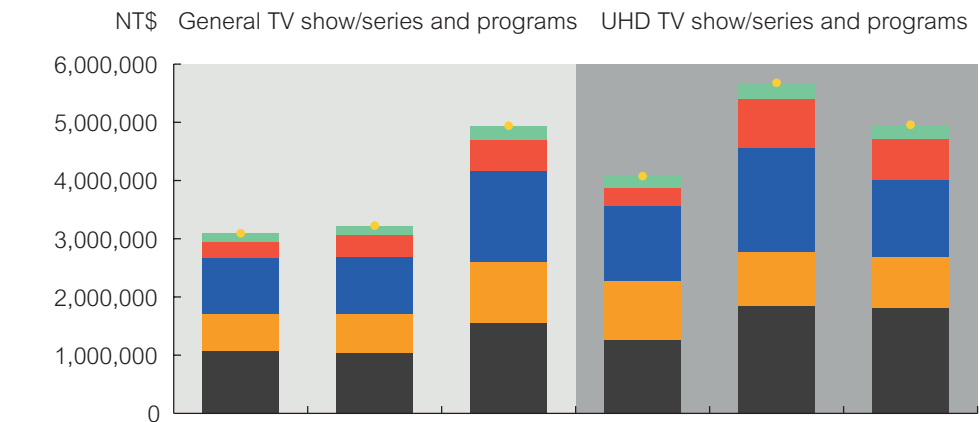


Source: Prepared by this survey.

Figure 1-5. Production of online dramas in 2017-2019

● 4. Program production cost of the television industry in Taiwan

The production of television content in Taiwan relies on government subsidies for a part of its funding. Hence, an application was submitted to the BAMID to access subsidy data and present the average production cost and structure of television content. The average production cost for a single episode of a television show/series in 2019 was NT\$4.9637 million, an increase of 53.21% compared with the previous year. With regard to UHD television content, the average production cost for a single episode of a UHD TV series was NT\$4.9806 million in 2019, down 12.70% compared to 2018.



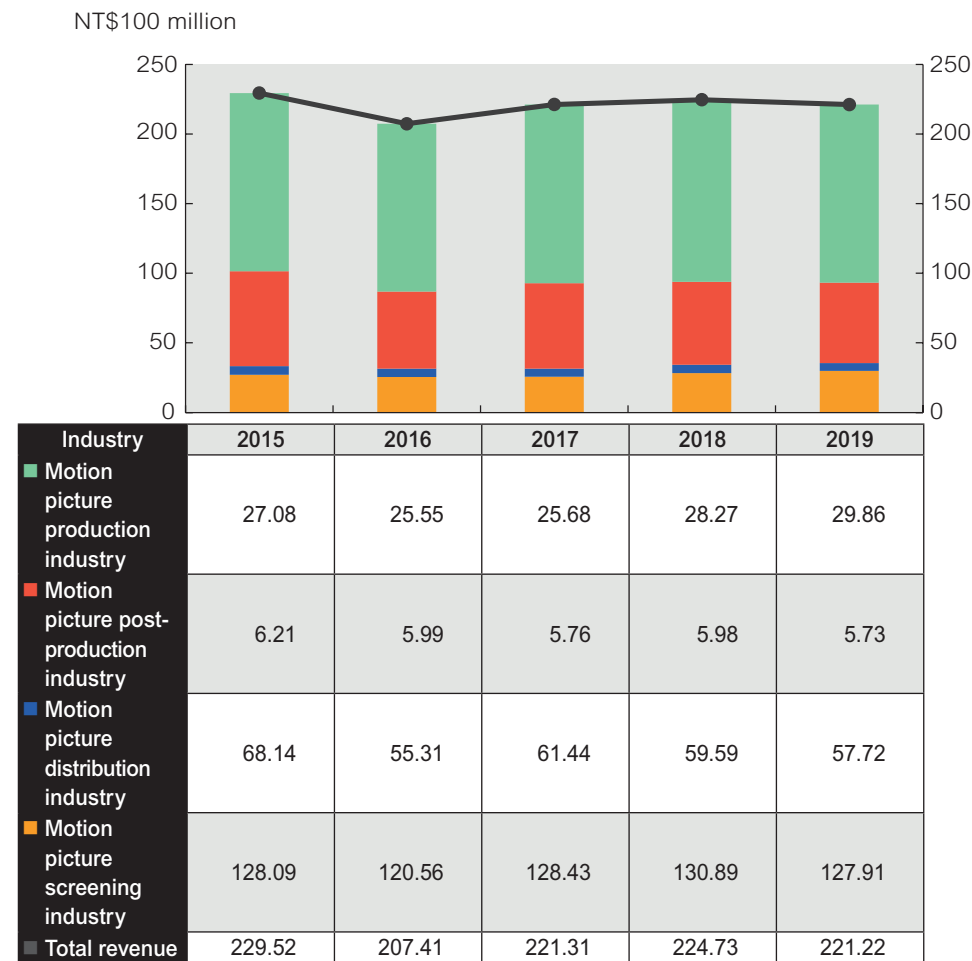
Production cost structure	2017	2018	2019	2017	2018	2019
■ Crew	1,082,661	1,058,892	1,559,723	1,270,169	1,863,974	1,828,478
■ Actor/Host	638,703	653,267	1,054,902	1,023,397	921,537	869,662
■ Filming and production	960,478	984,384	1,570,442	1,286,276	1,789,099	1,328,666
■ Post-production	278,302	389,050	542,224	320,032	859,122	716,583
■ Business tax	148,007	154,280	236,365	194,994	271,687	237,169
■ Total	3,108,152	3,239,873	4,963,655	4,094,868	5,705,419	4,980,558

Source: Data on subsidies provided by the BAMID for television program production and UHD television program production were prepared by this survey.

Figure 1-6. Changes in television show/series production cost in 2017-2019

● 5. Overview of the motion picture industry revenue in Taiwan

The total revenue of Taiwan's motion picture industry was NT\$22.122 billion in 2019, down 1.56% compared to 2018. Only the motion picture production industry's revenue grew, while all other industries declined compared to 2018. The motion picture production industry grew 5.62%, while motion picture post-production and special effects industry declined 4.22% compared with the previous year; the motion picture distribution industry and screening industry declined 3.13% and 2.28% compared to 2018, respectively.



Source: Estimated by the survey.

Figure 1-7. Motion picture industry revenue in 2015-2019

● 6. Export value of the motion picture industry in Taiwan

The export value of Taiwan's motion picture industry was NT\$482 million in 2019, up 18.86% compared to 2018. Among subindustries, export values of the motion picture production and distribution industries increased 24.14% and 10.68% compared to 2018, respectively. The export value of the post-production and special effects industry declined 7.26% compared to 2018 due to price competition from companies in Southeast Asia and South Korea.

Table 1-1. Export value of Taiwan's motion picture industry in 2015-2019

Unit: NT\$100 million, %

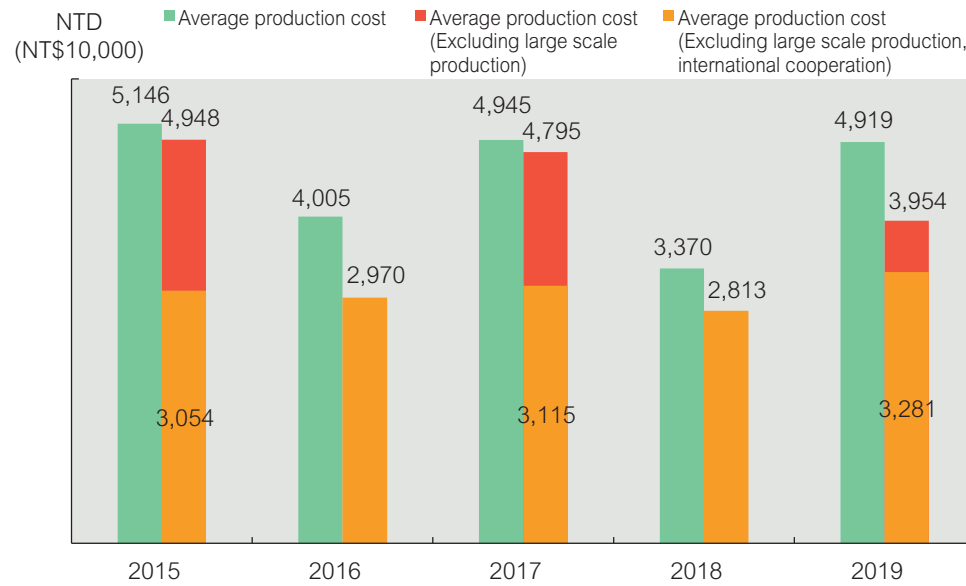
Industry	2015	2016	2017	2018	2019	Change in 2018-2019
Motion picture production	3.247	1.93	2.20	2.81	3.49	24.14%
Motion picture post-production	0.252	0.20	0.20	0.26	0.24	-7.26%
Motion picture distribution	2.802	0.5	0.69	0.98	1.09	10.68%
Motion picture screening	0.000	0.00	0.11	0.00	0.00	-
Total	6.301	2.66	3.19	4.05	4.82	18.86%

Notes: The export value of the motion picture screening industry in 2016 was NT\$3,600, including overseas revenue from service export.

Source: Estimated by the survey.

● 7. Motion picture production costs in Taiwan

The average production cost of a domestic motion picture was NT\$49.19 million in 2019. If motion pictures produced together with other countries and domestic motion pictures with extreme production cost (including marketing expenses) exceeding NT\$100 million are excluded, the average production cost in 2019 was NT\$32.81 million, higher than the average production cost in 2018.



Source: Summarized by this survey from secondary data.

Figure 1-8. Average production cost of domestic motion pictures in 2015-2019

The production cost of domestic drama and animated motion pictures was mainly in the NT\$30-50 million range in 2019, accounting for approximately 28.57%. The percentage of medium and large production scale motion pictures slightly decreased compared with the previous year and accounted for approximately 14.29%. There was only one domestic motion picture that reached the threshold for large production scale (production cost exceeding NT\$100 million) in 2019—*Mayday LIFE*.

For drama motion pictures and documentaries, the production scale of domestic dramas in 2019 was mainly NT\$30-50 million (accounting for 28.57%), followed by NT\$50-60 million (accounting for 17.86%).

Table 1-2. Overview of the production scale of domestic motion pictures in 2017-2019 (excluding P&A)

		2017		2018		2019	
		Drama and animation	Documentary	Drama and animation	Documentary	Drama and animation	Documentary
		Percentage	Percentage	Percentage	Percentage	Percentage	Percentage
Small scale	<NT\$5 million	3.70%	66.67%	7.14%	33.33%	3.57%	3.70%
	≥NT\$5 million, but <NT\$10 million	7.41%	0.00%	7.14%	33.33%	10.71%	0.00%
	≥NT\$10 million, but <NT\$30 million	33.33%	0.00%	17.86%	33.33%	21.43%	100.00%
Medium scale	≥NT\$30 million, but <NT\$50 million	18.52%	0.00%	32.14%	0.00%	28.57%	0.00%
	≥NT\$50 million, but <NT\$60 million	14.81%	0.00%	14.29%	0.00%	17.86%	0.00%
Medium-large scale	≥NT\$60 million, but <NT\$100 million	7.41%	0.00%	21.43%	0.00%	14.29%	0.00%
Large scale	≥NT\$100 million	14.81%	33.33%	0.00%	0.00%	3.57%	0.00%

Notes: Documentaries with a production scale over NT\$100 million in 2017 included *Formosa 3D* and *Leehom Wang's Open Fire Concert Film 3D*.

Source: This survey.

With regard to the detailed cost structure of domestic motion pictures that premiered in 2019, filming accounted for approximately 75.63% of the total cost, followed by post-production (14.38%), special effects (5.00%), and script development (4.99%).

Table 1-3. Cost structure of domestic motion pictures in 2015-2019

Production process	Year				
	2015	2016	2017	2018	2019
Script development	3.01%	3.78%	4.59%	6.59%	4.99%
Filming and production	77.38%	71.93%	74.74%	69.14%	75.63%
Post-production	14.03%	18.22%	15.07%	18.31%	14.38%
Special effects	5.57%	6.07%	5.60%	5.96%	5.00%
Total	100.00%	100.00%	100.00%	100.00%	100.00%

Source: Summarized by this survey from the questionnaire survey.

With regard to marketing expenses, the average marketing expense of domestic motion pictures was NT\$5.36 million in 2019, a slight increase compared with the previous year. If domestic motion pictures with total production costs and marketing costs exceeding NT\$100 million are not taken into account, the average marketing expense of domestic motion pictures was NT\$4.84 million. Overall, the marketing cost of domestic motion pictures accounted for 14.75% of overall production costs, a slight increase compared to the 13.14% in 2018.

Table 1-4. Average marketing cost of domestic motion pictures in 2019

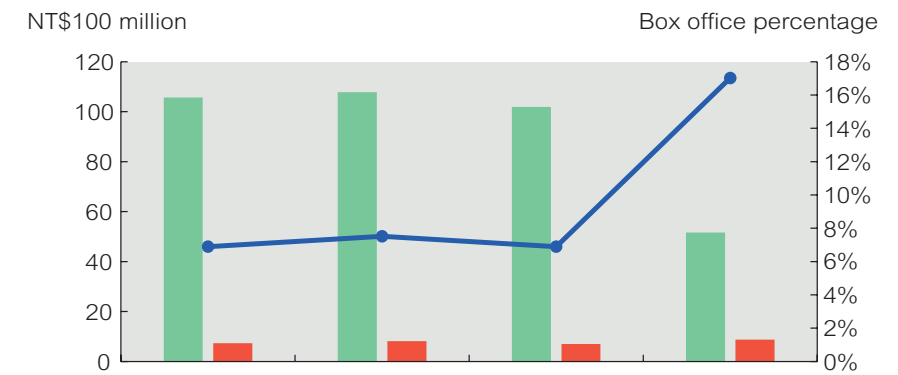
Item	Average box office	Highest box office	Lowest box office	Average marketing cost	
				Item	Average marketing cost
Small scale domestic motion pictures	<NT\$30 million	617	1,353	166	312
Medium scale domestic motion pictures	≥NT\$30 million, but <NT\$60 million	1,659	5,684	59	513
Medium-large scale domestic motion pictures	≥NT\$60 million, but <NT\$100 million	14,130	25,963	2,297	1,002
Overall		2,906	25,963	59	536
Overall (excluding domestic motion pictures with total production costs and marketing expenses exceeding NT\$100 million)		1,259	5,684	59	484

Source: This survey.

● 8. Motion picture box office performance in Taiwan

The total number of motion pictures released in Taiwan was 827 in 2019, a decline of 6.66% compared to the 886 in 2018. As for box office performance, the total box office in Taiwan was approximately NT\$10.191 billion with 43.19 million viewers in 2019, down 5.38% and 6.58% compared with the previous year, respectively. Total box office of domestic motion pictures was NT\$703 million with a market share of 6.90%, down 13.27% compared to 2018.

The total box office of Taiwan's motion picture market was approximately NT\$5.159 billion with 21.83 million viewers in 2020. The box office of domestic motion pictures was NT\$877 million with a market share of 17.02%.



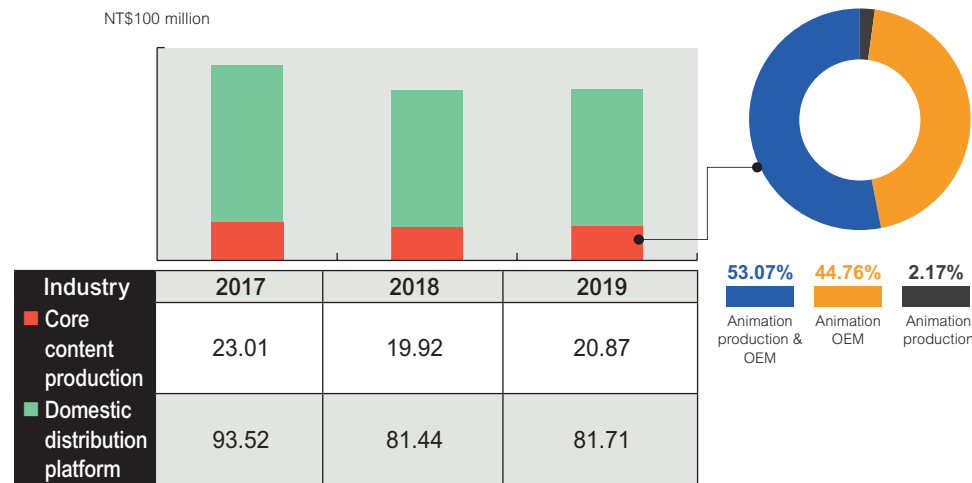
Item (NT\$1,000)	2017	2018	2019	2020
Total box office (NT\$100 million)	105.692	107.809	101.911	51.59
Box office of domestic motion pictures (NT\$100 million)	7.288	8.103	7.028	8.77
Percentage accounted for domestic motion pictures	6.90%	7.52%	6.90%	17.02%

Source: Summarized by this survey from box office data provided by the motion picture screening industry to the BAMID of the Ministry of Culture in accordance with the Motion Picture Act; 2020 data was recovered from 2020 motion picture market statistics announced by the BAMID.

Figure 1-9. Overview of the box office in Taiwan in 2017-2020

● 9. Overview of the animation industry revenue in Taiwan

The revenue of Taiwan's animation industry was approximately NT\$10.258 billion in 2019, up 1.20% compared to 2018. Approximately NT\$8.171 billion were generated from domestic distribution platforms (including television animation broadcast, animated motion picture distribution, and animated motion picture screening), up 0.33% compared to 2018.



Source: Estimated by the survey.

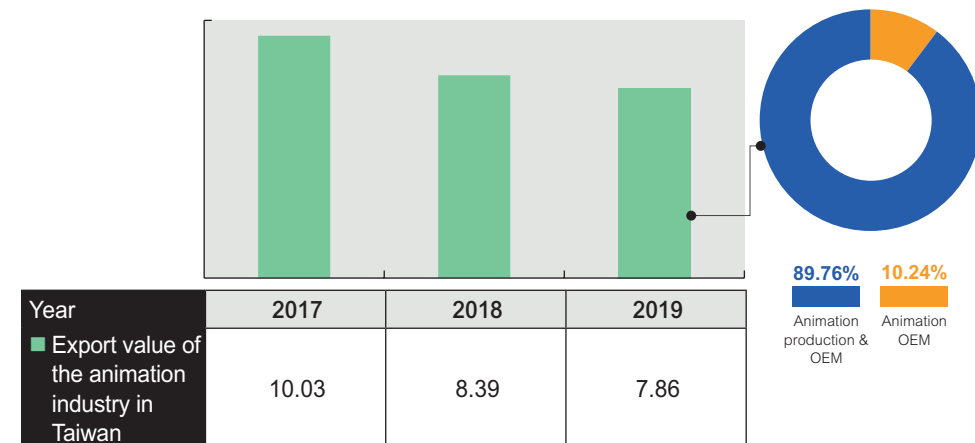
Figure 1-10. Revenue of Taiwan's animation industry in 2017-2019

Approximately NT\$2.087 billion were generated from core content production (including animation production, animation OEM, and animation production and special effects), up 4.78% compared to 2018. Of this, revenue from companies that engaged in both animation OEM and animation production accounted for approximately 53.07%, while revenue from companies that solely focus on animation OEM and animation production accounted for 44.76% and 2.17% of the revenue from core content production, respectively. This was mainly due to the steady source of cases that domestic animation OEMs and special effects companies have for animations, motion pictures, television, and special effects of games. Moreover, the active investment by domestic television and OTT platforms in television series production in recent years has driven domestic revenue growth. Companies have indicated that the unit price for television series is relatively low compared to special effects for movies, but average unit prices show an upward trend.

● 10. Export value of the animation industry in Taiwan

The animation industry's export value was NT\$786 million in 2019, down 6.28% compared to 2018, in which companies that only engaged in animation OEM accounted for approximately 10.24% of the export value, while companies that engaged in both animation production and OEM accounted for approximately 89.76% of the export value.

Domestic animation OEM and special effects companies are receiving more cases overseas for contents on international video platforms, but most of the companies are small and medium-sized. Their animation teams cannot take on large scale productions, so they mainly take on relatively small cases. Combined with the price competition from overseas animation OEM and special effects companies (such as Southeast Asia and South Korea), the average price of overseas cases received by domestic animation OEM and special effects companies decreased in 2019.



Source: Estimated by the survey.

Figure 1-11. Export structure of Taiwan's animation industry in 2019

Table 1-5. Revenue and export value of Taiwan's animation industry in 2019

Year	Unit: NT\$100 million, %			
	2017	2018	2019	Growth rate
Total revenue	116.53	101.36	102.58	1.20%
Core content production	23.01	19.92	20.87	4.78%
Domestic distribution platform	93.52	81.44	81.71	0.33%
Export value of core content	10.03	8.39	7.86	-6.28%

Notes: Revenue estimates for 2017 and 2018 only included animation OEM and animation production companies, and did not include animation special effects companies. Animation special effects companies were included in estimates in 2019.

Source: Estimated by the survey.

● 11. Overview of the radio industry revenue in Taiwan

The radio industry's 2019 revenue is estimated at NT\$6.535 billion, up 4.78% compared to 2018. Despite the decline in advertising revenue, companies have been actively developing new business models, including digital channel development and the 11th batch of licenses released for radio channels. In addition, the broader audience reach has driven the radio industry's revenue growth.

Revenue estimates of this survey rely on the business tax statistics for the six-digit standard industrial classification (SIC) code. However, based on the sales revenue displayed under the SIC code, it is possible that other cultural content industries were classified under the same SIC code. Furthermore, there has not been a complete questionnaire survey and in-depth interview of the radio industry since 2015, so there are not enough detailed and concrete standards. Hence, only estimates of the overall industry's revenue are provided this year.

Table 1-6. The radio industry revenue in 2014-2019

Unit: NT\$100 million, %

Year	2014	2015	2016	2017	2018	2019
Radio industry revenue	70.26	69.09	65.32	64.80	62.37	65.35
Annual growth rate	-	-1.67%	-5.46%	-0.80%	-3.75%	4.78%

Source: Estimated by the survey.



Overview

02

● 1. Television industry

1.1. Overall industry overview

1.1.2. Number of companies in the domestic television industry in 2019

According to the number of production companies that produced television programs in 2015-2019, the list of applicants for the Golden Bell Awards, the list of applicants for subsidies from the Ministry of Culture, the list of companies that were approved by the National Communications Commission for a license, and tax registration data of the Ministry of Finance, and business registration data of the Ministry of Economic Affairs, the television industry encompasses approximately 1,004 companies, in which the majority are in the television content industry (approximately 729 companies accounting for 72.61%).

Table 2-1. Companies and percentage of each subindustry of the television industry in 2019
Unit: Number of companies, %

Industry	Number of companies	Percentage
Television program production industry	669	66.63%
Television program post-production industry	-	-
Television program distribution industry	60	5.98%
Television content industry	729	72.61%
Television channel industry	118	11.75%
Television platform industry	65	6.47%
Online program production industry	80	7.97%
Digital distribution and broadcasting industry	12	1.20%
Total	1,004	100.00%

Source: Fiscal Information Agency of the Ministry of Finance.

1.1.2. Average scale of capital in the domestic television industry in 2019

The capital of companies in the television program production and distribution industry is mainly NT\$1-5 million, accounting for approximately 41.77% of companies, followed by NT\$5-10 million (accounting for 22.60%); approximately 45.21% of companies have a capital of NT\$5 million and under, and 6.39% of companies have a capital of NT\$100 million and above. The capital of companies in the online program production industry is relatively low compared with other industries with approximately 60% at NT\$5 million and under. Compared with television program production companies, most are new companies that entered the industry in recent years.

The average paid-in capital of television channel operators was NT\$376 million in 2019, and most are large scale companies. The capital of 43.44% of companies is NT\$50-100 million, followed by NT\$100-500 million (accounting for approximately 26.23%). The capital of domestic television platform operators is mainly NT\$500 million and above (79.69%).

In the digital distribution and broadcasting industry, online video platforms are not the main business item of most companies. For example, domestic telecom operators (e.g., Chunghwa Telecom, Taiwan Mobile, Far East Tone, etc.), television

channel operators (e.g., SET TV, FTV, ELTA TV, and TTV), and other motion picture companies, such as CatchPlay and Joint Entertainment, have launched their own platform, and only a few companies such as KKTV mainly operate on online platforms. Furthermore, most international platforms only establish an office in Taiwan, and television channel operators joining the industry have increased scale of capital of the domestic digital distribution and broadcasting industry. Hence, the scale of capital of companies in the digital distribution and broadcasting industry has become polarized.

Table 2-2. Capital scale of companies in the television and online video industries in 2019
Unit: %

Category	Television program Production and distribution industry	Online video Program production industry	Television channel industry	Television platform industry	Digital distribution and broadcasting industry	Total
≤NT\$100,000	0.25%	0.92%	-	-	-	0.27%
NT\$100,000-NT\$500,000 (exclusive)	2.21%	6.42%	-	-	3.13%	2.32%
NT\$500,000-NT\$1 million (exclusive)	0.98%	3.67%	-	-	-	1.09%
NT\$1 million-NT\$5 million (exclusive)	41.77%	49.54%	-	1.56%	3.13%	30.79%
NT\$5 million-NT\$10 million (exclusive)	22.60%	13.76%	-	-	6.25%	14.85%
NT\$10 million-NT\$50 million (exclusive)	21.62%	22.02%	14.75%	-	15.63%	18.39%
NT\$50 million-NT\$100 million (exclusive)	4.18%	1.83%	43.44%	1.56%	12.50%	10.49%
NT\$100 million-NT\$500 million (exclusive)	5.65%	1.83%	26.23%	17.19%	28.13%	10.49%
NT\$500 million-NT\$1 billion (exclusive)	0.25%	-	4.10%	40.63%	6.25%	4.63%
≥NT\$1 billion	0.49%	-	11.48%	39.06%	25.00%	6.68%
Total	100%	100%	100%	100%	100%	100%

Source: Business registration of the Ministry of Economic Affairs compiled by this survey.

1.1.3. Number of people employed in the domestic television industry in 2019

The number of people employed in the domestic television industry is estimated at 25,300 people in 2019, a slight decrease of 0.67% compared to 2018. The television content industry has a total of 5,517 employees, up 6.02% compared to 2018; the television channel industry has approximately 13,500 employees, down 4.25% compared to 2018 due to the decline in the industry's revenue; the cable TV system industry has approximately 6,350 employees, up 1.81%.

Table 2-3. Number of people employed in the television industry in 2014-2019

Industry	Year							2018-2019 Rate of change	Gender ratio in 2019	
	2014	2015	2016	2017	2018	2019	Male		Female	
Television content industry	5,107	4,836	4,753	4,782	5,204	5,517	6.02%	46.65%	53.35%	
Television channel	14,463	14,933	14,167	14,169	14,077	13,479	-4.25%	55.78%	44.22%	
Cable system operators ²	5,727	6,003	6,150	6,438	6,237	6,350	1.81%	63.36%	36.64%	
Total	25,297	25,772	25,070	25,389	25,518	25,346	-0.67%	55.16%	44.84%	

Source: Estimated by this survey.¹

2. Only cable TV system operators are calculated for number of people employed. Cable TV broadcasting system operators and IPTV (Chunghwa Telecom MOD) are not included.

1.2. Revenue and business model

The development of OTT platforms and digitally native content has affected the willingness of advertisers to place advertisements in the television industry, and continue to transfer advertisements to the Internet and social media. This has made it difficult for the profit model of television channel operators transforming ratings into advertising revenue.

More and more television channel and platform operators have been working together to find a new business direction after 2019. Some even working with domestic online video platforms and integrating different channels and content resources to improve the quality of content, and also offer customized products and related services that people need. This increases their opportunities to reach people and increases the exposure of content.

In recent years, despite the improvement in premium online video content in Taiwan, most people still view free content with advertisements, and the actual amount of subscription fees received by platform operators is limited. Overall online advertisement revenue increased in 2019, but the advertisements were mainly placed on Google (including YouTube), Yahoo, or large media platforms mainly directed towards the target audience. The amount of advertising revenue of individual platforms is limited. Hence, there are companies collaborating with alliances of domestic channel operators and online video platforms, and attracting subscribers through customized on-demand video content.

Furthermore, as overseas OTT platform operators enter Taiwan's motion picture market one by one, besides stepping up efforts to attract attention and subscribers, the abundant capital and advantages of the platforms in overseas markets give them the ability to allocate higher budgets for content production, which attract outstanding teams to produce high quality content and sell perpetual overseas licenses to overseas platform operators.

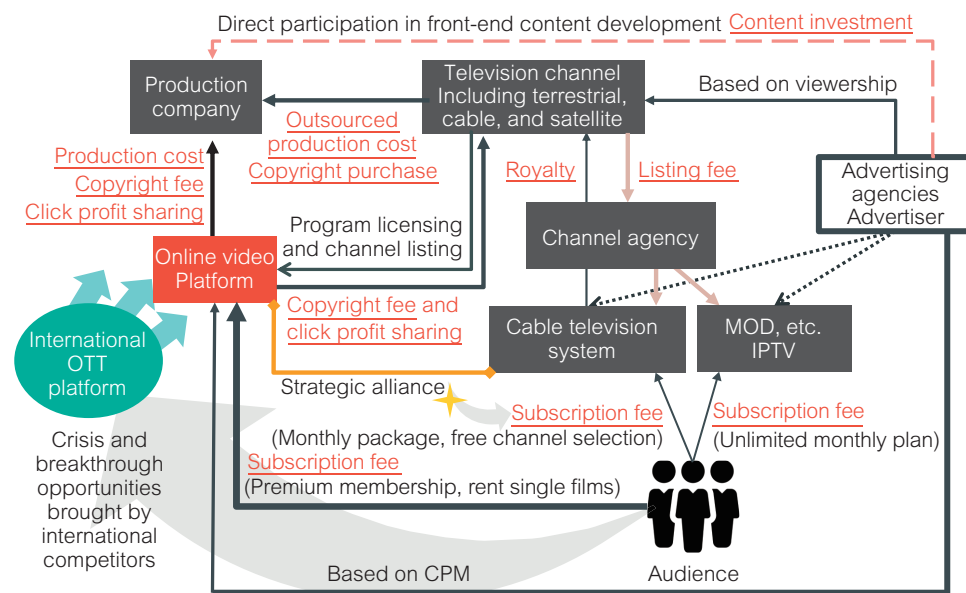
However, domestic video platform operators and television platform operators are also actively forming alliances due to competition from overseas operators, releasing smart OTT and sharing abundant content resources to expand the customer market, increasing opportunities to receive subscription fees in addition to advertising revenue. Recently, an increasing number of advertising agencies have been assisting advertisers in participating in content production, and directly provide advertising resources to provide a stable budget for program production, combining television program content with content related to the advertiser while improving the presentation of advertisement placement.

1.2.1. Revenue structure in the current year—Revenue items

The revenue of over 50% of television program production and distribution companies in Taiwan was less than NT\$10 million (55.84%) in 2019; the revenue of over 60% of online program production companies was less than NT\$10 million, and the top percentage of companies in both industries had a revenue of NT\$1-5 million.

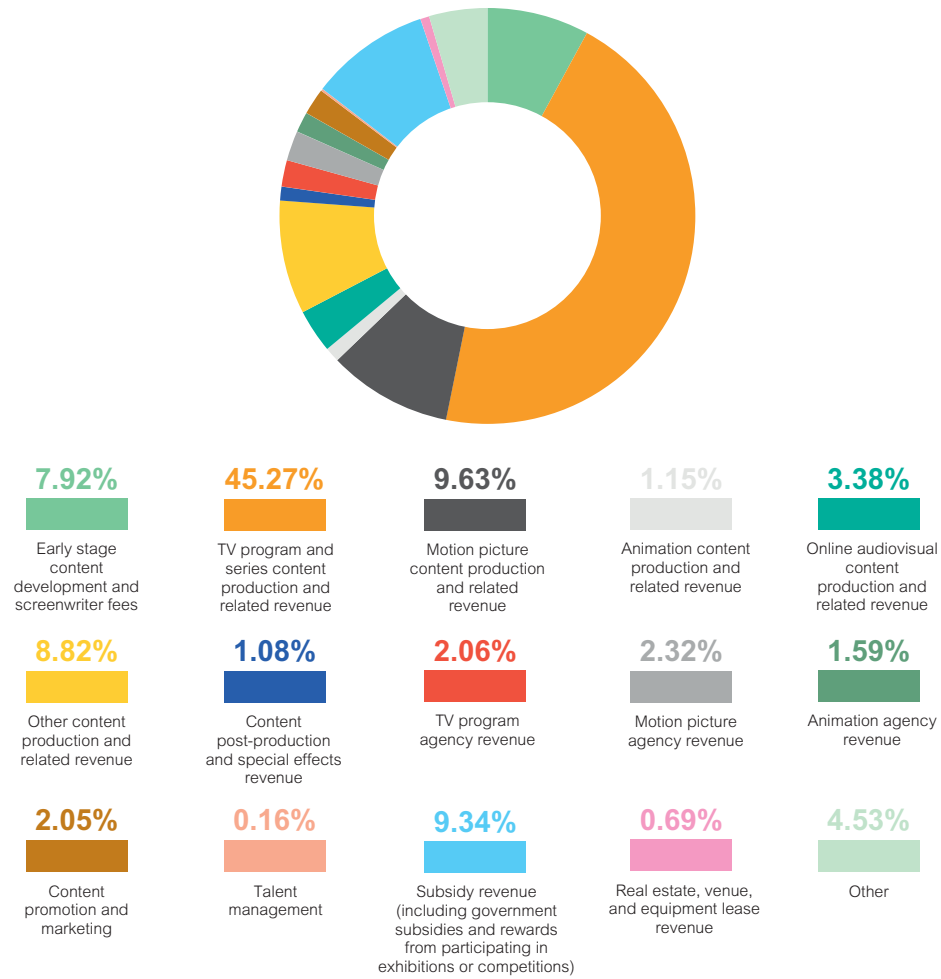
In the television channel industry, the revenue of 50% of companies is NT\$100 million and above, in which the majority of companies had a revenue of NT\$100-200 million and NT\$500 million and above. The revenue of most television platform operators was NT\$400 million and above, accounting for 56.52% of companies. The digital distribution and broadcasting industry consists of digitally native platforms, telecom operators, or channel operators crossing over to the industry. The companies have significantly different revenues and over 30% have a revenue of NT\$500 million and above.

Television program content production and related revenue (including production fees, licensing fees, sales, and advertisements) are the main sources of revenue of television program production and distribution companies, accounting for approximately 45.27% of their revenue. Approximately 22.99% of revenue is generated from motion pictures (9.63%), other content (e.g., video advertisements 8.82%), and online video content (3.38%); overall content production and related revenue accounts for approximately 68.26% of the revenue.



Source: This survey.

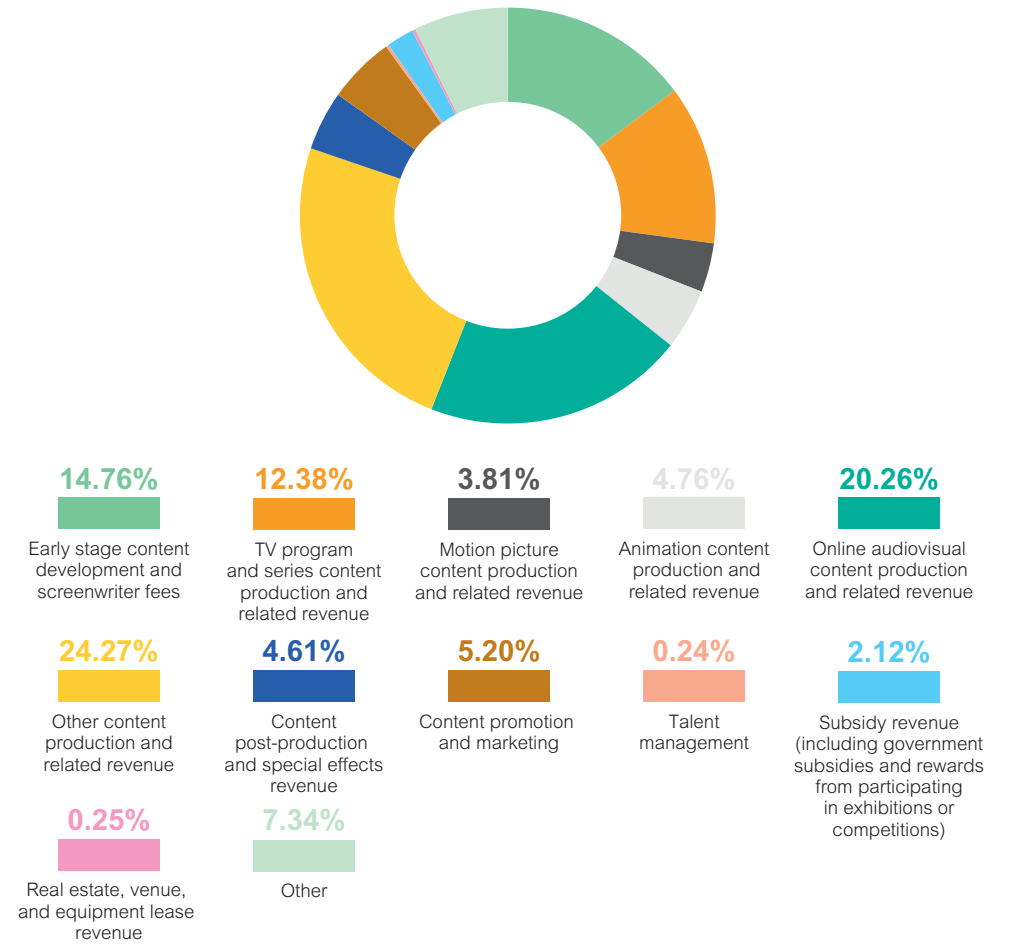
Figure 2-1. Changes in main cash flow relations in the television industry



Source: Summarized by this survey from the questionnaire survey.

Figure 2-2. Revenue structure of the television program production and distribution industry in 2019

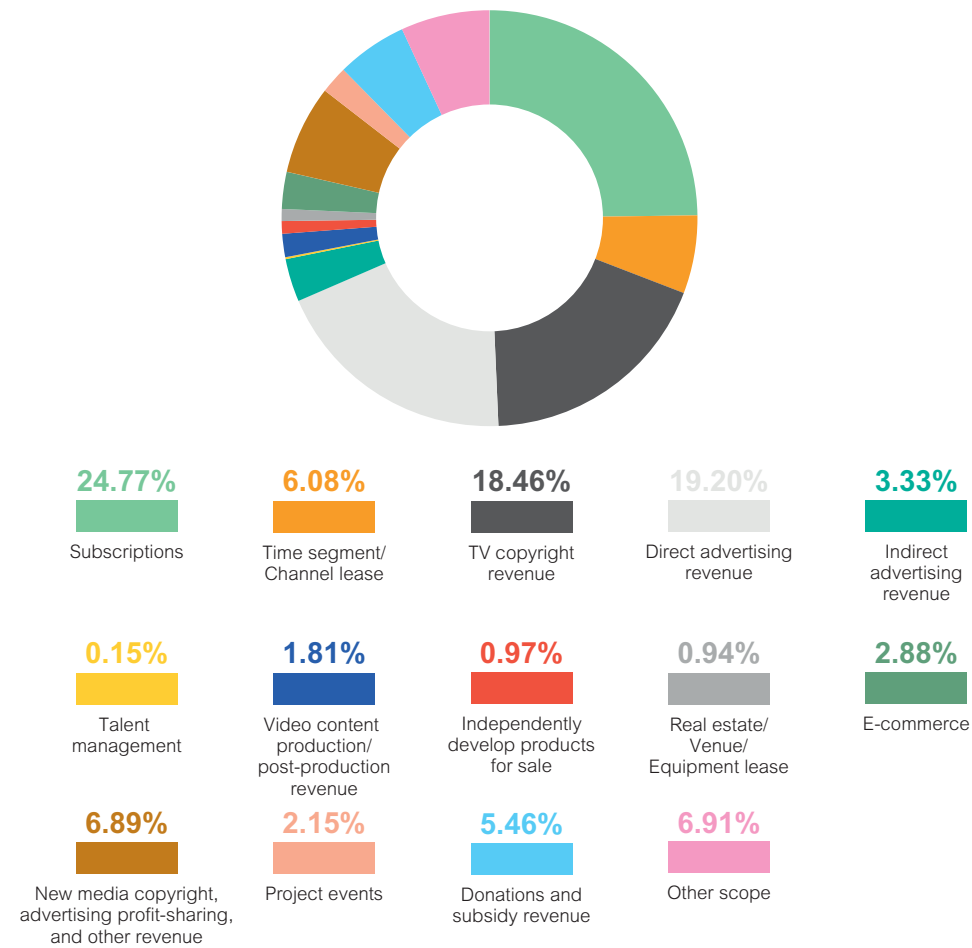
The domestic online program production industry's main source of revenue in 2019 was the production of advertisements and promotional videos, which accounted for approximately 24.27% of the revenue, followed by the online content production revenue at 20.26%.



Source: Summarized by this survey from the questionnaire survey.

Figure 2-3. Revenue structure of the online program production industry in 2019

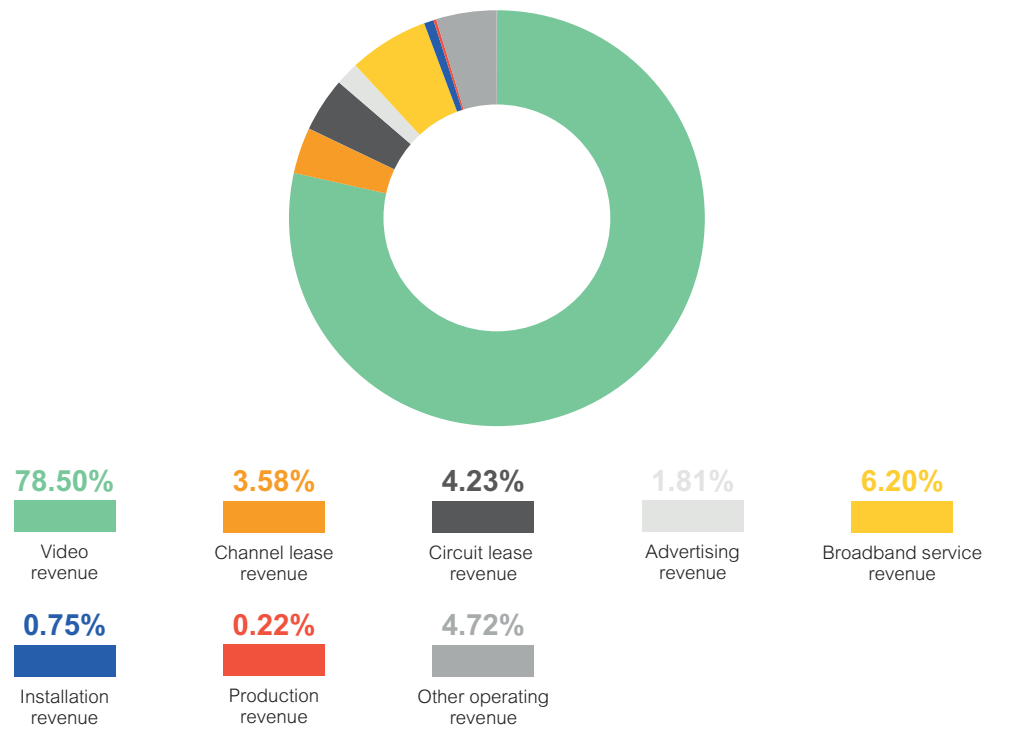
Subscription fees and direct advertising revenue were the main sources of revenue for television channel operators in 2019, accounting for 24.77% and 19.20% of their revenue, respectively.



Source: Summarized by this survey from the questionnaire survey.

Figure 2-4. Revenue structure of the television channel industry in 2019

Video revenue was still the main source of revenue of the television platform industry in 2019, accounting for 78.50% of its revenue. Broadband services accounted for 6.20% of revenue, up 4.71% compared to 2018.



Source: Summarized from the survey questionnaire.

Figure 2-5. Revenue structure of the television platform industry in 2019

The net revenue of cable TV systems in 2019 declined compared to 2018. Only New Changhua Digital Cable TV Co., Ltd. and Taiwan Optical Platform achieved net revenue growth and led to the improvement in the sector compared to 2018.

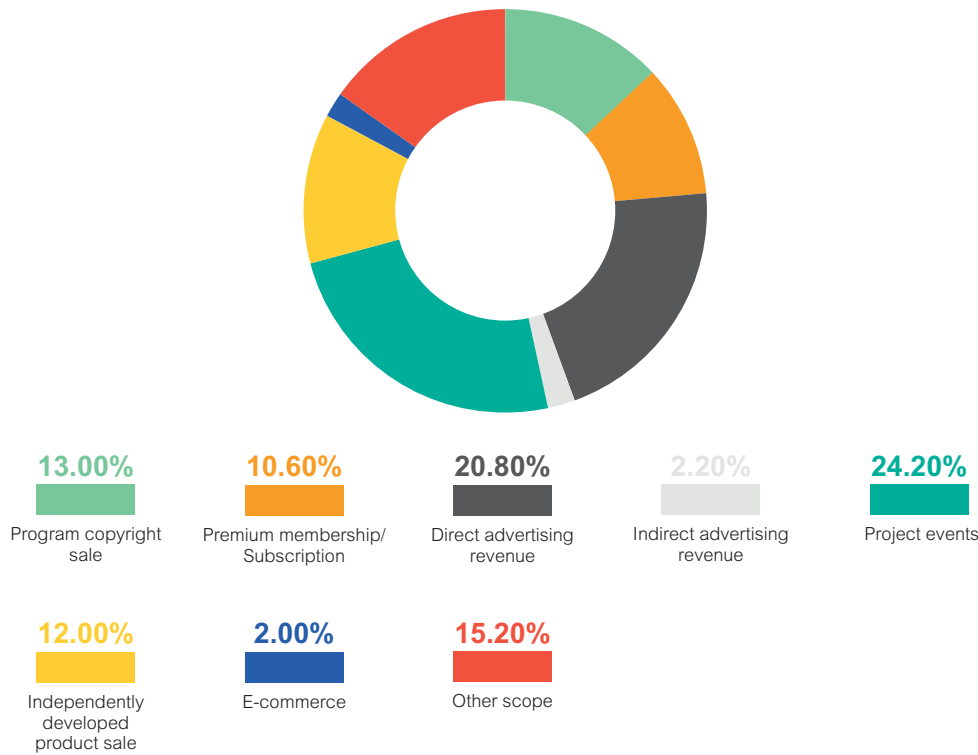
Table 2-4. Changes in revenue of major cable TV systems in 2019

Unit: NT\$1 million, %

Region	Average net revenue in 2019	Rate of change in average revenue in 2018/2019
Taipei City, New Taipei City, Keelung, and Yilan	487	-2.65%
Taoyuan, Hsinchu, and Miaoli	869	-3.83%
Taichung, Changhua, and Nantou	773	2.44%
Yunlin, Chiayi, and Tainan	533	-3.17%
Kaohsiung and Pingtung	810	-1.22%
Hualien and Taitung	304	-10.43%

Source: Summarized from Taiwan's Sizeable Enterprises TOP 5000 of China Credit Information Service, Ltd. in 2020.

Among the main sources of revenue of the digital distribution and broadcasting industry in 2019, events co-organized with platforms were the main source of income (24.20%), followed by advertising revenue (including direct and indirect advertising revenue), which accounted for 23.00%.



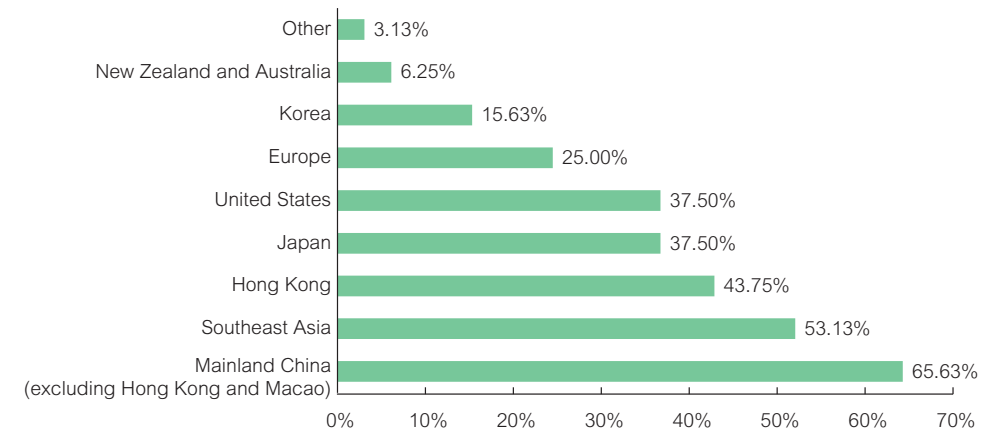
Source: Summarized by this survey from the questionnaire survey.

Figure 2-6. Revenue structure of the digital distribution and broadcasting industry in 2019

1.2.2. Regions and overview of overseas revenue

The overseas revenue of main exporters (television channels, television program production and distribution, and online program production companies) in the television industry in 2019 came mainly from China, accounting for approximately 65.63%, followed by Southeast Asia, accounting for approximately 53.13%.

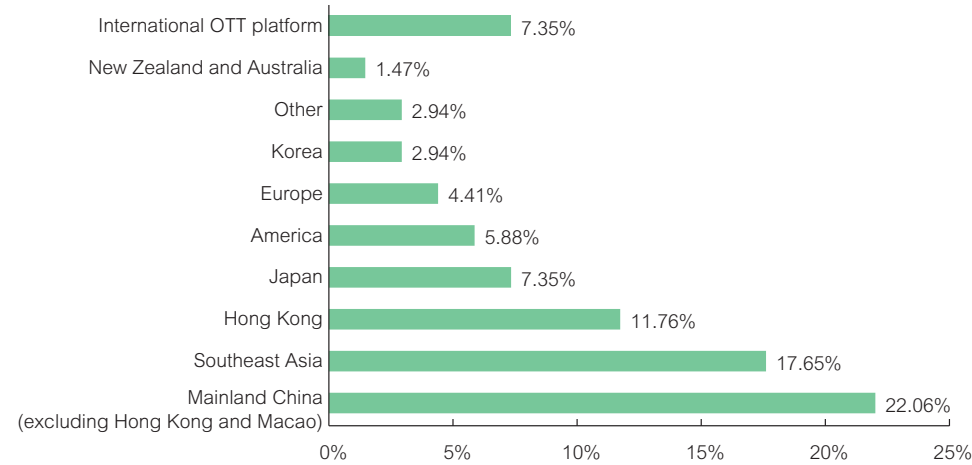
Due to the continued development of OTT platforms, domestic television program content can be exported to China on China's three major OTT platforms, or BAT (Baidu, Alibaba, and Tencent). Taiwan's television program content has been rarely broadcast on television channels in Japan and Hong Kong in recent years, but an increasing amount of content produced in the current year has been broadcast on local OTT platforms, increasing the overseas revenue of some companies.



Source: Summarized by this survey from the questionnaire survey.

Figure 2-7. Source of overseas revenue of television content in 2019 by country (number of companies and percentage)

Copyrighted content of Taiwan's television industry (television channels, television program content production and distribution, and online program production) is mainly licensed to regions with a Chinese population, including China (excluding Hong Kong and Macao, 22.06%), Southeast Asia (17.65%, such as Singapore and Malaysia), and Hong Kong (11.76%). In recent years, more and more companies are no longer limiting licenses to their content to a single region or country, and are negotiating with international OTT platforms to release their works on the platforms for more overseas exposure.



Source: Summarized by this survey from the questionnaire survey.

Figure 2-8. Regions where domestically produced content was licensed in 2017-2019 (number of companies and percentage)

Furthermore, besides licensing television content to international OTT platforms, more and more television program production companies and channel operators are reaching agreements with OTT platforms to invest in content development. Hence, transactions with overseas companies are no longer limited to exports and international licenses.

Overseas markets for Taiwanese TV series in 2019 mainly included China, Hong Kong, Singapore, and Malaysia. Domestic companies are also expanding into overseas markets through international joint production, such as *All is Well* jointly produced by Taiwan and Singapore, which was broadcasted on Singapore's MediaCorp Channel 8 and Channel U during their segments for local drama, increasing the overseas exposure of Taiwan's content.

Overseas OTT platforms have become a new channel for exporting content. For example, the TV series *The World Between Us* was exported overseas by Catchplay and HBO in 2019, and released on a Japanese OTT platform. Platforms in Europe and America have also negotiated licensing to broadcast the TV series.

Table 2-5. TV series produced in 2019 that were broadcasted overseas

Title	Premiere channel	Average viewership of premiere	Country/Region
Hello Again!	TTV Main Channel	1.40	Hong Kong, Malaysia, Singapore, Brunei, India
All is Well	TTV Main Channel	0.28	Malaysia, Singapore
Back To Home	TTV Main Channel	1.37	Singapore, India, Australia, New Zealand
Brave to Love (2019)	TTV Main Channel	0.61	Malaysia, Singapore, Brunei
Before We Get Married	TTV Main Channel	0.90	India, the Philippines, Hong Kong, Macao, Thailand, Vietnam, Indonesia, South Korea, Singapore, China
Without Her, Even Hero is Zero	TTV Main Channel	0.58	China
Let's go crazy on LIVE	TTV Main Channel	0.91	Hong Kong, India, Singapore, Malaysia, Brunei
Someday or One Day	Taiwan CTV Main Channel	0.81(2019)	Over a hundred countries and regions including Japan
The Making of an Ordinary Woman	CTS Main Channel	1.35	Japan, Malaysia, Singapore, Indonesia
Best Interest	CTS Main Channel	0.81	Japan, Malaysia, Singapore
The Mirror	FTV Terrestrial Channel	1.00	Malaysia
The Love Story in Banana Orchard	SET	2.26	Malaysia
The Missing Half	SCC	0.11	China, Hong Kong, Singapore, Malaysia, Myanmar, Thailand, Cambodia, Indonesia, South Africa, Vietnam, Mongolia, Maldives, the United Kingdom
Yong-Jiu Grocery Store	SL2 CTS Main Channel	0.69	India, Malaysia, Japan
Déjà vu	TTV Main Channel	0.21	Malaysia, China
My Goddess*	TTV Main Channel	0.56(2019)	China, Malaysia
The Fearless	GTV	0.18	Malaysia, Singapore, Brunei
Welcome Happy Together	CTS Main Channel	0.07	Malaysia
My Hero, My Daddy	SL2	0.74	Singapore
The Sound of Happiness*	SET	3.17	Singapore, Malaysia
CODE 2	SCM	0.18	Singapore, Hong Kong, the Philippines, China
The World Between Us	PTS Main Channel	1.84	Hong Kong, Singapore, New Zealand, Australia, Japan, countries with HBO Asia
The Teenage Psychic 2	PTS Main Channel	1.15	Premiered in countries with HBO Asia
Hate the Sin, Love the Sinner	PTS Main Channel	0.78	Countries with Netflix
Green Door	PTS Main Channel	0.78	Countries with Netflix
A Taiwanese Tale of Two Cities*	PTS Main Channel	-	China, countries with Netflix
Coolie	PTS Main Channel	1.16	Malaysia, Singapore
Girl's Power*	TVBS-G	1.36	Singapore

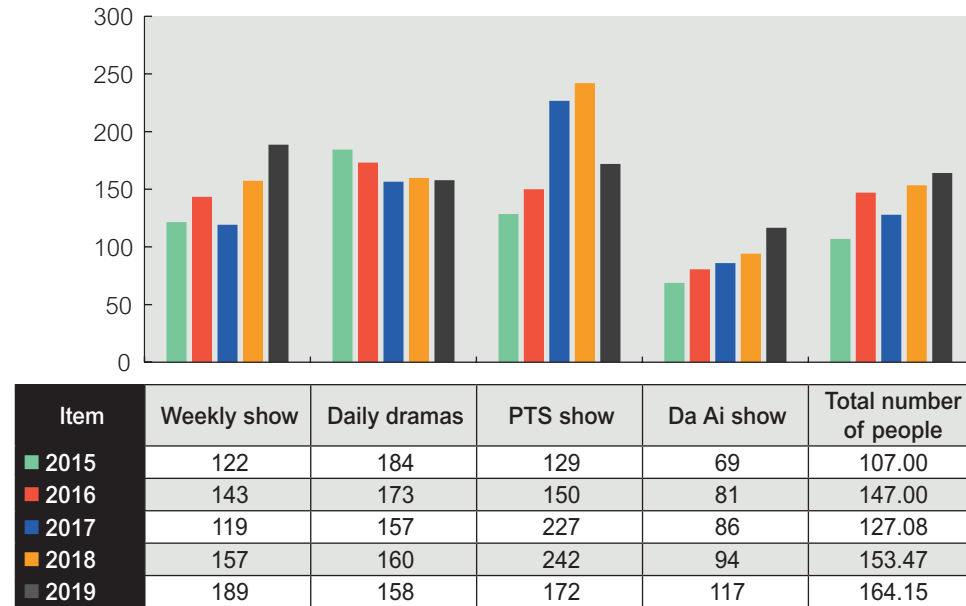
Notes: 1. TV series with an asterisk (*) cross over different years

2. Rating statistics are from Nielsen and for the entire series. The year is indicated in parentheses if only 2019 is calculated.

Source: Summarized by this survey (data retrieved on December 31, 2020).

1.2.3. Manpower for programs overview

This study takes inventory of the manpower (including actors³) for newly-produced dramas in 2019, including 20 weekly shows, 14 daily shows, 12 Public Television shows, and 10 Da Ai TV shows. The average manpower for production in 2019 increased 6.96% compared to 2018. The average production manpower for weekly shows in 2019 increased 20.38% compared with the previous year. ¹

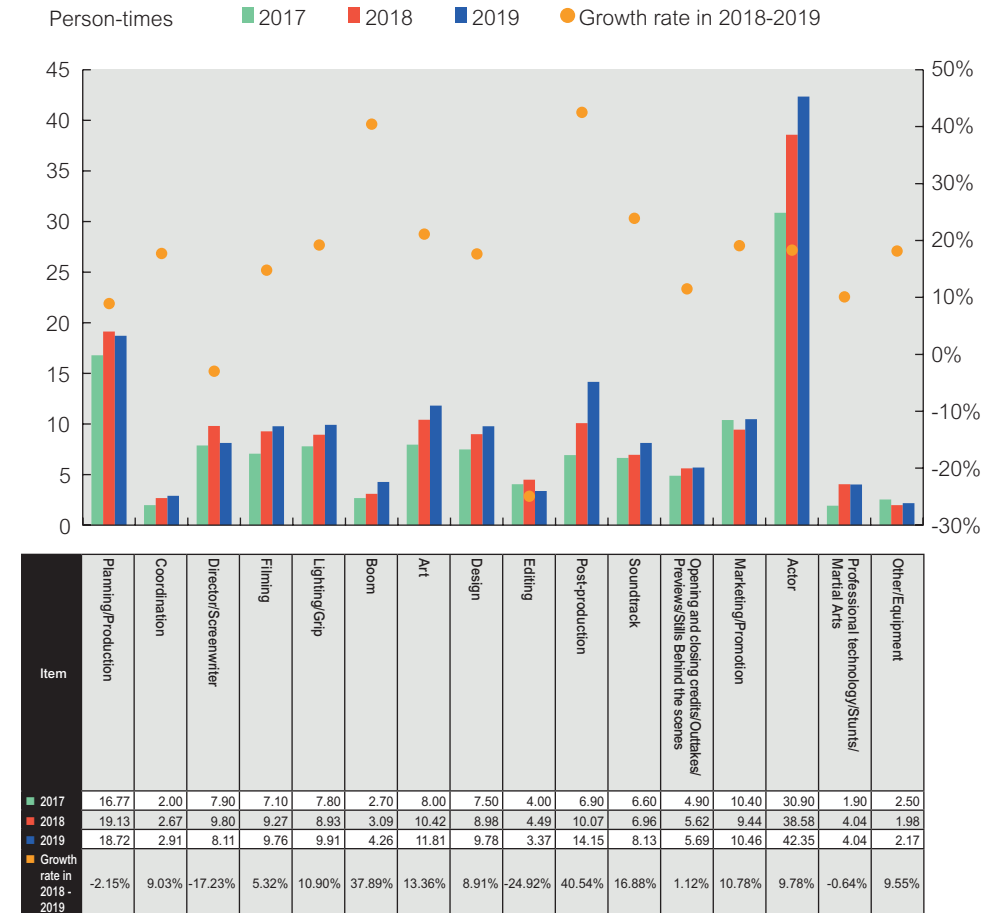


Source: Summarized by this survey from the list of actors and staff of each program.

Figure 2-9. Average production manpower per TV series in 2015-2019 (including actors)

The average manpower (excluding extreme values of multi-national productions) was 164.15 persons in 2019. Breaking down manpower by each position, actors accounted for the highest percentage (approximately 25.58%) with an average of 42.35 actors per TV series. Planning/production and post-production manpower accounted for 11.31% and 8.54% of total production manpower, respectively. Many companies have been filming suspense, fantasy, and horror motion pictures in recent years, and this has led to higher post-production requirements, which also resulted in manpower adjustments. Generally speaking, the distribution of TV series production manpower in 2019 and 2018 was very similar.

With regard to manpower used in each aspect, the amount of manpower in each position in 2019 increased compared to 2018, in which the amount of manpower used for post-production increased 40.54% compared to 2018 due to the increase in multi-national and cross-platform productions with higher budgets in 2019. Marketing manpower also increased compared with previous years. Furthermore, the amount of manpower used for planning and coordination has increased, such as the addition of talent coordinator and screenwriter coordinator positions, in some motion picture crews, showing that the growing production scale has driven demand on different types of coordination positions.

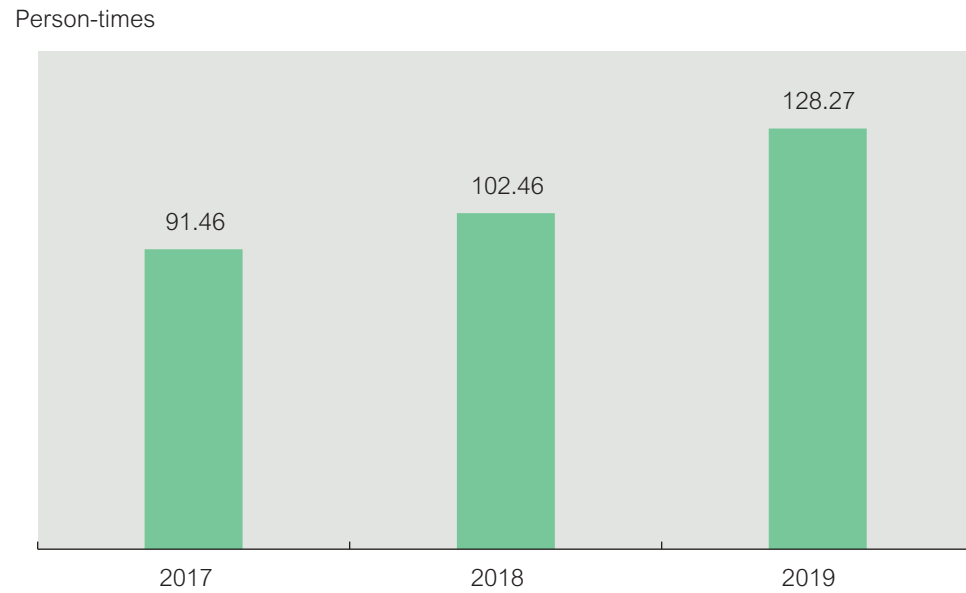


Source: Summarized by this survey from the list of actors and staff of each program.

Figure 2-10. Changes in average production manpower per TV series in 2017-2019 (including actors)

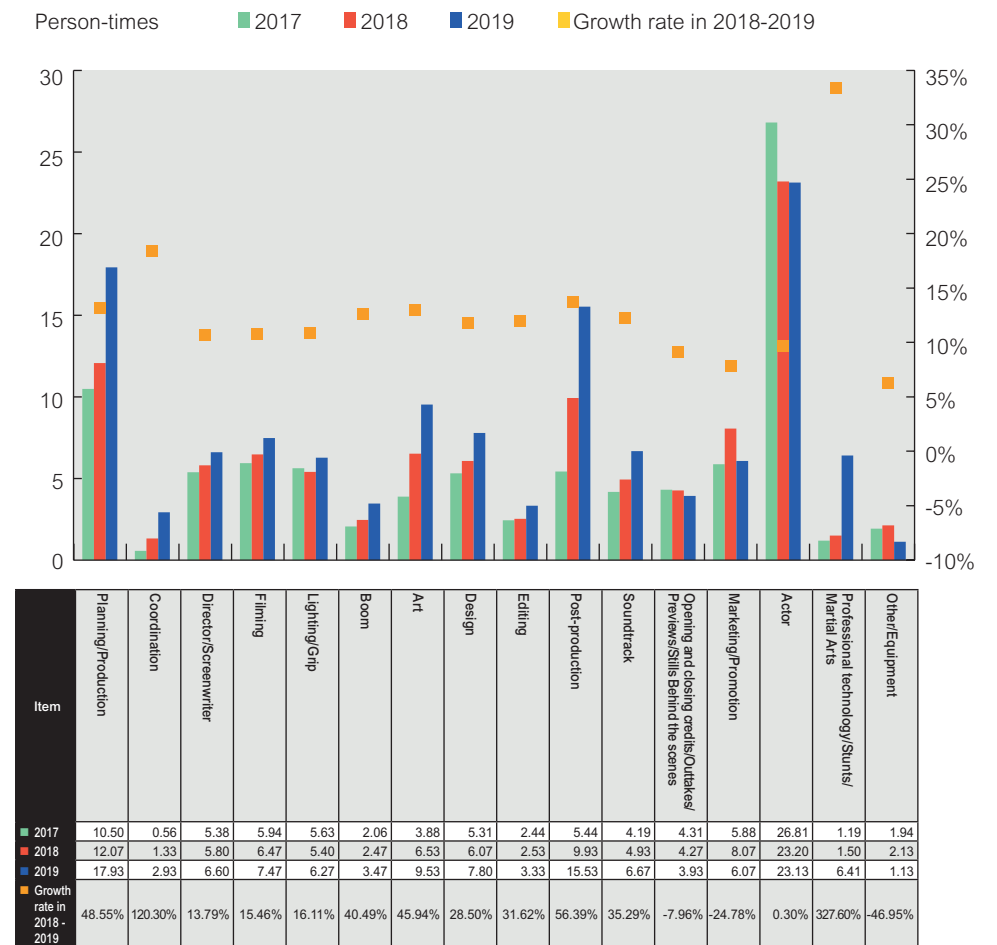
3. Employment statistics only include cable TV system operators and do not include cable broadcast system operators and IPTV (Chunghwa Telecom MOD).

The average production manpower per online drama (premiered on an online platform) in 2019 was 128.27 persons, up 25.19% compared to the 102.46 persons in 2018.



Source: Summarized by this survey from the list of actors and staff of each program.
Figure 2-11. Average production manpower per online drama in 2017-2019 (including actors)

Actors currently account for the majority of online drama production manpower at 18.04%. Each drama on average has 23.13 actors, which is roughly the same as in 2018, followed by planning/production and post-production manpower at 13.98% and 12.11%, respectively. Compared with the previous year, “coordination” and “specialized technologies/stunts/martial arts” positions have increased in recent years due to the growing production scale, which has created the need for personnel to assist the main team in character selection, actor management, and management of the screenwriting team’s progress. The latter is due to current companies requiring personnel with a higher level of expertise when developing drama with different types of content, such as drama on professionals (medical, law, etc.), and they are now hiring more professional consultants and trainers.



Source: Summarized by this survey from the list of actors and staff of each program.
Figure 2-12. Changes in average production manpower per online drama in 2017-2019 (including actors)

1.3. IP licensing trends

With regard to IP licensing performance of domestic TV series in 2019, approximately half of contents produced were from previous texts, but subsequent licensing performance was no longer limited to novels and TV series.

Table 2-6. Topics of television content produced in 2019 and IP extension

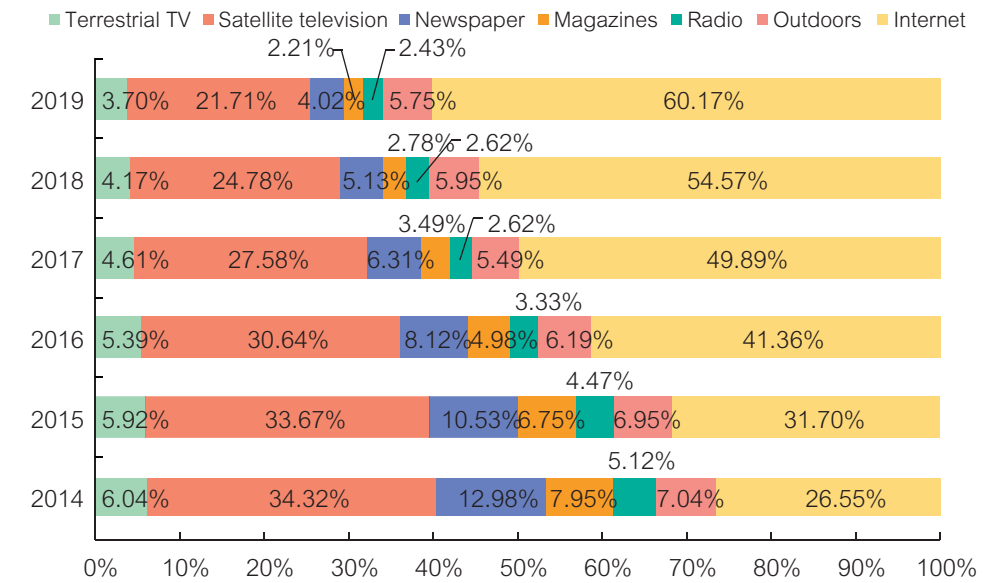
Item	Name of television content	Category	Source of topic/ Previous text	IP extension/ Sequel	Licensed region
1	The Making of an Ordinary Woman	TV series	Literary adaptation (Prose)	TV series sequel	Taiwan
2	The Teenage Psychic 2	TV series	Motion picture adaptation (short motion picture), previous TV series	Novel	Taiwan
3	Brave to Love (2019)	TV series	Comic adaptation (Japan)	-	-
4	Wait for the Sun Wait for You (2019)	TV series	TV series remake	-	-
5	Before We Get Married	TV series	Literary adaptation (Novel)	-	-
6	10 Survival Rules of the Japanese Occupation Era	TV series	Literary adaptation (Novel)	-	-
7	Green Door	TV series	Literary adaptation (Novel)	-	-
8	CODE 2	TV series	TV series	-	-
9	Yong-Jiu Grocery Store	TV series	Comic adaptation (Taiwan)	Digital exhibition, stage show	Taiwan
10	CSIC2	TV series	Previous TV series	-	-
11	My Hero, My Daddy	TV series	TV series adaptation (South Korea)	-	-
12	Hate the Sin, Love the Sinner	TV series	Script adaptation	-	-
13	Hello Again!	TV series	Original work	Novel	Taiwan
14	My Goddess	TV series	Original work	Novel	Taiwan
15	A Thousand Goodnights	TV series	Original work	Novel	Taiwan
16	Back To Home	TV series	Original work	Novel	Taiwan
17	Let's go crazy on LIVE	TV series	Original work	Novel	Taiwan
18	The Fearless	TV series	Original work	Novel	Taiwan
19	Déjà vu	TV series	Original work	Novel	Taiwan
20	Someday or One Day	TV series	Original work	Novel, TV series remake	Korea
21	Best Interest	TV series	Original work	TV series sequel	Taiwan
22	The Love Story in Banana Orchard	TV series	Original work	TV series sequel	Taiwan
23	The World Between Us	TV series	Original work	Stage show	Taiwan
24	Handsome Stewardess	Online drama	Original work	Comic	Taiwan
25	History3: Make Our Days Count	Online drama	Original work	Novel	Taiwan
26	History3: Trapped	Online drama	Original work	Novel	Taiwan
27	Jungle Voice 2	Variety show	Previous variety show	-	Taiwan
28	TTV 17Q	Variety show	Previous variety show	Variety show sequel	Taiwan

Source: This survey.

1.4. Industry observation indexes

1.4.1. Changes in media advertising volume

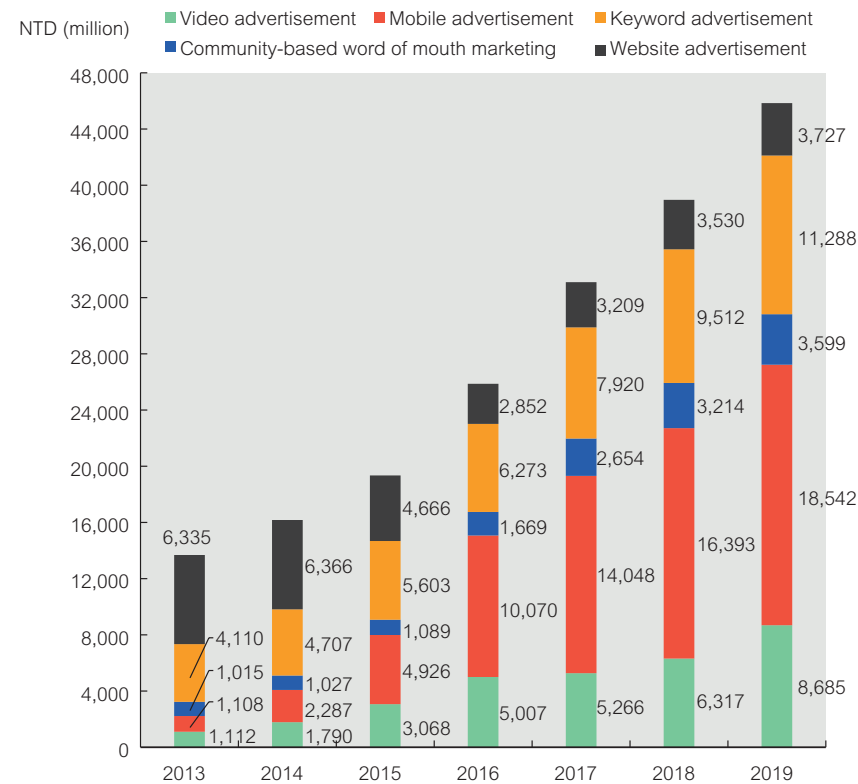
Total advertising in all media in Taiwan amounted to NT\$76.184 billion in 2019, an increase of 6.69% compared to 2018. Advertising volume continues to be driven by online advertising. The percentage accounted for by online advertising reached 60% for the first time. In terms of TV advertising, terrestrial television advertising amounted to NT\$2.822 billion and accounted for 3.70% of overall advertisement volume in 2019, down 5.18% compared to 2018. Satellite TV advertising amounted to NT\$16.543 billion, which was lower than in 2018, and accounted for 21.71% of overall advertisement volume. Terrestrial television and satellite television advertising in 2019 reached a historical low, and the absolute amount also continued to decline at an even greater margin compared with the previous year.



Source: Summarized from the 2020 White Paper on Taiwan Media, Media Agency Association (MAA).

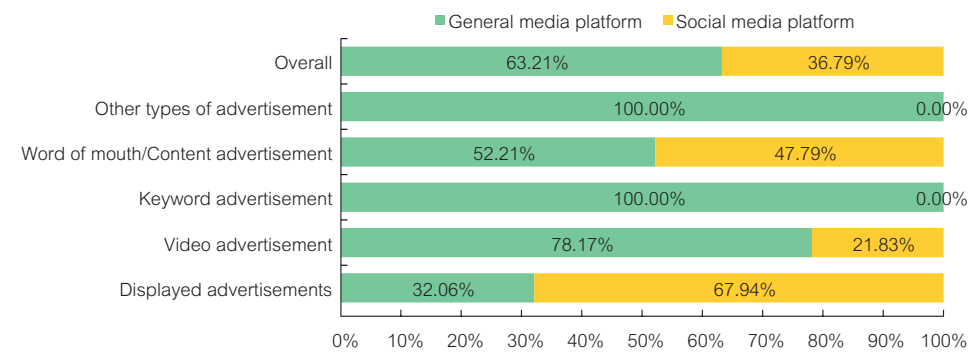
Figure 2-13. Media advertising volume in 2014-2019

Total online advertising volume in Taiwan reached NT\$45.841 billion in 2019, up 17.64% compared to 2018, accounting for 60.17% of overall advertising volume. Observing the types of online advertising, mobile display advertisements are still the main type of advertising with an increasing ratio each year. Mobile advertising amounted to NT\$18.542 billion or 40.45% in 2019. At the same time, as consumers gradually turn to mobile and online social media platforms, the advertising amount from word-of-mouth marketing has increased each year to approximately NT\$3.599 billion in 2019, up 11.98% compared with the previous year.



Source: Summarized from the 2020 White Paper on Taiwan Media, Media Agency Association (MAA).

Figure 2-14. Online media advertising in 2013-2019



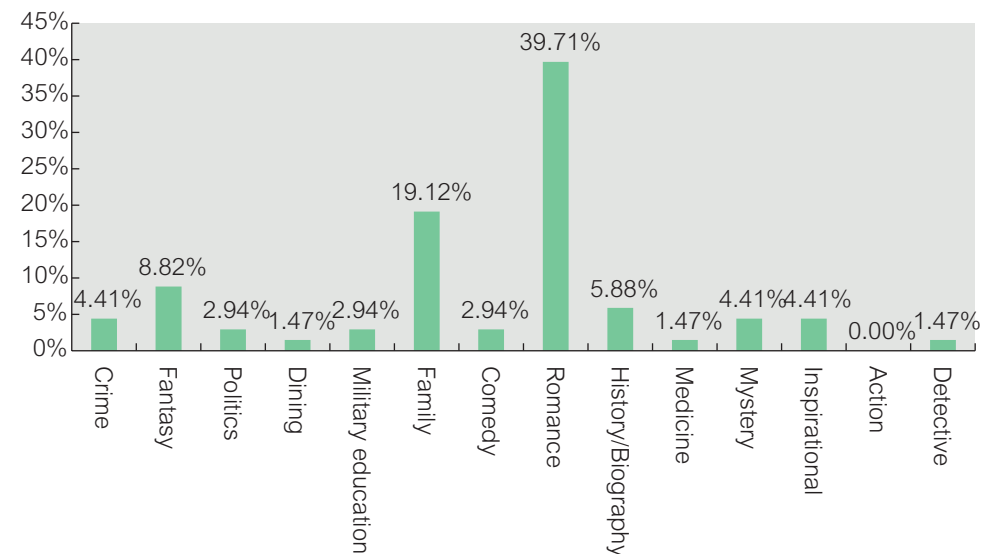
Source: Summarized from the 2019 Taiwan Digital Advertising Statistics Report, Digital Marketing Association (DMA).

Figure 2-15. Percentage of online advertising on each media platform in 2019

1.4.2. Analysis of program content production

Based on the number of television programs produced, the approximately 56 newly produced dramas⁴ in 2019, including weekly shows, daily shows, Da Ai shows (excluding Chang Ching Ju Zhan and Bodhi Meditative Mind), and Public Television shows (excluding anthologies such as Life Story), remained about the same as 2018. Out of these, *My Goddess* crossed over different years, and *Déjà vu*, *CODE 2*, *Yong-Jiu Grocery Store*, and *The Fearless* premiered on an online platform at the same time.

In 2019, the main genres of Taiwanese TV drama continued to be love & romance (39.71%) and family (19.12%). However, Taiwanese TV dramas have become growingly diverse in terms of content and genres in recent years. The percentage of inspirational, suspense, fantasy, detective, and medical dramas has increased. Professional dramas related to social issues have also appeared.



Notes: 1. The naming of the types of dramas uses the types from the British Film Institute as a reference and includes newly added military life, medical, food, politics, and martial arts types.

2. This survey manually determined newly-produced dramas in 2019. Each drama may be categorized under a maximum of three genres (taking into consideration the purpose of production and nature of television dramas, Da Ai shows, and anthologies such as Life Story are excluded).

Source: The program schedule of domestic and overseas channel was summarized by this survey.

Figure 2-16. Topics and elements of television programs produced in 2019

4. The standard for calculating the number of dramas produced is newly-produced television dramas that premiered in 2019, including dramas that will cross over different years. There were 51 newly-produced dramas.

The average length of episodes of online drama increased in 2019 compared with the previous year, but the total number of episodes and total length has decreased.

Table 2-7. Online dramas produced in 2019 and broadcast situation

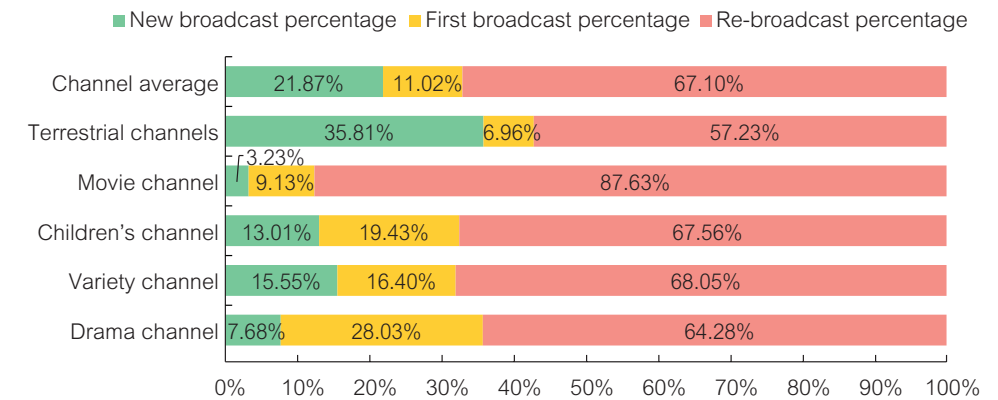
Title	Length of each episode	Number of episodes	Broadcast strategy	Total number of broadcast platforms (including television channels)
HIStory3 – Trapped	30	20	Only online	1
HIStory3 – Make Our Days Count	30	20	Only online	1
Triad Princess	60	6	Only online	1
Nowhere Man	60	8	Only online	1
Til Death Do Us Part – Perfectly Spotless	30	1	First online then television (PTS)	5
Til Death Do Us Part – The Paradise	30	1	First online then television (PTS)	5
Til Death Do Us Part – Hit and Run	30	1	First online then television (PTS)	5
Til Death Do Us Part – Tunnel	30	1	First online then television (PTS)	5
Til Death Do Us Part – Tiger	30	1	First online then television (PTS)	5
Til Death Do Us Part – Login Trouble	30	1	First online then television (PTS)	5
Til Death Do Us Part – No Pets Allowed	30	1	First online then television (PTS)	5
Handsome Stewardess	30	6	Only online	3
N Generations*	30	16	Only online	4
Girls Dorm's Secrets	10	10	Only online	2
Déjà vu	60	24	Online and television synchronized (TTV)	3
My Goddess*	60	10	Online and television synchronized (TTV)	3
The Fearless	60	13	Online and television synchronized (GTV)	2
CODE 2	60	10	Online and television synchronized (SCM)	3

- Notes: 1. Online drama is defined as drama that premieres on an online platform.
 2. This table mainly lists dramas that premiered in 2019, and does not include micro and entertainment short motion pictures.
 3. Dramas with a gray base are simultaneously broadcast on a television channel and OTT platform.
 4. Works with an asterisk (*) are dramas that cross over different years.

Source: Prepared by this survey.

1.4.3. Ratio of new broadcast, first broadcast, and rebroadcast on domestic television channels

With regard to the ratio of new broadcasts, first broadcasts, and rebroadcasts on various channels, the average ratio of new broadcasts on domestic television channels was 21.87% in 2019; terrestrial television had the highest ratio of new broadcasts compared with other channels at 35.81%, while movie channels had the lowest ratio at only 3.23%, and had a rebroadcast ratio reaching 87.63%.



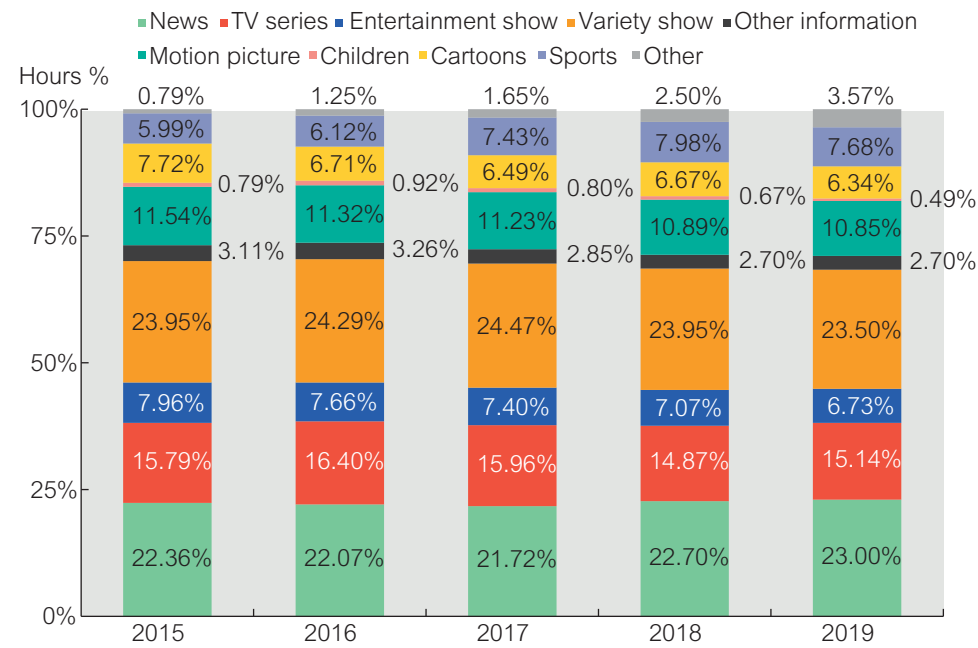
- Notes: 1. Among the types of channels analyzed by this survey, satellite television channels mainly consist of cable TV systems, drama channels include EBC Drama Channel, Videoland Drama Channel, GTV Drama Channel; variety channels include CTi Entertainment, CTi Variety, GTV One, GTV Variety, SET Taiwan, SET Metro, EBC Variety, Star Chinese, Videoland Variety, TVBS (Variety Channel), TVBS-G, MUCH TV, Super TV, Azio TV, JET Variety. Movie channels only include EBC Movie, EBC Foreign Movie, VideoLand Movie, and SCM; children's channels only include EBC YOYO TV and MOMO Kids.
 2. Data on new broadcasts, first broadcasts, and rebroadcasts was taken from NCC Open Data "Satellite TV channels broadcast programs according to the number of hours and proportions of new broadcasts, first broadcasts and rebroadcasts" and "Terrestrial television channels broadcast programs according to the number of hours and proportions of new broadcasts, first broadcasts and rebroadcasts." The definitions of television channel new broadcasts, first broadcasts, and rebroadcasts are based on definitions of the NCC, and the total of the categories above is 100%. The NCC's revised definition of "new broadcast" is "the first time a program is broadcast by a domestic cable TV broadcast system operator (including cable TV program broadcast system), live satellite broadcast television service company or other public broadcasting platform."

Source: Summarized from NCC open data by this survey.

Figure 2-17. New broadcast, first broadcast, and rebroadcast ratio of television channels in 2019

1.4.4. Types of programs broadcast in Taiwan

The types of programs that account for the biggest percentage of hours that domestic television programs are broadcast on television channels are as follows: general entertainment shows⁵, news, television dramas, motion pictures⁶, sports, variety shows⁷, and cartoons⁸. General entertainment shows account for the highest percentage at 23.50%, and reach 30.23% when combined with variety shows, followed by news at 23.00%. Overall, there was not much difference in the types of programs that were broadcast in 2019, and there was only a slight increase in the ratio of television dramas and other programs.



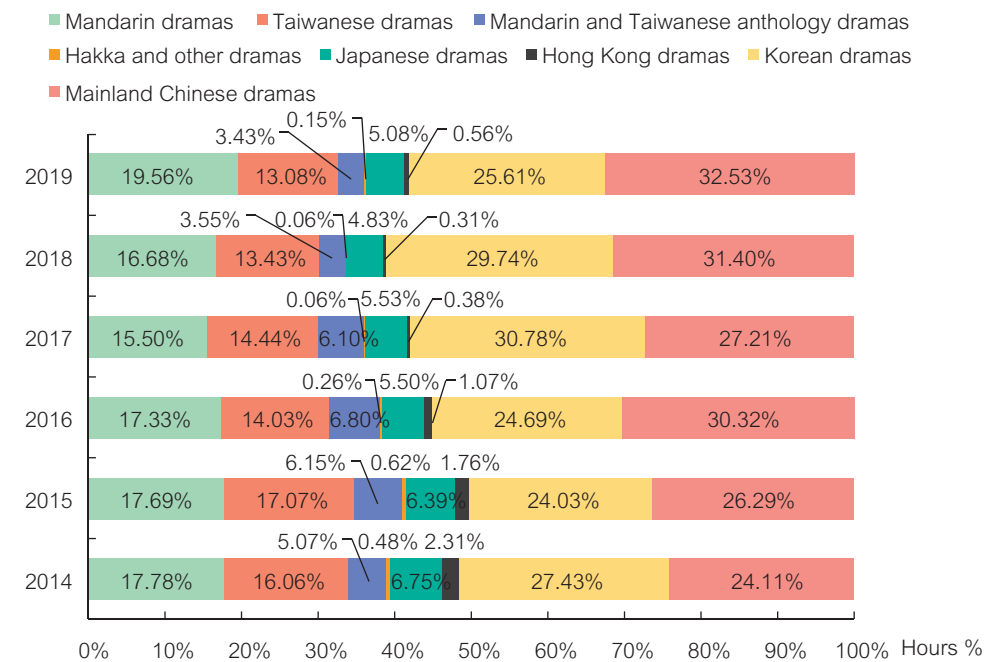
Source: Nielsen.

Figure 2-18. Distribution of different types of programs broadcast at all hours in 2015-2019

1.4.5. TV drama broadcasting overview

A total of 95,531 hours of television programs were broadcast in 2019, up 2.37% compared to 2018. This was mainly due to television channels changing the time that variety and general entertainment shows are broadcast in the previous year, and the time that the FIFA World Cup was broadcast in 2018 was used to broadcast dramas, resulting in the increase in number of hours that dramas were broadcast.

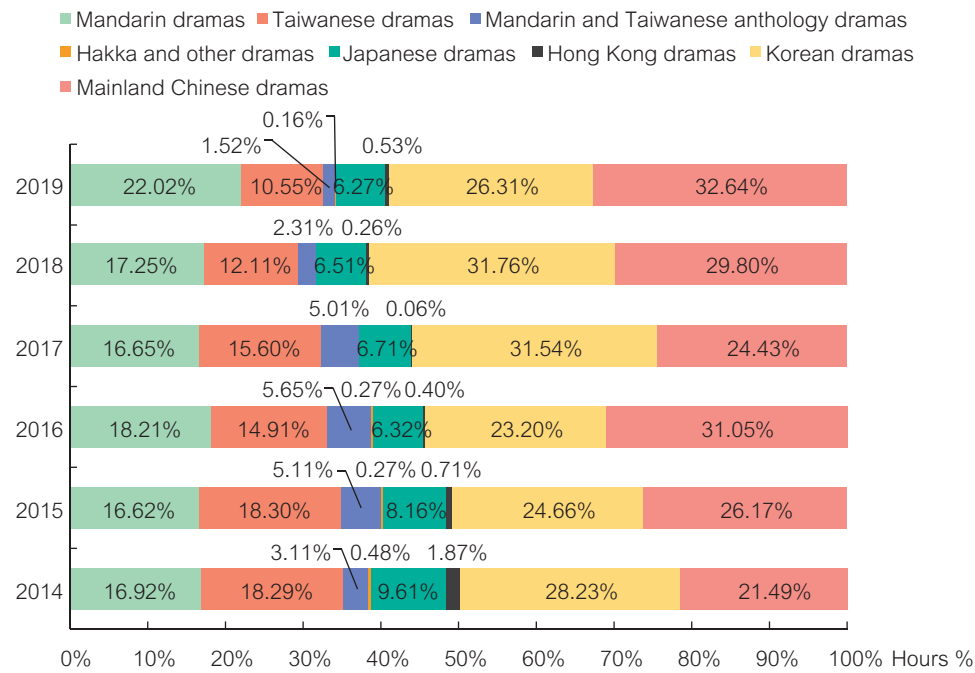
Taiwanese dramas (including Mandarin dramas, Taiwanese dramas, Mandarin anthologies, and Hakka dramas) accounted for the biggest percentage of dramas that were broadcast at 34,594 hours, accounting for 36.21% of total number of hours that dramas were broadcast, up 7.39% compared to 2018. Mandarin dramas showed the most significant growth—20.04% compared with the previous year. Among overseas dramas, only Chinese dramas showed an increase compared to 2018. Chinese dramas were broadcast for a total of 31,073 hours in 2019, which accounted for 50% of the total hours that overseas dramas were broadcast. Observing changes in broadcasting time in recent years, the number of hours that Chinese dramas are broadcast has continued to increase, and accounts for approximately 30% of the total hours that dramas were broadcast in the past two years. In comparison, the number of hours that Korean dramas were broadcast declined 25.61% in 2019.



Source: Nielsen.

Figure 2-19. Breakdown of dramas broadcast by language in 2014-2019

Dramas were broadcast for a total of 30,346 hours during prime time in 2019, a slight decline of 2.02% compared to 2018. With regard to domestically produced dramas broadcast during prime time, due to joint production with online video platforms and word-of-mouth of PTS dramas in the past three years, television companies began producing dramas on a wide variety of topics in 2019. This led to an increase in the number of hours that domestically produced dramas were broadcast.

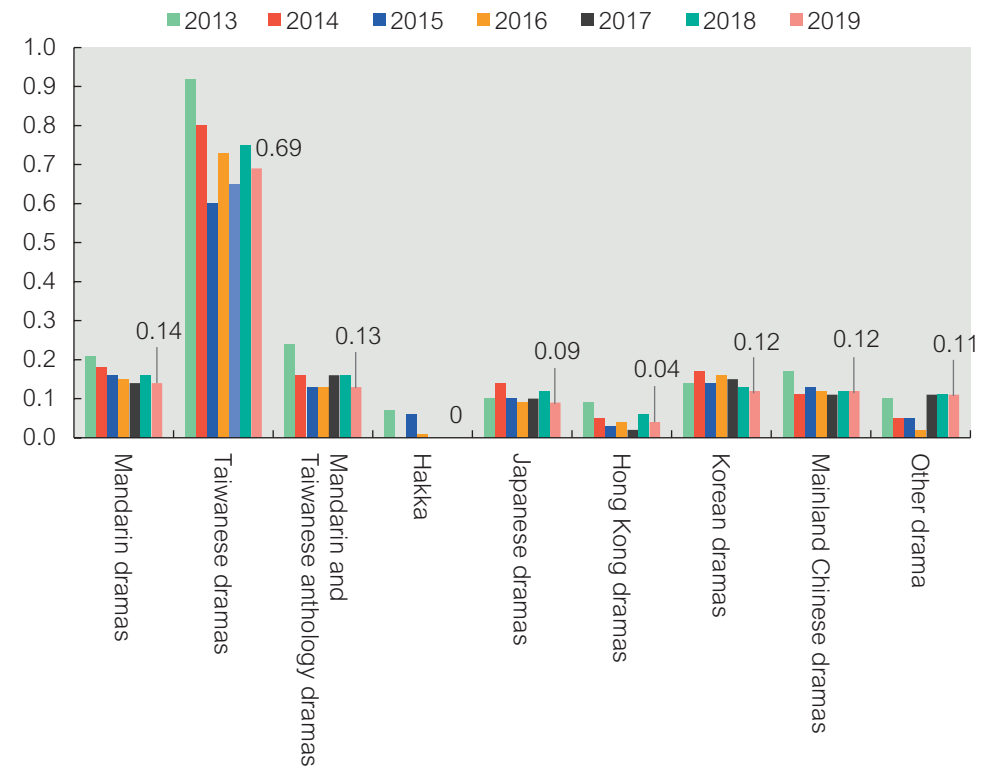


Source: Nielsen.

Figure 2-20. Breakdown of dramas broadcast during prime time by language in 2014-2019

1.4.6. Drama ratings overview in Taiwan

Taiwanese dramas still had the highest rating in 2019 at 0.69, Mandarin dramas had an average rating of 0.14 in 2019, Mandarin anthologies had a rating of 0.13.



Source: Nielsen.

Figure 2-21. Average viewership of dramas by language and country in 2013-2019

With regard to drama viewership in Taiwan in 2019, Taiwanese dramas still achieved the best performance. However, television channels have been actively improving the contents of Mandarin dramas and gradually accumulated a steady audience in recent years. The *Girl's Power* series produced by TVBS starting in 2018 is already at the top in terms of ratings. *The World Between Us*, a large scale production of PTS in 2019, became a frequently discussed drama that was popular for its high quality content that year, and it was further licensed to be adapted into a stage show.

● 2. Motion picture industry

2.1. Overall industry overview

2.1.1. Number of companies in the domestic motion picture industry in 2019

The majority are motion picture production companies, with a total of 1,372 companies (77.30%), followed by motion picture distribution, screening, and post-production and special effects companies, accounting for 9.41%, 7.15%, and 6.14%, respectively.

Table 2-8. Number of companies and percentage accounted for by each subindustry of the motion picture industry in 2019

Unit: Number of companies, %

Item	Number of companies	Percentage
Motion picture production industry	1,372	77.30%
Motion picture post-production industry	109	6.14%
Motion picture distribution industry	167	9.41%
Motion picture screening industry	127	7.15%
Total	1,775	100.00%

Source: Fiscal Information Agency of the Ministry of Finance.

2.1.2. Average scale of capital in the domestic motion picture industry in 2019

At present, approximately 60% of motion picture production companies in Taiwan have a capital of NT\$10 million or less, in which 42.76% have a capital of NT\$5 million or less, and 10.59% have a capital of NT\$100 million or more.

Table 2-9. Breakdown of subindustries of the motion picture industry by scale of capital in 2019

Unit: %

Industry	Motion picture production industry	Motion picture post-production industry	Motion picture distribution industry	Motion picture screening industry	Total
≤NT\$100,000	0.71%	1.39%	1.23%	2.20%	1.17%
NT\$100,000-NT\$500,000 (exclusive)	4.95%	7.64%	4.29%	0.00%	4.70%
NT\$500,000-NT\$1 million (exclusive)	3.18%	6.25%	3.07%	3.30%	3.82%
NT\$1 million-NT\$5 million (exclusive)	33.92%	40.97%	26.99%	1.10%	29.37%
NT\$5 million-NT\$10 million (exclusive)	16.25%	8.33%	15.95%	45.05%	18.36%
NT\$10 million-NT\$50 million (exclusive)	25.80%	22.22%	30.06%	16.48%	24.82%
NT\$50 million-NT\$100 million (exclusive)	4.59%	4.86%	7.98%	9.89%	6.17%
NT\$100 million-NT\$500 million (exclusive)	6.71%	5.56%	4.29%	13.19%	6.75%
NT\$500 million-NT\$1 billion (exclusive)	2.47%	2.08%	4.29%	3.30%	2.94%
≥NT\$1 billion	1.41%	0.69%	1.84%	5.49%	1.91%
Total	100.00%	100.00%	100.00%	100.00%	100.00%

Source: Ministry of Economic Affairs business registration.

Most of the motion picture post-production companies have a capital of NT\$1-5 million (40.97%), followed by NT\$10-50 million (22.22%). Approximately 15.28% of post-production companies have a capital of NT\$1 million or less, which is relatively high compared with other industries. This is due to some post-production companies operating in the form of a small studio that takes cases, resulting in the relatively low capital. However, 8.33% of post-production companies have a capital of NT\$100 million or more, such as Taipei Postproduction, The White Rabbit Entertainment, and Arrow Cinematic Group.

The top percentage of motion picture distribution companies have a capital of NT\$10-50 million (30.06%), followed by NT\$1-5 million and NT\$5-10 million at 26.99% and 15.95%; 10.42% of the companies have a capital of NT\$100 million and above, such as Kbro Media Co., Ltd., Hualien Media International Co., Ltd., Double Edge Entertainment Corp., and Central Pictures Corporation.

In the motion picture screening industry, 45.05% of the companies have a capital of NT\$5-10 million, 16.48% of the companies have a capital of NT\$10-50 million, and 21.98% of the companies have a capital of NT\$100 million or more, which is higher than the motion picture production, post-production, and distribution industries. This is mainly because most companies are movie theater chains, including Vieshow Cinemas, Showtime Cinemas, and Ambassador Theatres, which require higher capital to maintain their hardware and movie theater operations.

2.1.3. Number of people employed in the domestic motion picture industry

A total of 4,780 people were employed in the overall motion picture industry in 2019, down 1.89% compared to the previous year. With regard to the number of people employed in subindustries, only the motion picture production industry saw an increase of 5.97% compared with the previous year, while the remaining subindustries all saw a decrease. The number of people employed in the motion picture distribution, motion picture post-production and special effects, and motion picture screening industries decreased 2.66%, 3.97%, and 1.95%, respectively.

Furthermore, the questionnaire survey showed that a relatively high percentage of formal employees were female, accounting for 51.29%, while male employees accounted for 48.71%. Nearly 60% of employees in the motion picture screening industry are female, resulting in the higher percentage of female employees in the overall motion picture industry. Male employees account for 55.57% of employees in the motion picture post-production and special effects industry.

Table 2-10. Number of people employed in the motion picture industry in 2014-2019
Unit: People, %

Industry	Year						2018-2019 Growth rate	Gender ratio in 2019	
	2014	2015	2016	2017	2018	2019		Male	Female
Motion picture production	408	401	367	375	374	396	5.97%	50.51%	49.49%
Motion picture distribution	385	427	367	397	369	359	-2.66%		
Motion picture post-production and special effects	417	429	402	393	396	380	-3.97%	55.57%	44.43%
Motion picture screening	3,279	3,636	3,423	3,647	3,733	3,660	-1.95%	42.78%	57.22%
Total	4,489	4,893	4,559	4,812	4,872	4,780	-1.89%	48.71%	51.29%

Source: Estimated by the survey.

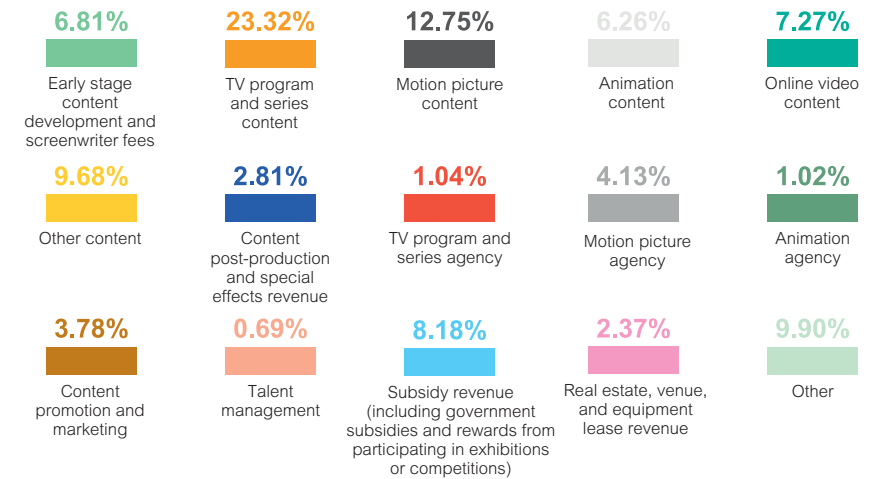
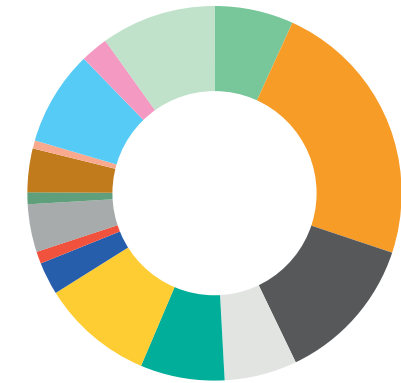
2.2. Revenue and business model

2.2.1. Revenue structure in the current year—Revenue items

Over 50% of companies in the motion picture production, distribution, and post-production and special effects industries had a revenue of less than NT\$10 million, in which the majority of companies had a revenue of NT\$1-5 million.

In the motion picture screening industry, the top percentage of companies had a revenue of less than NT\$5 million (34.29%). If movie theaters are divided into independent movie theaters and movie theater chains, nearly 50% of independent movie theaters have a revenue of less than NT\$5 million, while most movie theater chains have a revenue of NT\$100-200 million.

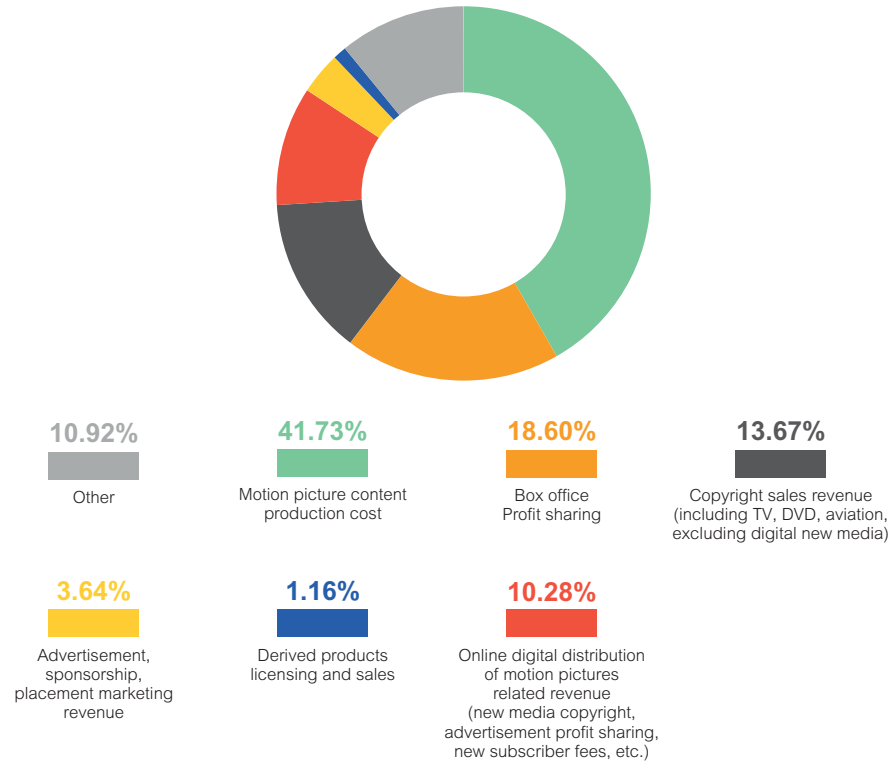
Taking a closer look at the revenue structure of each subindustry, content production was the main source of revenue (59.28%) for motion picture production and distribution companies in 2019, in which contents produced were mainly TV series. This is mainly due to joint productions of TV series with international OTT platforms and production companies in other countries in recent years. Domestic motion picture production and distribution companies have also begun to participate in the production of TV series, showing that the companies are diversifying to increase their sources of revenue.



Source: Summarized by this survey from the questionnaire survey.

Figure 2-22. Breakdown of the revenue of motion picture content production and distribution companies in 2019

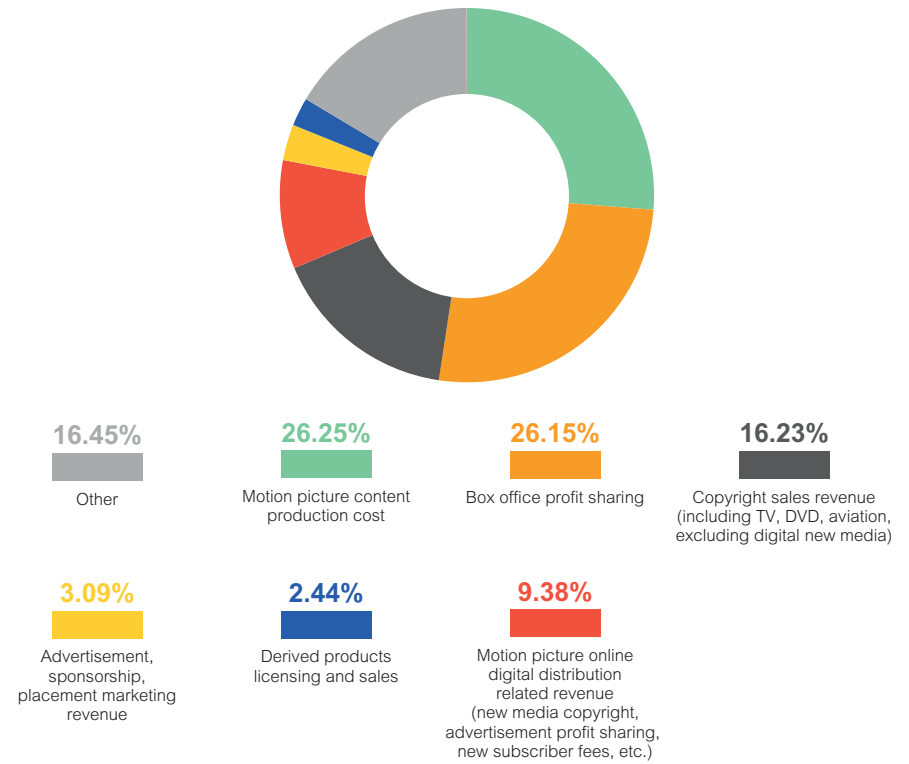
With regard to the structure of content production revenue, content production fees, box office profit sharing, and licensing are the main sources of revenue for motion picture production and distribution companies. Compared with the previous year, the percentage of revenue from licensing and online digital distribution (including new media licensing, advertising profit sharing, etc.) increased for both motion picture production and distribution companies in 2019.



Notes: Due to item adjustments in the survey this year, the structure of other content production cannot be presented in this figure.

Source: Summarized by this survey from the questionnaire survey.

Figure 2-23. Structure of the content production revenue of motion picture production companies in 2019



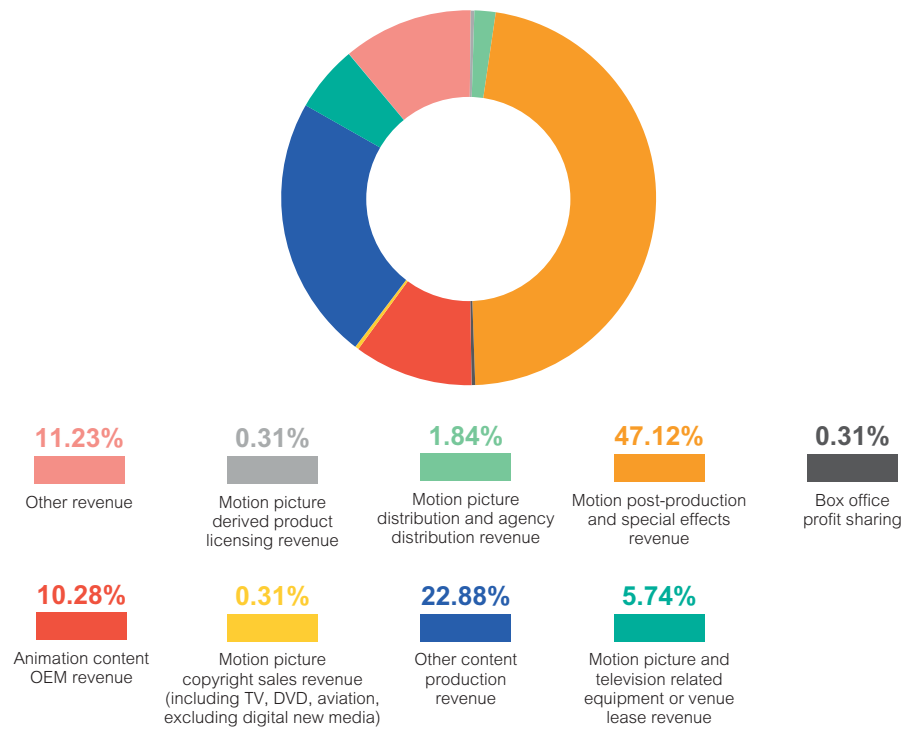
Notes: The figure above only includes domestic distribution companies.

Source: Summarized by this survey from the questionnaire survey.

Figure 2-24. Structure of the content production revenue of motion picture distribution companies in 2019

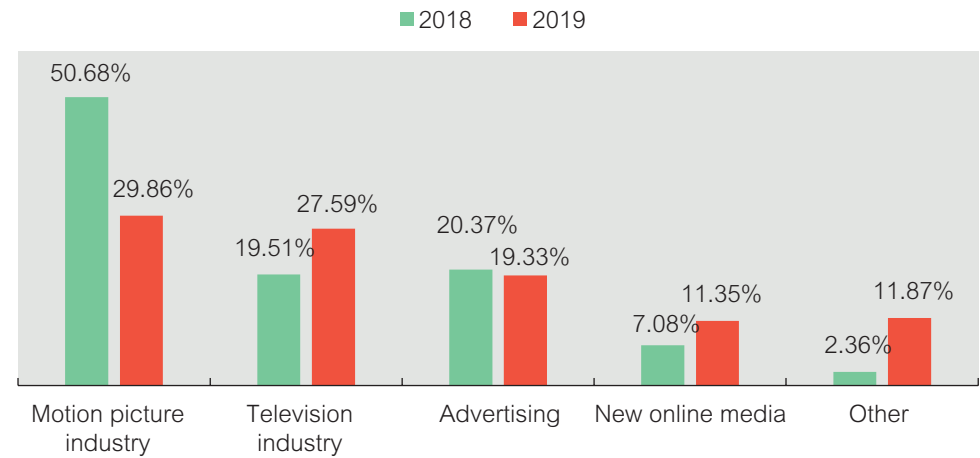
Motion picture post-production and special effects production revenue accounted for the highest percentage of the revenue of motion picture post-production and special effects companies at 47.12%. This represented a slight decrease compared with the previous year (48.83%), followed by revenue from other content production (including post-production and special effects) at 22.88%, which saw an increase compared with the previous year.

Breaking down the revenue of the domestic motion picture post-production and special effects industry by types of content in 2019, there was no significant difference between motion picture and television content at 29.86% and 27.59%, respectively, but the percentage accounted for by motion pictures significantly decreased, while the percentage accounted for by online new media at 11.35% was a significant increase compared with the previous year.



Source: Summarized from the survey questionnaire.

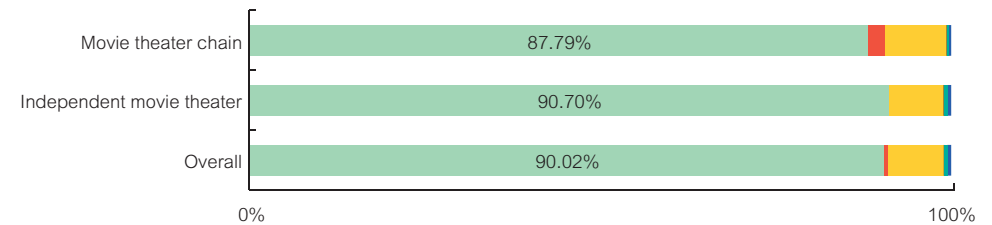
Figure 2-25. Structure of the revenue of motion picture post-production and special effects companies in 2019



Source: Summarized by this survey from the questionnaire survey.

Figure 2-26. Breakdown of the revenue of post-production and special effects companies from the motion picture and television industries

In the motion picture screening industry, revenue from the screening of motion pictures was the main source of revenue at 90.02% in 2019, which means a decrease compared to 2018, followed by food and beverage sales, advertising revenue, and merchandise sales at 8.40%, 0.64%, and 0.34%. There is a significant difference in the percentage of revenue accounted for by advertising revenue between movie theater chains and independent movie theaters.



Item	In theaters (%)	Advertising revenue (%)	Food and beverage sales (%)	Derived product sales (%)	Other motion pictures (%)	Other revenue (%)
Movie theater chain	87.79%	2.42%	9.08%	0.24%	0.12%	0.34%
Independent movie theater	90.70%	0.10%	8.19%	0.37%	0.08%	0.57%
Overall	90.02%	0.64%	8.40%	0.34%	0.09%	0.51%

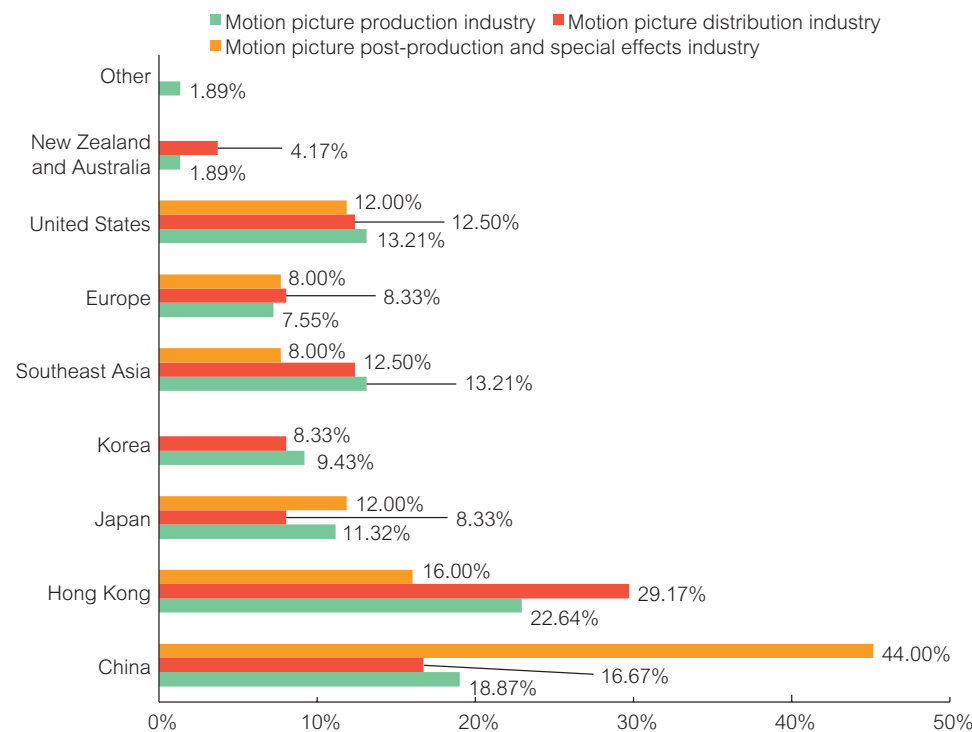
Source: Summarized by this survey from the questionnaire survey.

Figure 2-27. Structure of revenue of the motion picture screening industry in 2019

2.2.2. Regions and overview of overseas revenue

Overseas revenue accounted for 39.70% of the domestic motion picture industry's total revenue in 2019. China and Hong Kong account for a relatively high percentage of overseas revenue, whether it may be from the motion picture production, distribution, or post-production and special effects industries. Among these industries, the post-production and special effects industry has the highest proportion, accounting for about 44.00%.

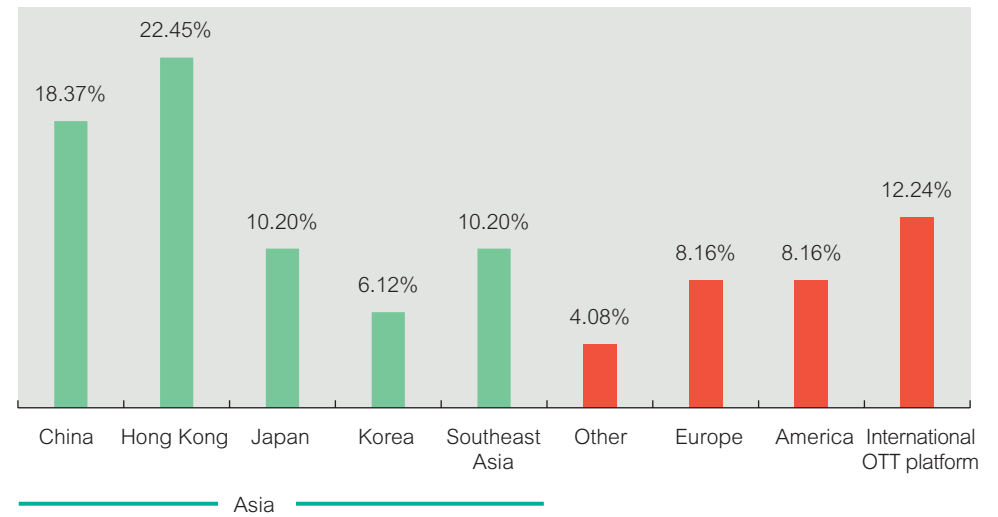
Generally speaking, domestic companies are turning to markets in Southeast Asia and international OTT platforms because of the higher risks of joint production and acceptance of cases in China caused by uncontrollable factors. In practice, companies generally negotiate licensing for domestic motion pictures by region in Southeast Asian markets, such as Singapore and Malaysia. Coupled with the fact that most domestic motion pictures produced in recent years are suspense/thriller, horror, and romance/love movies, which meets the preference of Southeast Asian markets, domestic motion pictures are more accepted compared with other regions, and revenue from Southeast Asia has stably increased. Furthermore, international OTT platforms are actively expanding their content base and localizing content. The growing demand on content has led to an increasing percentage of overseas revenue from Southeast Asia and the United States.



Notes: The breakdown of overseas revenue is by number of times and not amount.
Source: Summarized by this survey from the questionnaire survey.

Figure 2-28. Breakdown of overseas revenue of the motion picture industry by region in 2019

Observing the breakdown per region of overseas licensing, it is clear that Hong Kong and China still accounted for the highest percentage of overseas licensing for domestic motion pictures in 2019 at 22.45% and 18.37%, respectively. Following the dominance of online OTT platforms, international motion picture platforms are actively purchasing motion picture content around the world to enrich their content and enhance their competitiveness. The platforms are even working with local production companies to release original motion pictures and TV series. Hence, from the perspective of domestic production companies, overseas licenses and sales right of the motion pictures they produced are mostly held by international OTT platforms, so the percentage accounted for is 12.24%.



Notes: The breakdown of overseas licensing region is by number of times and not amount.
Source: Summarized by this survey from the questionnaire survey.

Figure 2-29. Motion picture industry overseas licensing breakdown in 2019 by region

2.3. IP licensing trends

Observing the sources of past scripts for domestic dramas and animations, and overall situation of IP translation/extension, most domestic motion pictures still use original scripts. Only a portion of these is adapted from games, comics, stage shows, novels, or true stories.

Motion pictures are the end result of IP translation. The scale of production, manpower, and budget required for motion pictures is high compared to other content formats. Therefore, there are fewer IP translations of motion picture content. These mainly consist of merchandise, such as original sound tracks, novels, calendars, and card sets. Furthermore, the Cuihua Junior High School Experience Hall was built in Taipei Cinema Park in Ximending before the premiere of *Detention*, a motion picture adapted from a game with the same name. The experience hall raised consumers' interest in the movie. It was a creative method for applying and promoting IP.

The *Dear Loneliness* series produced by Dreamland Image Co., Ltd. in 2019 includes a stage show, TV series, novel, and books on the topic of loneliness. These works were simultaneously released to increase the series' exposure and share of voice.

Table 2-11. Topics of domestic dramas and animations, and overall situation of IP translation and extension in 2019

English title	Source of topic/Former script	IP extension/Derived products
Detention	Game – Detention	Experience hall, exhibition, TV series
Mayday LIFE	Original script	Peripheral products (calendar, card set, stationary, etc.)
Han Dan	Original script	Peripheral products (towel)
A Sun	Original script	Peripheral products (towel, original sound track)
Fall in Love at First Kiss	Comic – It Started with a Kiss	
Dad's Suit	Original script	Peripheral products (hand towels)
Stand by Me	Novel – Pacer	-
The Gangs, The Oscars, And The Walking Dead	Original script	Peripheral products (original sound track)
It's a Mad, Mad, Mad, Mad Show	Stage show – All U people theatre	
Invisible Justice	Adaptation of a true story	Peripheral products (original sound track)
Bad Boy Symphony	Adaptation of a true story	-
Thunderbolt Fantasy Bewitching Melody of the West	Original script	Peripheral products (photo album, action figures, card stickers)
The Paradise	Adaptation of a true story – the Sunrise Organic Farm story	-
The Shooting of 319	Adaptation of a true story	Novel
Taichi Cats	Original script	Peripheral products (L clips, postcards, pencil cases, rulers)
Deus Ex Baryon	Original script	Peripheral products (setting collection)
Breast and House	Adaptation of a true story	-
A-Hu	Adaptation of a true story	Peripheral products (original sound track)
Somewhere Winter	Novel – Somewhere Winter	
Always Miss You	Original script	Novel
Dear Loneliness	Original script	Illustrated books, novels, stage shows
Mystery in the Mist	Adaptation of a true story	-
Gold Fish	Comic – Gold Fish	-

Notes: This section only shows IP translations and extensions of domestic motion pictures in 2019.
Source: This survey.

2.4. Industry observation indexes

2.4.1. Domestic motion picture market analysis

A total of 827 motion pictures were distributed in Taiwan in 2019, down 6.66% compared with the 886 motion pictures in 2018. Observing the regions where these are produced, the majority come from other regions in Asia and from the United States with 268 and 251 each, accounting for 32.41% and 30.35%, respectively; 77 domestic motion pictures were screened in theaters (9.31%).

The number of motion pictures from other regions in Asia surpassed the U.S. for the first time in 2019. This was mainly due to the increase in motion pictures from Japan and Thailand, in which motion pictures from Japan increased by 27—the biggest increase. The majority of these were animated motion pictures based on TV animations. The 77 domestic motion pictures that were screened accounted for 9.31% of all motion pictures in theaters. This shows an increase compared with the previous year. Furthermore, 3 African motion pictures were screened in 2019, while the number of European motion pictures significantly decreased compared with 2018, only accounting for 22.37%.

As for box office, the total box office in Taiwan was approximately NT\$10.191 billion with 43.19 million viewers in 2019, down 5.47% and 6.57% compared with the previous year, respectively. The overall box office of domestic motion pictures was NT\$703 million, and had a market share of 6.90%, down 13.27% compared to 2018; the number of viewers was approximately 3.01 million person-times, down 16.21% compared to 2018. As for other continents, American motion pictures grossed the highest total box office at NT\$7.919 billion in 2019, followed by Asia and other regions at NT\$1.195 billion.

Table 2-12. Taiwan total box office overview in 2017-2019

Unit: Motion picture, NTD, %, person-times

	Item	Box office (NTD)	Number of viewers	Number of screened motion pictures	Percentage of distributed motion pictures	Box office percentage
2017	Taiwan (R.O.C)	728,849,536	3,223,913	63	8.40%	6.90%
	China, Hong Kong, and Macao	225,370,026	1,007,142	41	5.47%	2.13%
	Other regions in Asia	1,156,690,420	4,999,706	210	26.80%	10.94%
	Europe	450,279,110	2,016,677	212	28.13%	4.26%
	America	7,997,993,423	34,131,911	231	30.80%	75.67%
	Oceania	10,058,011	45,634	2	0.40%	0.10%
	Total	10,569,240,526	45,424,983	759	100.00%	100.00%
2018	Taiwan (R.O.C)	810,291,142	3,599,748	64	7.22%	7.52%
	China, Hong Kong, and Macao	188,307,111	842,710	37	4.18%	1.75%
	Other regions in Asia	1,496,154,212	6,413,972	260	29.35%	13.88%
	Europe	226,691,959	1,010,082	251	28.33%	2.10%
	America	8,058,709,395	34,363,349	270	30.47%	74.75%
	Oceania	750,504	4,464	4	0.45%	0.01%
	Total	10,780,904,323	46,234,325	886	100.00%	100.00%

	Item	Box office (NTD)	Number of viewers	Number of screened motion pictures	Percentage of distributed motion pictures	Box office percentage
2019	Taiwan (R.O.C)	702,765,192	3,016,371	77	9.31%	6.90%
	China, Hong Kong, and Macao	254,187,842	1,130,280	38	4.59%	2.49%
	Other regions in Asia	1,195,608,384	5,078,787	268	32.41%	11.73%
	Europe	111,742,913	506,347	185	22.37%	1.10%
	America	7,919,502,600	33,432,317	251	30.35%	77.71%
	Oceania	6,659,726	31,685	5	0.60%	0.07%
	Africa	648,340	3,076	3	0.36%	0.01%
Total		10,191,114,997	43,198,863	827	100.00%	100.00%

Notes: 1. The number of motion pictures distributed includes motion pictures screened in the current year, across years, and re-releases; motion pictures from festivals were excluded.

2. Number of Taiwan (R.O.C) motion pictures distributed in 2019: 77 motion pictures, including 57 screened in the current year (45 dramas [including animations] [44 long motion pictures and 1 short motion picture], 12 documentaries), and 20 motion pictures screened across years and re-released.

Source: Summarized by this survey from box office data provided by motion picture screening companies to the BAMID in accordance with the Motion Picture Act.

2.4.2. Domestic motion picture average views

On average, Taiwanese people viewed 1.83 motion pictures in 2019, which is lower than in 2018. Breaking down motion pictures by continent, people on average viewed 0.13 domestic motion pictures and 0.05 motion pictures from China and Hong Kong, which is an increase of 0.01 motion pictures compared with 2018. Among foreign motion pictures, American motion pictures were viewed the most with an average of 1.42 motion pictures per person, while views of European motion pictures have steadily declined since 2017 to 0.02 motion pictures.

Table 2-13. Domestic motion picture average views in 2015-2019

Unit: Motion picture								
	Taiwan (R.O.C)	China and Hong Kong	Other regions in Asia	Europe	America	Oceania	Africa	Overall
2015	0.17	0.03			1.26			1.46
2016	0.07	0.06			1.22			1.34
2017	0.14	0.04	0.21	0.09	1.45	0	-	1.93
2018	0.15	0.04	0.27	0.04	1.46	0	-	1.96
2019	0.13	0.05	0.22	0.02	1.42	0	0	1.83

Notes: The population in 2019 was 23,603,121 people (Source: National Statistics, Directorate-General of Budget, Accounting and Statistics, Executive Yuan).

Source: Data for 2017 and before was summarized from box office data for Taipei City provided by the Taipei Film Trade Association; data for the years after 2017 was summarized from box office data provided by motion picture screening companies to the BAMID in accordance with the Motion Picture Act.

2.4.3. Top 10 highest-grossing motion pictures in Taiwan in 2019

In 2019, all of the top 10 highest-grossing motion pictures in Taiwan were American motion pictures with *Avengers: Endgame* at the first place with a box office of NT\$910 million, and *Fast & Furious Presents: Hobbs & Shaw* at second place with a box office of NT\$454 million.

Table 2-14. Taiwan top 10 highest-grossing motion pictures in 2019

Unit: NTD, person-times				
Country	Chinese title	Tickets sold	Sales amount	Release date
United States	Avengers: Endgame	3,492,311	910,456,089	2019/04/24
United States	Fast & Furious Presents: Hobbs & Shaw	1,905,892	454,474,344	2019/07/31
United States	Captain Marvel	1,699,437	404,391,001	2019/03/06
United States	Spider-Man: Far From Home	1,596,769	379,826,849	2019/07/03
United States	Joker	1,381,615	330,633,370	2019/10/03
United States	Frozen 2	1,377,147	326,221,985	2019/11/21
United States	The Lion King	1,319,161	314,852,832	2019/07/17
United States	Toy Story 4	1,347,740	312,715,035	2019/06/20
United States	Aladdin	1,250,869	290,433,029	2019/05/22
United States	Alita: Battle Angel	1,104,685	276,857,126	2019/02/05

Source: Summarized by this survey from box office data provided by motion picture screening companies to the BAMID in accordance with the Motion Picture Act.

Among domestic motion pictures, only *Detention* grossed over NT\$100 million in 2019. The motion picture is an adaptation of a PC game made by Red Candle Games, an independent game production team in Taiwan. The top 10 highest-grossing domestic motion pictures in 2019 cover a wide variety of topics. In addition to romance and comedy, crime, family, inspirational, and suspense/thriller motion pictures have gradually attracted the attention of domestic consumers.

Table 2-15. Top 10 highest-grossing domestic motion pictures in 2019

Unit: NTD, person-times				
Chinese title	Release date	Days in theaters	Tickets sold	Sales amount
Detention	2019/09/20	99	1,110,388	259,626,995
The 9th Precinct	2019/08/29	77	250,237	56,843,257
Mayday LiFE	2019/05/24	79	159,801	54,167,349
Han Dan	2019/01/23	80	221,472	49,291,780
A Sun	2019/11/01	62	109,447	25,936,161
Fall in Love at First Kiss	2019/02/14	90	108,717	24,703,070
Big Three Dragons	2019/02/01	67	105,954	23,605,217
We Are Champions	2019/08/23	114	102,282	22,968,141
Dad's Suit	2019/03/22	115	61,769	13,525,751
Run for Dream	2019/05/31	76	69,374	15,430,131

Notes: If motion pictures from festivals, released across years, and re-releases are not taken into consideration, a total of 57 domestic motion pictures were released in 2019, with a total box office of NT\$702,765,192 in Taiwan.

Source: Summarized by this survey from box office data provided by motion picture screening companies to the BAMID in accordance with the Motion Picture Act.

2.4.4. Domestic motion picture distribution—Box office market share of domestic motion picture distribution companies

Hollywood motion picture studios still have a relatively high market share among distribution companies in the domestic motion picture market, and accounted for 69.28% of the box office in 2019. The high market share of Hollywood motion picture studios was mainly due to the release of many sequels and hero movies in 2019.

However, the market share of Hollywood motion picture studios decreased in 2019 compared with the previous year. This was mainly due to the outstanding box office performance of many Asian movies, which increased the market share of local motion picture studios. These motion pictures include: *Exit and Kim Ji-Young Born, 1982* (South Korea), *Weathering With You* (Japan), romantic comedy *Friend Zone* and horror film “Reside” (Thailand), etc. Out of these, *GaragePlay Weathering With You* and *Ashfall* had relatively good box office performance.

Table 2-16. Market share of domestic distribution companies in 2015-2019

Unit: %

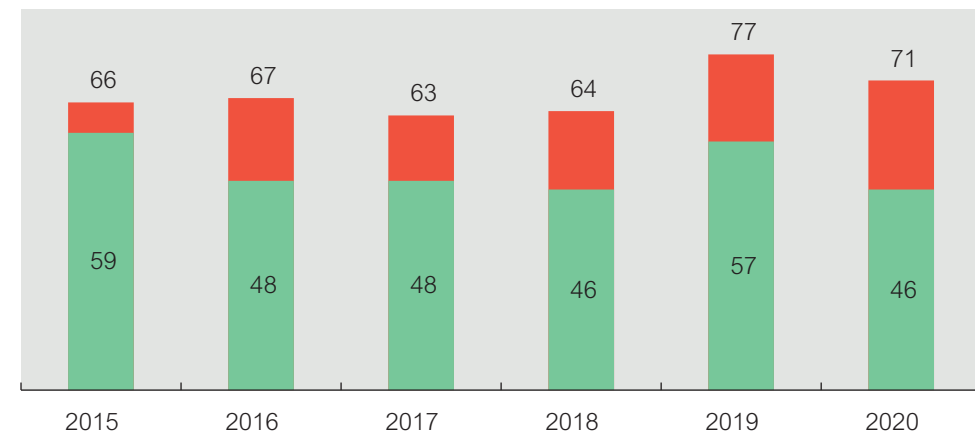
	2015		2016		2017		2018		2019	
	Distributor	Market share	Distributor	Market share	Distributor	Market share	Distributor	Market share	Distributor	Market share
1	Universal Studios	20.18%	Buena Vista	20.76%	Universal Studios	16.66%	Warner Bros.	19.61%	Disney	29.24%
2	Buena Vista	17.80%	Warner Bros.	17.76%	Warner Bros.	15.22%	Disney	16.39%	Warner Bros.	16.06%
3	Fox	14.70%	Fox	12.01%	Disney	12.63%	Universal Studios	13.55%	Universal Studios	9.88%
4	Warner Bros.	11.61%	Universal Studios	7.99%	Fox	11.20%	Twenty-First Century Fox	10.73%	Sony	6.85%
5	Paramount	6.64%	CatchPlay	6.55%	Buena Vista	8.25%	CaiChang	8.89%	GaragePlay	4.83%
6	Hualien	5.32%	Paramount	5.23%	Paramount	6.11%	Buena Vista	6.51%	Twenty-First Century Fox	4.25%
7	Long Shong	3.86%	GaragePlay	4.05%	CatchPlay	4.96%	Paramount	6.28%	CatchPlay	3.93%
8	Applause	3.40%	Long Shong	3.89%	Vie Vision	4.02%	GaragePlay	2.15%	Deejoy	3.06%
9	Vie Vision	2.55%	iFilm	3.61%	GaragePlay	3.56%	Vie Vision	1.92%	Paramount	3.00%
10	CatchPlay	2.45%	Vie Vision	3.58%	Applause	2.75%	CatchPlay	1.76%	Vie Vision	2.87%
	Other	11.49%	Other	14.57%	Other	14.64%	Other	12.21%	Other	16.03%
	Total	100.00%	Total	100.00%	Total	100.00%	Total	100.00%	Total	100.00%

Source: Data for 2017 and before was summarized from box office data for Taipei City provided by the Taipei Film Trade Association; data for the years after 2017 was summarized from box office and movie rating data provided by the Taiwan Film & Audiovisual Institute.

2.4.5. Domestic motion picture content—Production overview

By observing the production of domestic motion pictures based on the number of domestic motion pictures that premiere each year, a total of 57 domestic motion pictures premiered in 2019, 11 more than in 2018. Due to the pandemic in 2020, a total of 71 domestic motion pictures were distributed in 2020, out of which 46 premiered. This represents a slight decrease compared with the previous year.

■ Total domestic motion pictures released that year ■ Domestic motion picture premier



Notes: The total number of motion pictures released that year includes re-releases and motion pictures from festivals. A re-release refers to a motion picture that was not in theaters for the first time that year, i.e., that was released again.

Source: Data on the number of domestic motion pictures distributed in 2017 and before was provided by the Taipei Film Trade Association; data on the number of domestic motion pictures distributed after 2017 was summarized from box office data provided by the Taiwan Film & Audiovisual Institute.

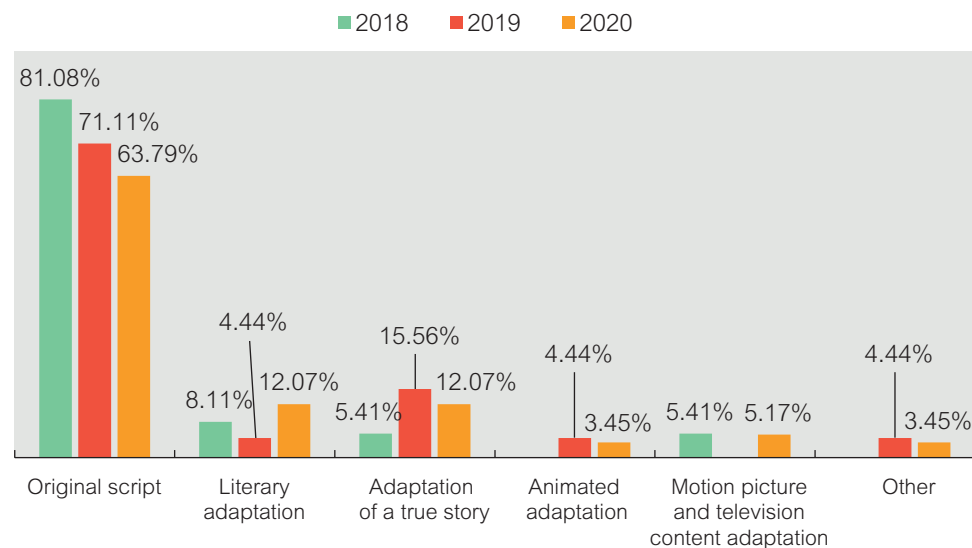
Figure 2-30. Domestic motion picture production overview in 2015-2020

2.4.6. Domestic motion picture content—Source of scripts

Observing the inspiration for scripts of domestic dramas and animations (45 in total) that premiered in 2019, a total of 13 motion pictures were adaptations of literary works, comics, true stories, and games.

A total of 7 domestic motion pictures were adaptations of true stories, accounting for 15.56% of domestic motion pictures in 2019. These include *Invisible Justice*, *Bad Boy Symphony*, *The Paradise*, and *The Shooting of 319*. Most of the motion pictures focused on social issues, such as ex-convict life, political events, and labor safety. Furthermore, there have also been motion pictures adapted from games, comics, and stage shows. Out of these, *Detention*, an adaptation of a PC game made by Red Candle Games, which is a well-known independent game production team in Taiwan, had the best box office performance at NT\$260 million. Domestic motion pictures with an original script accounted for 63.79% of domestic motion pictures in 2020, followed by adaptations of literary works and true stories, such as *Do You Love Me As I Love You*, *A Choo* and *The Bridge Curse*.

Generally speaking, even though the majority of domestic motion pictures (dramas and animations) use original scripts, the top ten highest-grossing domestic motion pictures are mostly adaptations of previous stories. The percentage of domestic motion pictures with original scripts decreased from 81.08% in 2018 to 63.79%.



Notes: 1. Only the source of scripts for dramas and animations was calculated.
 2. Ideas for domestic motion pictures are based on the domestic motion pictures that have been in theaters over the years.

Source: This survey; data for 2020 was based on statistics disclosed by the BAMID.

Figure 2-31. Source of inspiration for the script of domestic motion pictures in 2018-2020

2.4.7. Domestic motion picture content—Genres

Genres of domestic motion pictures released in 2019 mainly include romance (25.51%), family (13.27%) and inspirational (10.20%), while thriller/suspense and horror motion pictures, which have attracted attention in recent years, decreased compared with the previous year (9.86%, 0.68%). Meanwhile, the percentage of action, music/dance, war, and crime motion pictures increased. Generally speaking, a relatively high percentage of domestic motion pictures released in the past four years are romantic motion pictures.

Table 2-17. Domestic dramas released in 2016-2019 by genre

Genres	Unit: %				Total
	2016	2017	2018	2019	
Action	4.41%	1.35%	4.17%	5.10%	4.31%
Adventure	2.94%	0.90%	0.00%	0.00%	0.49%
Biography	0.00%	0.00%	0.00%	0.00%	0.14%
Comedy	25.00%	14.86%	13.89%	9.18%	16.94%
Crime	1.47%	13.51%	6.94%	7.14%	6.60%
Family	8.82%	7.66%	15.28%	13.27%	10.69%
Fantasy/Science Fiction	2.94%	4.05%	8.33%	5.10%	4.93%
Mystery/Thriller	7.35%	21.62%	12.50%	9.86%	11.74%
Horror	4.41%	2.25%	4.17%	0.68%	2.36%
Musicals	2.94%	2.25%	2.78%	4.08%	3.40%
Romance	33.82%	29.28%	22.22%	25.51%	26.18%
War	2.94%	0.00%	0.00%	1.70%	0.49%
Historical	0.00%	0.00%	1.39%	0.00%	1.66%
Inspirational	2.94%	2.25%	8.33%	10.20%	8.40%
Other	-	-	-	8.18%	1.67%
Total	100.00%	100.00%	100.00%	100.00%	100.00%

Notes: 1. These genres were summarized from Yahoo! Movies, AtMovies, and referenced genres of the British Film Institute (BFI). Each domestic motion picture was manually assessed by this survey and categorized under a maximum of three genres.
 2. Only genres were calculated.
 3. Only newly released domestic motion pictures over the years were calculated.
 4. The calculation was based on the weighted average of genres.

Source: Prepared by this survey.

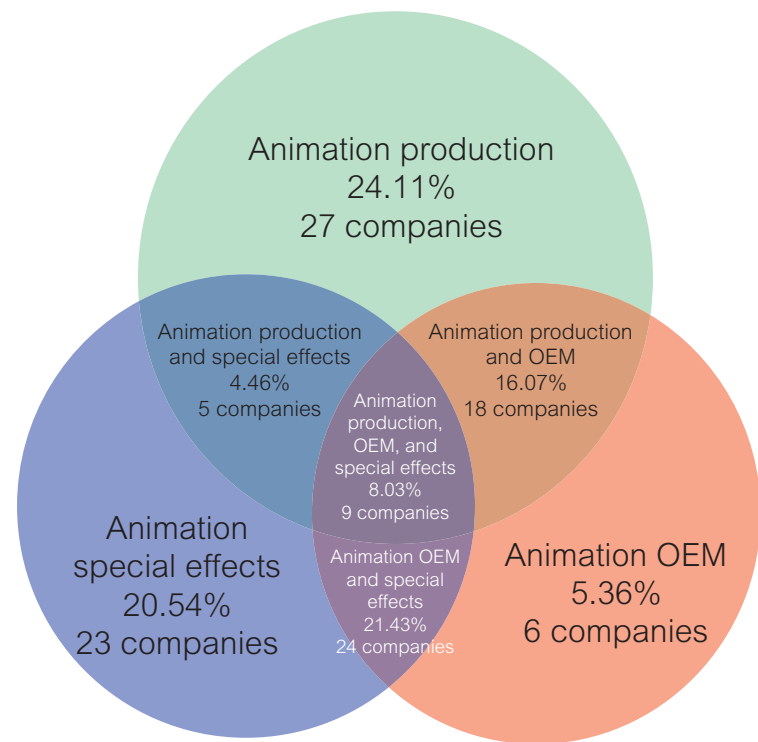
● 3. Animation industry

3.1. Overall industry overview

3.1.1. Number of companies in the domestic animation industry in 2019

A total of 112 production companies were involved in the animation industry in 2019. Out of these, 27 animation production companies/studios mainly produced animations, followed by 24 animation OEM and special effects companies, accounting for 21.43% of all companies.

Most domestic animation production companies/studios are involved in numerous businesses. For example, animation production companies may accept domestic and overseas cases for animation OEM and special effects. This is related to the relatively small scale of domestic animation production companies. The production of animations requires large amounts of manpower and funds, so they must gain funds through animation special effects, animation OEM (including advertisement animations), and other video content, in order to maintain their operations.



Source: Summarized by this survey.

Figure 2-32. Companies in Taiwan's animation industry in 2019

3.1.2. Average capital scale of the domestic animation industry in 2019

Most domestic animation companies have a capital of NT\$1-5 million and NT\$10-50 million, accounting for 41.07% and 20.54% of companies, respectively. Less than 10% of animation companies have a capital of less than NT\$1 million.

There were 5 animation companies with a capital of more than NT\$500 million that participated in animation production (including animation IP licensing, animation OEM, etc.) in 2019. These included Gamania, Pili International, Digimax, HIM International, Softstar, and IGS. These companies are mainly involved in the motion picture, game, and entertainment industries, but have entered the animation industry for diversification or to extend their IP.

Table 2-18. Breakdown of Taiwan's animation industry in 2019 by capital scale

Item	Number of companies	Percentage
<NT\$100,000	-	-
≥NT\$100,000 <NT\$500,000	5	4.46%
≥NT\$500,000 <NT\$1 million	5	4.46%
≥NT\$1 million <NT\$5 million	46	41.07%
≥NT\$5 million <NT\$10 million	11	9.82%
≥NT\$10 million <NT\$50 million	23	20.54%
≥NT\$50 million <NT\$100 million	6	5.36%
≥NT\$100 million <NT\$500 million	11	9.82%
≥NT\$500 million <NT\$1 billion	3	2.68%
≥NT\$1 billion	2	1.79%
Total	112	100.00%

Source: Ministry of Economic Affairs business registration.

3.1.3. Number of people employed in the domestic animation industry

The domestic animation industry had an average of 19.72 employees per company, and is estimated to have had a total of 2,209 professionals in 2019. Furthermore, the animation production companies on average had 18.79 full-time employees, animation special effects companies had 27.55, and animation OEM companies had 29.40. There were relatively more male full-time employees at 55.51% and female employees at 44.49%.

The number of employees involved in animation series and long animated motion pictures both decreased in 2019, with less than 25 employees in most companies.

Long animated motion pictures on average involved 208 people in 2015-2019. Animation series on average involved 59 people in the past few years. The long animated motion picture—*The Arti: the Adventure Begins*—is a puppet show animation that had a manpower of 636 people. The animation series *Adventures of the Mythical Creatures at the National Palace Museum* had the largest manpower at 191 people. This was mainly because the animation was produced in 4K, requiring a large number of modelers and animators. If extreme values are excluded⁹, the average production manpower is 57 and 147 people, respectively. Domestic animation series on average required 50-80 people, while long animated motion pictures employed more than 150 people in 2015-2019.

Table 2-19. Average production manpower of domestic original animations in 2015-2019

Unit: Number of People

Category	Average	Average (excluding extreme values)	Maximum	Minimum
Animation series	59	57	191	8
Long animated motion pictures	208	147	636	60

Notes: The "long animated motion pictures" mentioned in this survey refer to puppet animations and animated motion pictures screened during previews that are 60 minutes or longer per episode.
Source: Summarized by this survey from the cast of Taiwanese animation series and long animated motion pictures.

9. Excluding the long animated motion picture *The Arti: the Adventure Begins* with 636 people; excluding the animation series *Adventures of the Mythical Creatures at the National Palace Museum* and *Bamboo Baby* with 191 and 12 people, respectively.

Staff allocation of production teams for domestic animations in 2015-2019 is divided into production and post-production based on relatively important positions in the animation industry, such as storyboard artist, editor, and special effects personnel, in order to compare the percentage of staff allocation. The staff of animation series mainly consists of animation production personnel and artists; on average every animation requires 11 and 9.82 people, respectively. Long animated motion pictures focus on artists, animation production personnel, post-production personnel, and preparation personnel (e.g., scenery, woodworking, props, modeling, etc.), showing that the production talent, technology, and processes that television and long animated motion pictures focus on vary with the length and scale of works.

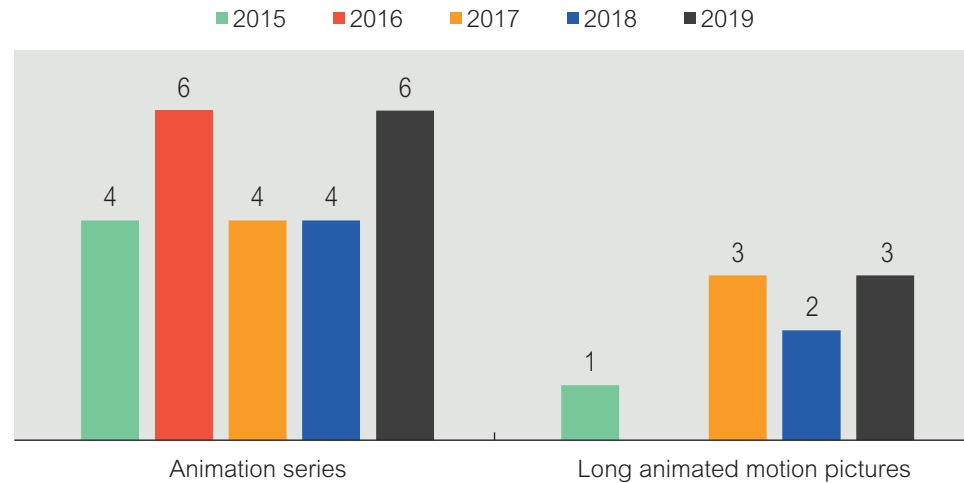
Table 2-20. Average production manpower and percentage of original animations in 2015-2019 in Taiwan

Unit: Number of people, %

	Animation series				Long animated motion pictures			
	2015-2019 Average number of people	Ratio	2019 Average number of people	2019 Ratio	2015-2019 Average number of people	Ratio	2019 Average number of people	2019 Ratio
Director	1.60	2.74%	1.80	4.25%	3.13	1.50%	3.50	5.98%
Producer	3.28	5.05%	2.60	6.13%	14.14	5.95%	2.00	1.71%
Filming/Composition	-	-	0	0.00%	5.50	1.32%	2.00	1.71%
Lighting	6.14	3.68%	4.00	3.77%	24.00	4.33%	0	0.00%
Sound effects	2.59	3.77%	1.50	2.83%	7.71	3.25%	3.00	2.56%
Special effects	2.89	2.23%	3.00	2.83%	15.80	4.75%	0	0.00%
Art	9.82	14.30%	8.00	11.32%	31.63	15.21%	14.50	24.79%
Modeler	7.10	6.08%	4.67	6.60%	22.43	9.44%	1.00	0.85%
Screenwriter	3.22	4.97%	2.00	3.77%	3.57	1.50%	2.00	3.42%
Editor	1.46	1.63%	1.25	2.36%	4.00	1.44%	0	0.00%
Storyboard artist	3.21	3.85%	2.25	4.25%	5.50	2.65%	2.00	3.42%
Animation production	11.00	18.84%	7.40	17.45%	29.13	14.01%	15.50	26.50%
Post-production	5.79	6.93%	2.33	3.30%	24.57	10.34%	4.50	7.69%
Marketing	1.67	0.43%	0	0.00%	8.25	1.98%	0	0.00%
Preparation	4.57	2.74%	4.50	4.25%	20.00	6.01%	3.50	5.98%
Dubbing	7.69	10.53%	5.60	13.21%	17.29	7.28%	16.00	13.68%
Administrative personnel	4.86	5.82%	2.67	3.77%	17.86	7.52%	2.00	1.71%
Music	4.24	6.16%	4.20	9.91%	6.00	1.80%	0	0.00%
Overall	58.40	-	42.40	-	207.88	-	58.50	-

Notes: Not many animation series and long animated motion pictures are produced in Taiwan each year. Hence, the average number of people corresponds to works in 2015-2019.
Source: Summarized by this survey from the cast of animation series and long animated motion pictures.

With regard to the number of animations produced in Taiwan in 2019, there were 6 animation series, 3 long animated motion pictures, and 1,292 short animated motion pictures. This shows that there is strong creative capacity for short animated motion pictures in Taiwan, but the output of animation series and long animated motion pictures is unstable, making it hard for professional animation talent to systematically and effectively accumulate practical experience.



Source: Summarized by this survey from the questionnaire.

Figure 2-33. Animation series and long animated motion pictures in 2015-2019 in Taiwan

Most animation companies allocate their manpower and funds in animation content production, which results in higher costs and investment risks. Production professionals leave the industry in 2-3 years and turn to advertisement special effects and game animation design as an alternative. Most animation OEM and special effects companies in Taiwan are small and medium-sized companies that are not able to independently complete large overseas projects with a high budget. They can only take on low-tech cases, making it hard for industry talent to accumulate practical experience.

3.2. Revenue and business model

3.2.1. Domestic animation industry operations overview in 2019

Approximately 50% of animation production companies had a revenue of less than NT\$5 million in 2019, and only a few companies had a revenue of more than NT\$40 million.

During interviews, domestic animation production companies stated that it is hard to maintain their operations with only revenue from animations. Many creators or animation companies take cases for commercial advertisements, music video production, game advertisements, or participate in special effects for motion pictures to maintain their basic operations. The companies use revenue from animation OEM and special effects to support their production of original animations. Hence, companies that are mainly involved in animation production (e.g., independently produced animations) had relatively low revenue in 2019.

On the other hand, in terms of capital and manpower larger animation OEM and special effects companies had steady overseas sources of projects, and even saw an increase of cases in 2019. Recently, Southeast Asian regions (such as Thailand and Malaysia) have actively promoted their animation industry. Therefore, many animation OEM and special effects companies have engaged in price competition to obtain cases, so that they can accumulate experience and build a reputation in the industry. This has resulted in an increase in cases, but a decrease in average unit prices.

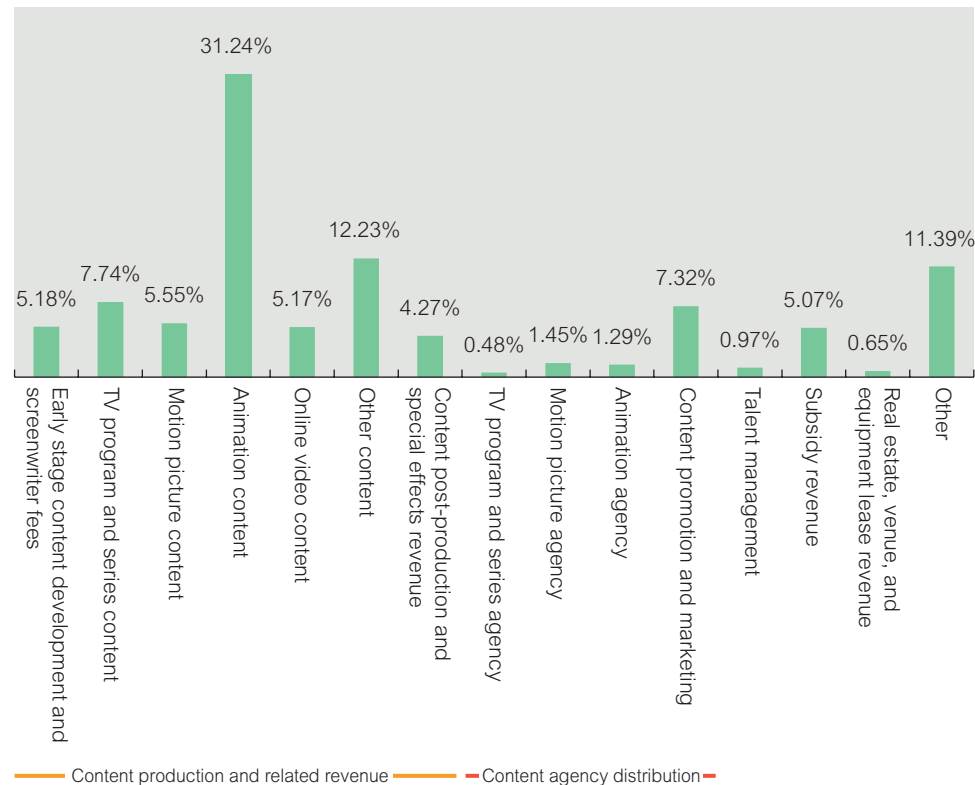
Table 2-21. Overview of the domestic animation industry in 2019—Operating revenue

Item	Unit: %			
	Animation production	Animation OEM	Animation special effects	Overall
<NT\$1 million	33.33%	14.29%	14.81%	21.35%
≥NT\$1 <5 million	30.30%	32.14%	29.63%	30.34%
≥NT\$5 <10 million	15.15%	14.29%	14.81%	14.61%
≥NT\$10 <20 million	6.07%	10.71%	22.22%	12.36%
≥NT\$20 <30 million	15.15%	7.15%	7.42%	10.11%
≥NT\$30 <40 million	-	10.71%	-	3.37%
≥NT\$40 <50 million	-	3.57%	-	1.12%
≥NT\$60 million	-	7.14%	11.11%	6.74%
Total	100.00%	100.00%	100.00%	100.00%

Source: Summarized by this survey from the questionnaire survey.

3.2.2. Revenue structure of the current year—Revenue items

Animation content production accounted for the highest percentage of domestic animation companies' revenue in 2019 at 31.24%, followed by other content production (12.23%) and others (11.39%). Based on interviews, most animation companies are not only involved in animation content production, but also participate in the production of other motion picture content to maintain their internal operations.

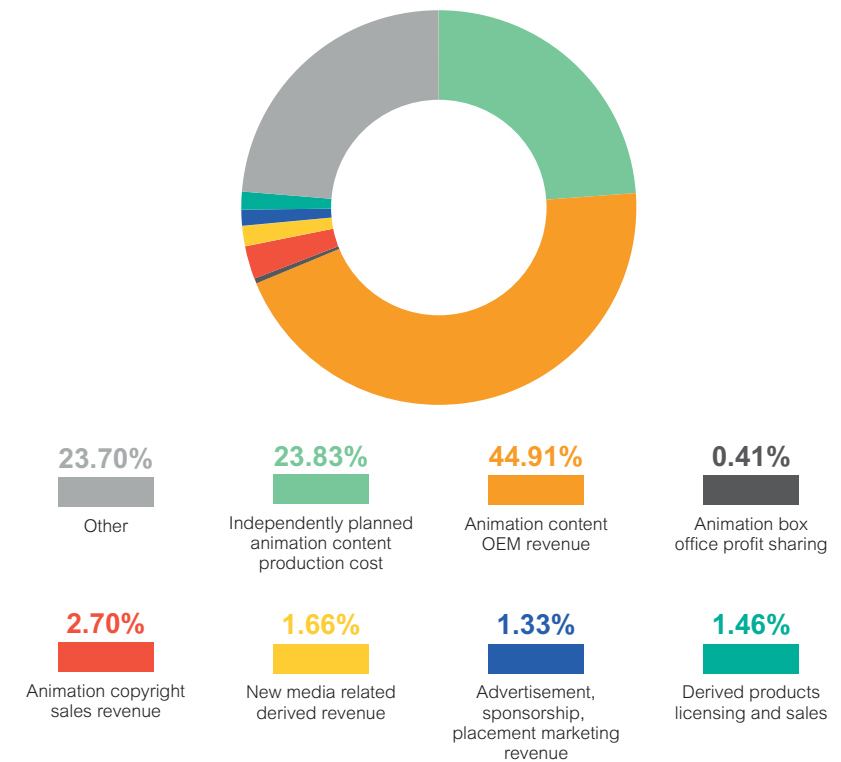


Source: Summarized by this survey from the questionnaire survey.

Figure 2-34. Animation companies' revenue breakdown in 2019

Animation OEM accounted for the highest percentage of animation production companies' revenue in 2019 at 44.91%, followed by independently planned animation content production (23.83%) and others (23.70%).

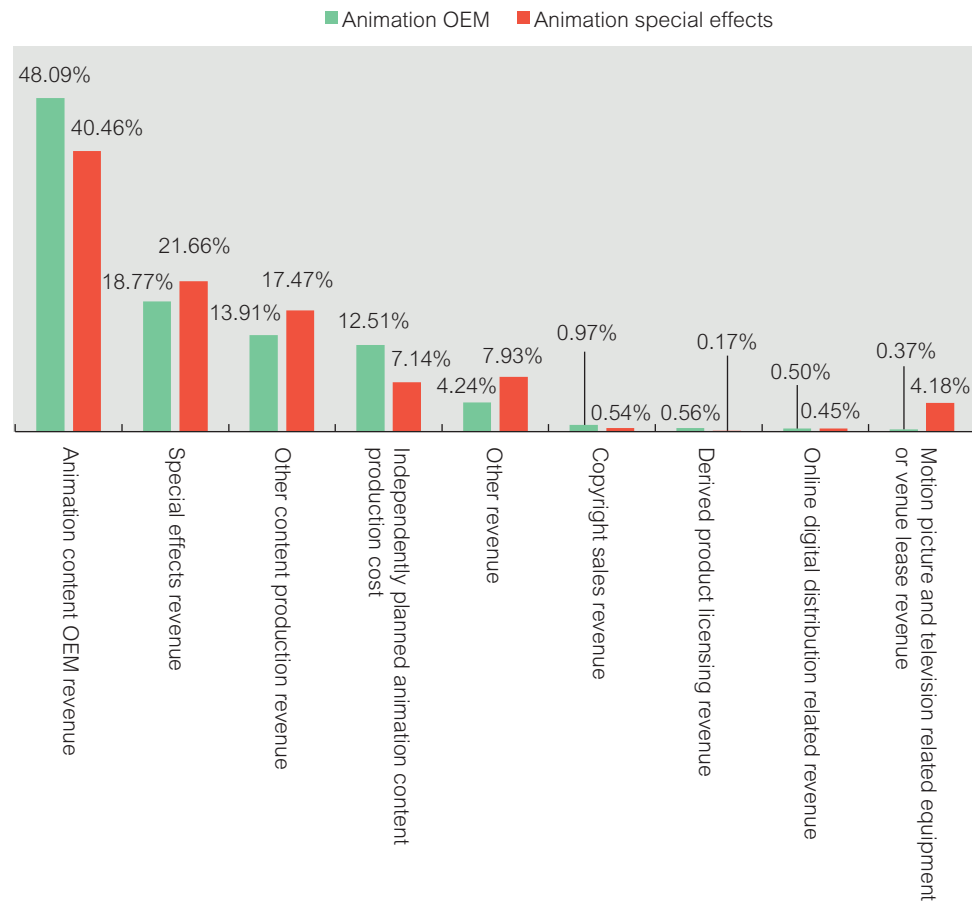
Furthermore, some companies stated that animation viewers in Taiwan mostly prefer Japanese, European, and American animations. In terms of production formats, domestic animation companies are not as competitive in the market, so many screening channels (such as television channels and online video platforms) are purchasing licenses at lower prices, or require the animation companies to pay a listing fee for their content.



Source: Summarized by this survey from the questionnaire survey.

Figure 2-35. Content production revenue structure of animation production companies in 2019

Regarding revenue from animation OEM and special effects, animation content OEM was the main source of revenue in 2019, accounting for 48.10% and 40.46%, respectively, followed by revenue from special effects, and finally other content production. Revenue from independently planned animation content production accounts for a relatively high percentage of the revenue of animation OEM companies, which may be related to some OEM companies attempting to produce original content in recent years.

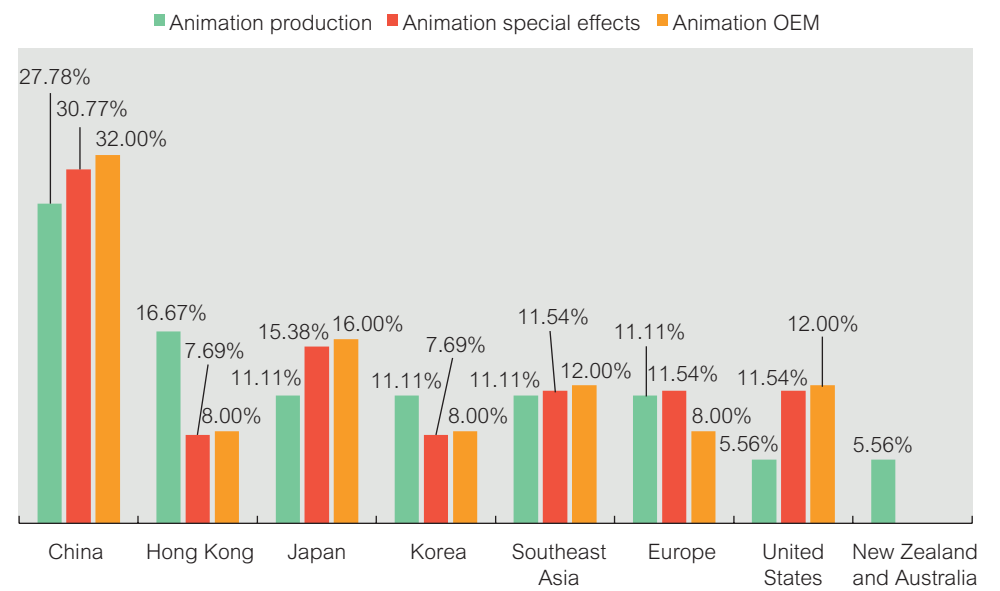


Notes: 1. Licensing revenue includes TV, DVD, and aviation, but does not include digital new media.
 2. Revenue from online digital distribution includes new media licensing, new media advertisement profit sharing, and new media subscription fees.
 Source: Summarized by this survey from the questionnaire survey.

Figure 2-36. Animation OEM and special effects companies' revenue breakdown in 2019

3.2.3. Overseas revenue regions and overview

China accounted for the highest percentage of domestic animation companies' overseas revenue in 2019, and was the highest for animation OEM companies at 32.00%. In addition, the revenue of animation OEM and special effects companies from Japan and the United States is higher than animation production companies', which is related to the cases received by domestic companies.

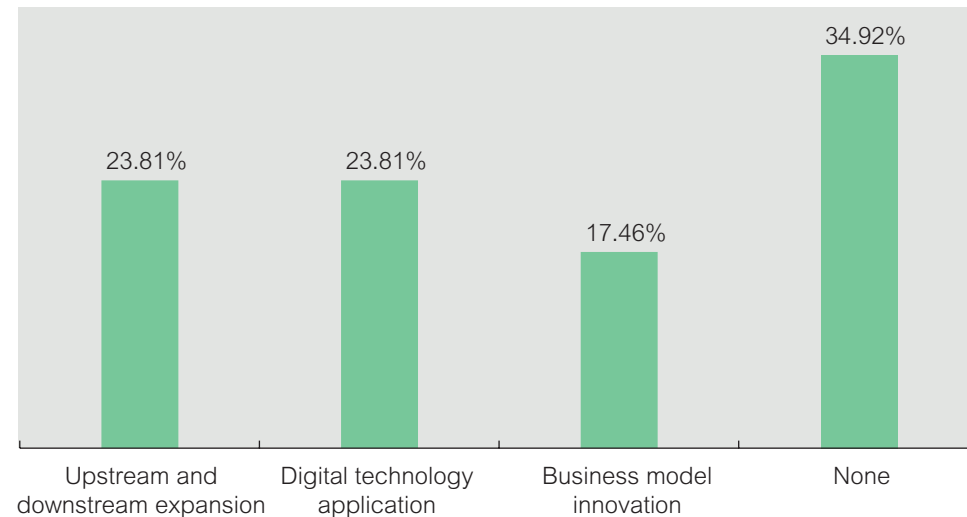


Source: Summarized by this survey from the questionnaire survey.

Figure 2-37. Breakdown of the overseas revenue of animation industry's subindustries in 2019 by region

3.2.4. Industry business trends

With regard to the trend of domestic animation companies expanding to other businesses, the questionnaire survey this year showed that approximately 65.08% of companies are engaging in digital technology applications, extending upstream and downstream, and innovating their business models. This shows that domestic animation companies are actively expanding into different sectors due to the digital convergence, and are innovating their business models to increase their sources of profit.



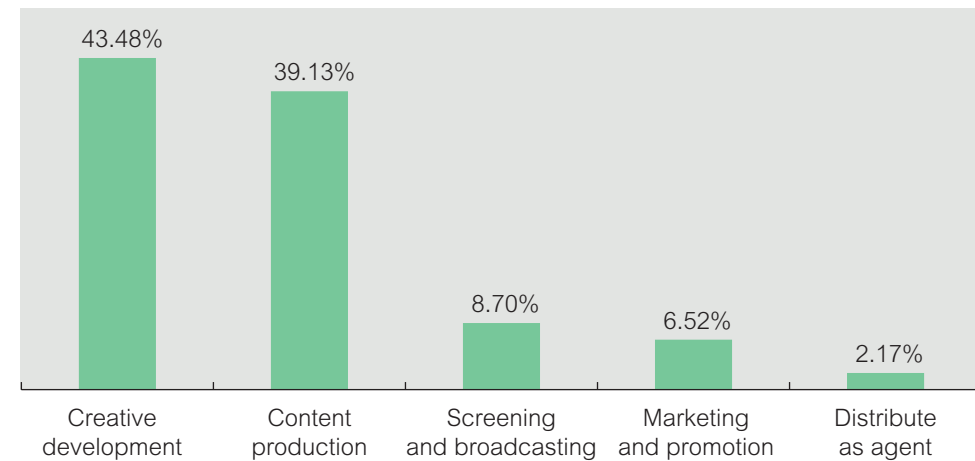
Source: Summarized by this survey from the questionnaire survey.

Figure 2-38. Animation industry expanding into different businesses trend in 2019

Digital technology applications, upstream and downstream expansion, and business model innovations of domestic animation companies in 2019 mainly involved creative development, which accounted for 43.48%. For example, companies used big data in databases to assist with script development in the writing stage, developed animations on popular science education using AR, and used a cloud-based work model to integrate resources, including scripts, art, production, digital technology, music, and other fields. These were provided to domestic animation companies to consider market preferences and their current resources.

With regard to content production, 39.13% of animation companies engaged in innovation. Some companies used MOCAP technology, digital illustration software, and models to produce animations, and to create product advertisement animations in collaboration with music creators.

However, the percentage of screening (8.70%) and marketing and promotion (6.52%) has significantly decreased. This is mainly due to domestic animation companies focusing their resources on script development and content production, thus negatively impacting their budgets and resources for subsequent marketing and promotion. As a result, domestic animations often have issues with low visibility and share of voice.



Source: Summarized by this survey from the questionnaire survey.

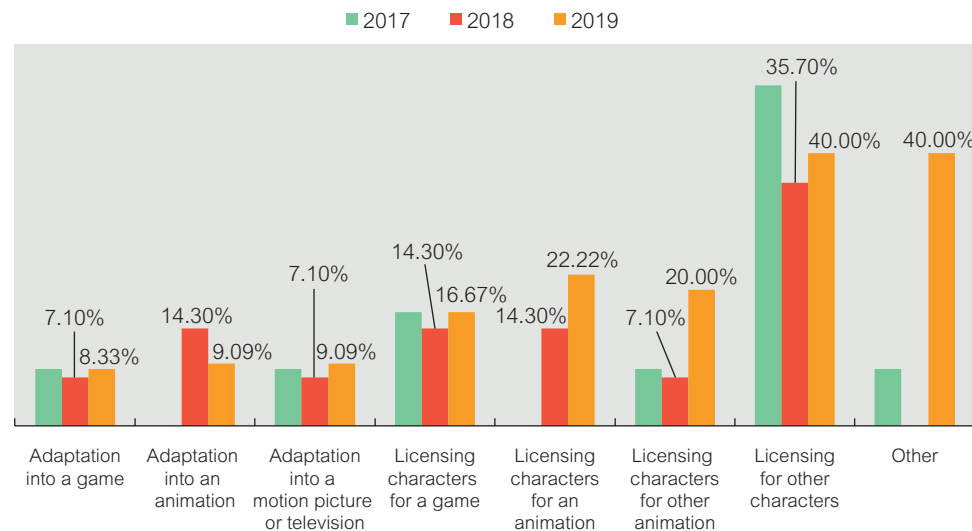
Figure 2-39. Innovation and development in the animation industry breakdown in 2019

3.3. IP licensing trends

Regarding the licensing of domestic animations in 2017-2019, “other character” licenses and “other” accounted for the highest percentage with both at 40.00%; in addition, both saw an increase compared to 2018, followed by licensing characters for comics (22.22%), for other animations (20.00%), and for games (16.67%).

Domestic animation licensing of “other character” is mainly for stationary and toys. This type of licensing simply licenses images, so the requirements on the completeness and maturity of animation contents (such as character settings, background structure, and script) are relatively low. Furthermore, the threshold for licensing adaptations into games, motion picture content, and comics is also relatively low, so many animation companies tend to use this licensing model.

In addition, when animation production companies work with foreign companies, they do not automatically obtain copyrights when participating in planning and production. The power to make decisions (such as IP translation and production of peripheral products) is determined based on the percentage of funds given by the producer. If they simply participated in the process of coming up with characters or a story, then it belongs to the creator-in-chief.



Source: Summarized by this survey from the questionnaire survey.

Figure 2-40. Animation licensing in 2017-2019

There were a total of 12 domestic animation series, long animated and short animated motion pictures in 2019. Most of these had an original script. With regard to IP translation and extension, there were 8 animations that were translated into comics, games, and picture books, such as *My Little Boys* and *Food Man* in 2018. Licensing of peripheral products is mainly for stationary and action figures. In addition, a small number of companies work with restaurants or develop high unit price peripheral electronic products, such as *A-Kuei* and *Yameme*.

Furthermore, the main topic of about 40% of animation series in Taiwan is science education. These are mainly produced with subsidies from the Ministry of Education and Ministry of Science and Technology.

Table 2-22. Topics of domestic television, motion pictures, and animations, and overall situation of IP translation and extension in 2019

Category	Item	Year	IP title	Source of topic/ Former script	IP extension	Character
Animation series						
Original animation	1	2019	Diego and Pea	Original script		Diego Pea
	2	2019	Food Man Season 2	Original script	Picture book	Food Man, Dr. Zong, Fly King
Adaptation of animation	1	2019	Hero of Robots	Arcade game		Leon, Molly, Robb, Bacchus
	2	2019	My Little Boys Season 2	Adaptation of novel	Animation	My Little Boys
					Picture book	Daddy Lo
					Thematic book stores	
Stage show						
Popular science education animations	1	2019	History of Taiwan! Everyone Should Read This	Original script		
	2	2019	Hello Manui	Original script		
Long and short animated motion pictures						
Long and short animated motion pictures	1	2019	Taichi Cats	Original script		Budy, Carly, Casey, Hairball, Bajiao
	2	2019	Deus Ex Baryon	Original script		Lei Ming-Hai, Siren
	3	2019	Gold Fish	Adaptation of comic		
	4	2019	Thunderbolt Fantasy Bewitching Melody of the West	Adaptation of Thunderbolt Fantasy		Lang Wu Yao, Mu Tian Ming, Chao Feng
	5	2019	The Adventure of Yumin and Yuma	Original script		
	6	2019	Kinseijin Love Story	Original script		Hsiao-hsia, Tien-ching, Hsiao T, Lala

Source: Prepared by this survey.

3.4. Industry observation indexes

3.4.1. Animation content production overview in Taiwan

The domestic animation industry mainly produced short animated motion pictures in 2015-2019, and produced a total of 4,012 animations in the past five years. Out of these, 2,913 were short animated motion pictures (shorter than five minutes), 10 were long animated motion pictures, and 24 were animation series.

Table 2-23. Quantity and length of domestic animations in 2015-2019

Unit: Quantity, minutes, total number of minutes/total quantity

Item		2015	2016	2017	2018	2019	Total for 2015-2019	Average length	
Animation series	Quantity	4	6	4	4	6	24	150.46	
	Length	1,440	342	727	549	553	3,611		
Long animated motion pictures	Quantity	1	0	3	2	3	10	89.9	
	Length	207	-	243	175	274	899		
Animated short motion picture	5-60 minute animation	Quantity	132	180	396	145	246	1,099	7.63
		Length	779	1,306	3,734	727	1,816	8,383	
	Short animation	Quantity	441	527	548	351	1,046	2,913	
		Length	385	647	837	611	1,607	4,087	

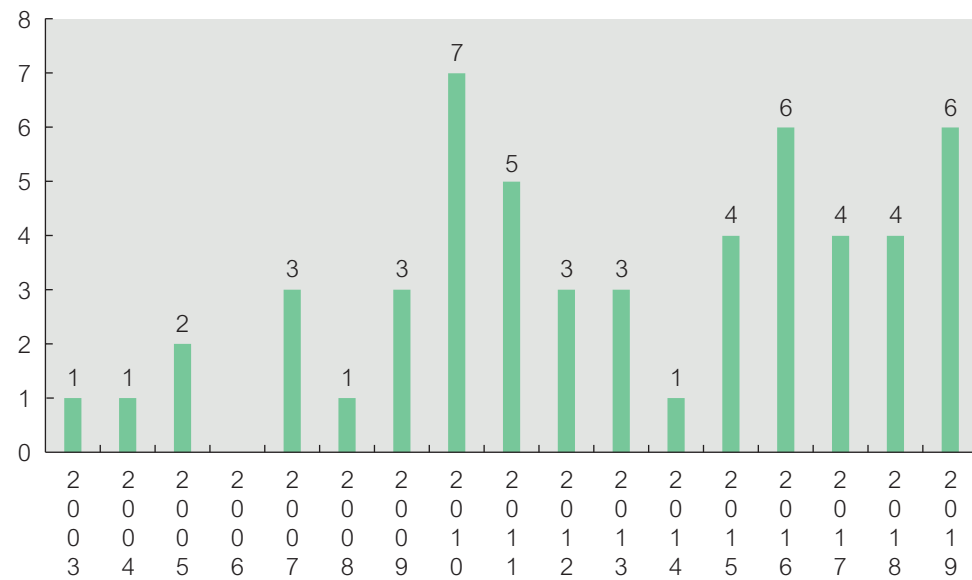
- Notes: 1. For this survey, long animated motion pictures refer to puppet animations and animated motion pictures screened during previews that are 60 minutes or longer per episode; short animations are defined as animations that are less than 5 minutes long.
 2. Short animated motion pictures do not include government promotional videos, commercial animations, and music video animations.
 3. For this survey, "long animated motion pictures" refer to puppet animations and animated motion pictures screened during previews that are 60 minutes or longer per episode, such as *Thunderbolt Fantasy – The Sword of Life and Death* in 2017, *AKA's Adventure: The Secret of Light* in 2018, and *Thunderbolt Fantasy – Bewitching Melody of the West* in 2019.
 4. No data could be found for some of the animations, so they were not calculated in the average length.

Source: Prepared by this survey.

As for animation series, a total of 53 domestically produced original animation series have been released since 2003, and most were educational and related to science.

In terms of channels on which animation series were premiered, most animations (23) were first broadcast on PTS, accounting for 43.40% of all domestic animation series, followed by 5 animations on TTV, accounting for 9.43%. There were a total of 6 original animation series in Taiwan in 2019. Out of these, 4 were first broadcast on PTS, Nice Bingo broadcast *Hello Manui* produced by Engine Studios; *Hero of Robots*, which is an adaptation of a card game made by IGS, was first broadcast on Bahamute Anime.

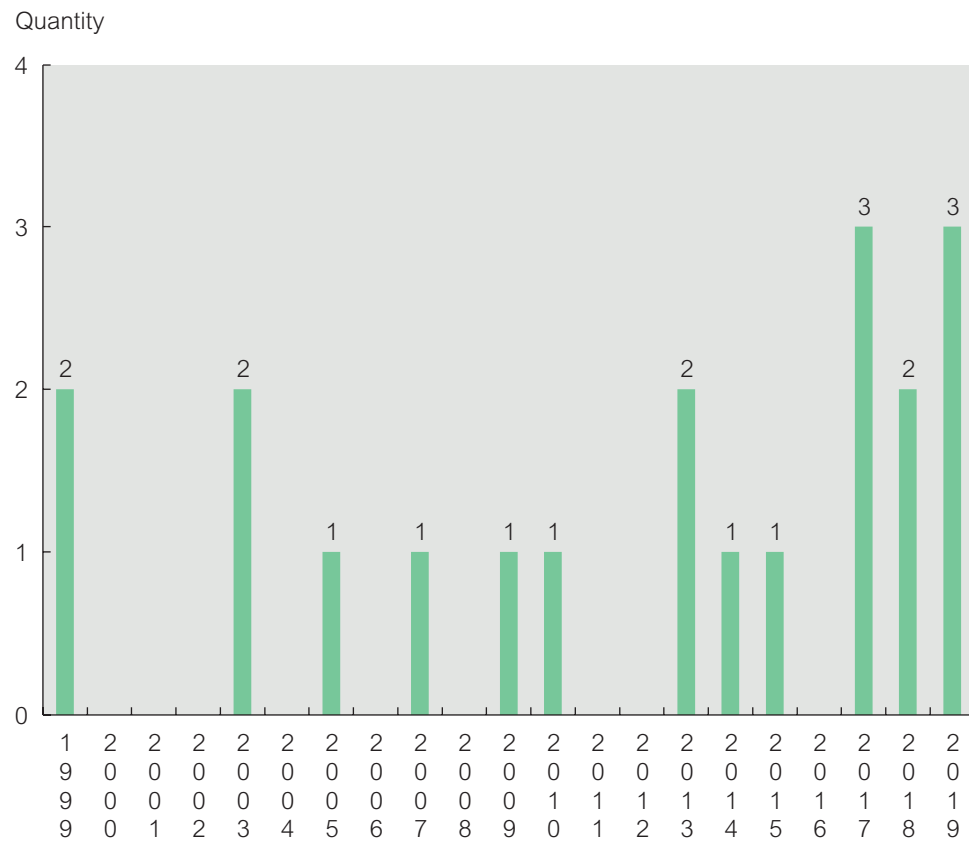
Quantity



Source: Prepared by this survey.

Figure 2-41. Domestic animation series premieres in 2015-2019

A total of 3 domestic long animated motion pictures were released in 2019, namely *Taichi Cats*, *Deus Ex Baryon*, and *Thunderbolt Fantasy – Bewitching Melody of the West*.



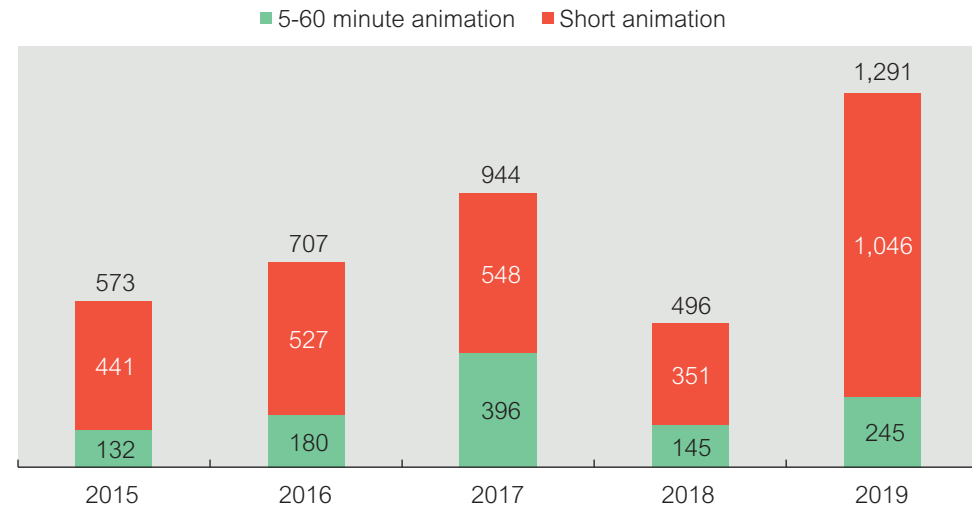
Notes: The “long animated motion pictures” mentioned in this survey refer to puppet animations and animated motion pictures screened during previews that are 60 minutes or longer per episode.

Source: Prepared by this survey.

Figure 2-42. Domestic long animated motion pictures released over the years

Taiwan has abundant capabilities to create short animated motion pictures. More and more independent creators are releasing their animations on online video platforms; most of these are short animations (less than 5 minutes long).

Domestic animation creators have utilized online video platforms and social media in recent years to accumulate fans through their illustrations first, and then producing short animated motion pictures based on the personalities of existing characters. Over 400 animations are produced ever year. In 2019, a total of 1,291 short animated motion pictures were produced—the largest amount per year so far. Out of these 1,046 were short animations¹⁰.



Source: Prepared by this survey.

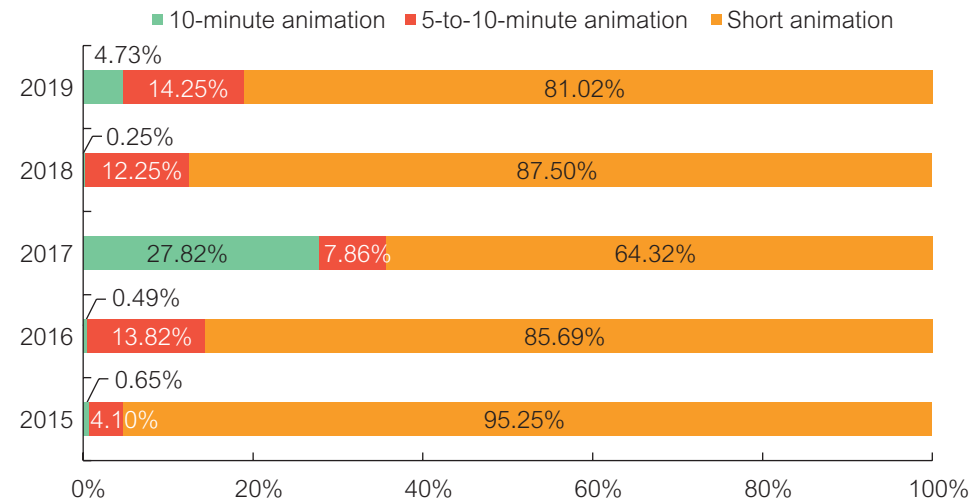
Figure 2-43. Online animations produced in 2015-2019

There are multiples channels for releasing short animated motion pictures. In 2019, many short animated motion pictures were not only released on online video platforms, but also on television channels and in movie theaters, such as the *Kinseijin Love Story* produced by 24.5 Image Production, which premiered in Tainan’s Chuan Mei Movie Theater and was broadcast on Bahamute Anime; *Gold Fish*, produced by independent animation creator Fish Wang, was screened at the Eslite Art House; *A Quest for Sound* and *The Adventure of Yumin and Yuma*, which were nominated for best animation program and best short animated motion picture in the Golden Bell Awards, were broadcast on Hakka TV and Taiwan Indigenous TV.

10. This year saw an increase of short video creators compared to 2018. These include, PanSci, A Naughty Monkey & a Spoiled Bunny, Bugcat Capoo, and Shiny Bear, which added 695 short videos.

Most online animations in Taiwan are short motion pictures that are less than 20 minutes long. Animated motion pictures can be divided into three categories based on length, including short animations that are 5 minutes or shorter, online animations that are 5-10 minutes long, and online animations that are longer than 10 minutes.

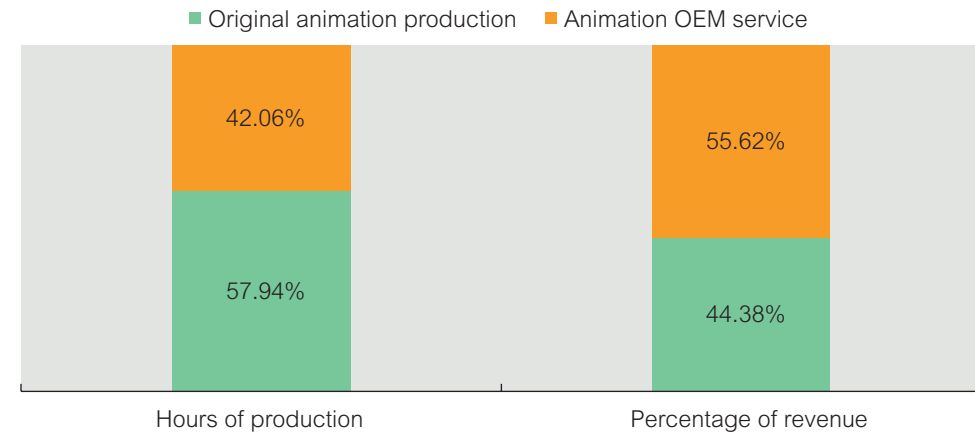
Domestic online animations are still mainly short animations, but the percentage of 5-10 minute long animations has increased each year. Short animations accounted for 81.02% of overall online animations in 2019, followed by 5-10 minute animations accounting for 14.25%, and short animated motion pictures that are 10 minutes or longer accounting for 4.73%.



Source: Prepared by this survey.

Figure 2-44. Types of domestic online animations produced in 2015-2019

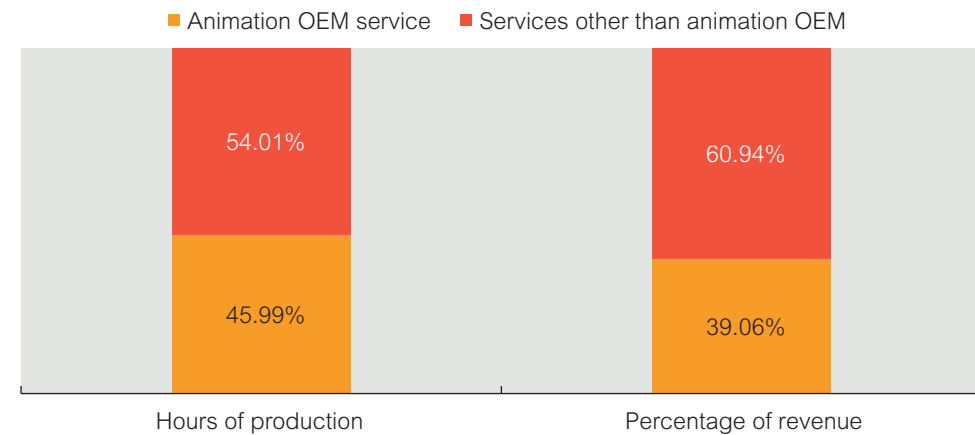
Domestic animation production companies on average spent 57.94% of their time producing original animations, and 42.06% of their time providing animation OEM services (taking cases) in 2019. Breaking down revenue from animations, original animations accounted for 44.38% and animation OEM services accounted for 55.62%.



Source: Summarized by this survey from the questionnaire survey.

Figure 2-45. Domestic animation production overview in 2019: Animation production industry

Regarding animation OEM and special effects, domestic companies mainly provided services other than animation OEM in terms of hours of production and percentage of revenue.

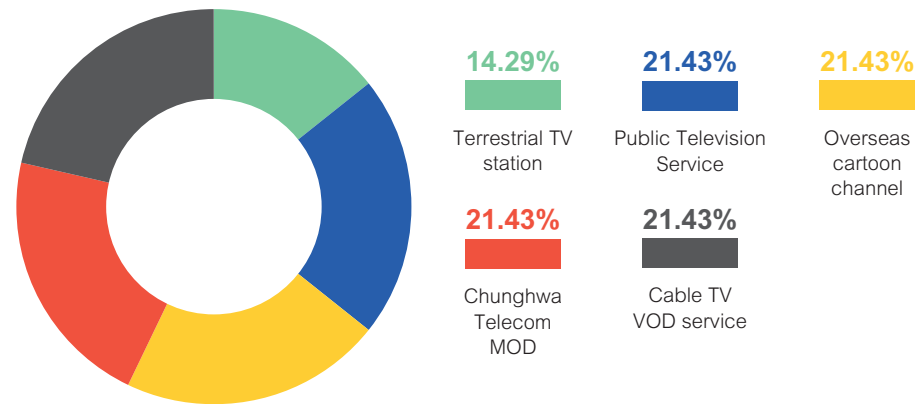


Source: Summarized by this survey from the questionnaire survey.

Figure 2-46. Domestic animation production overview in 2019: Animation OEM and special effects industries

3.4.2. Domestic animation screening channels

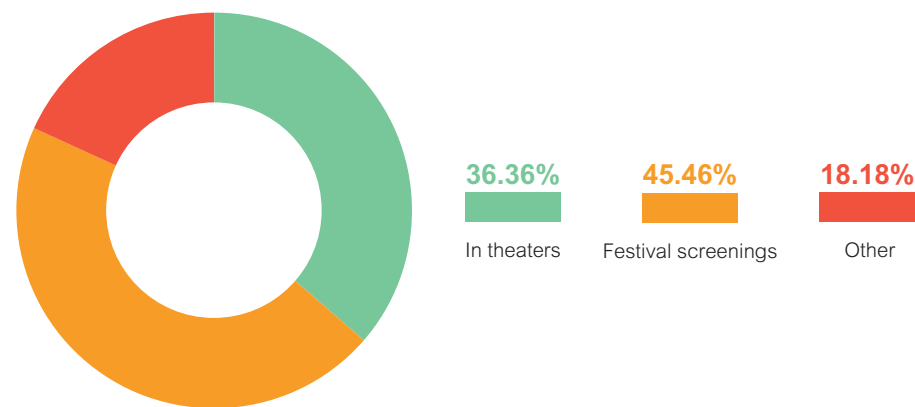
Most companies do not limit the release of domestic animations to a single television platform. Many companies chose to reach audiences through multiple platforms in 2019. For example, the animations *Barkley The Cat* and *Weather Boy*, produced by Studio2 Animation Lab Co., Ltd.¹¹, were released on PTS, terrestrial television, overseas cartoon channels, MOD, and VOD.



Source: Summarized by this survey from the questionnaire survey.

Figure 2-47. Domestic animation series screening channels in 2019

Long animated motion pictures and short animated motion pictures are mainly screened at motion picture festivals (45.46%), followed by movie theaters (36.36%). The ratio of motion pictures released in movie theaters slightly increased compared with the previous year.



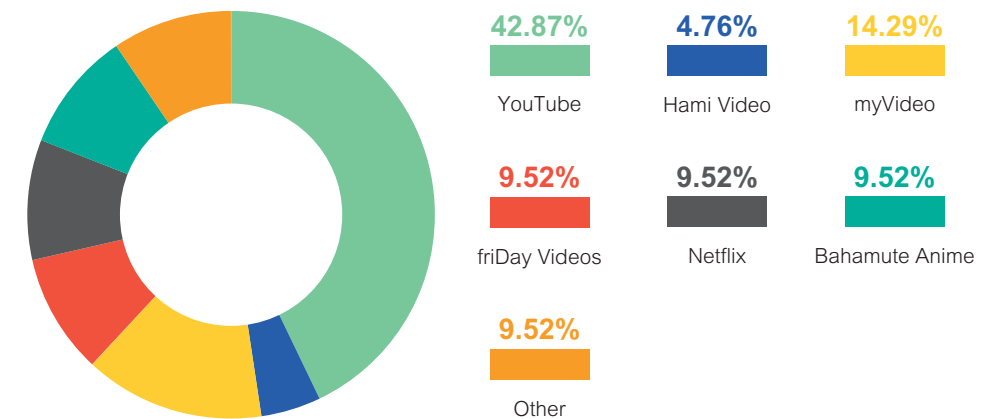
Source: Summarized by this survey from the questionnaire survey.

Figure 2-48. Screening channels for long and short animated motion pictures in Taiwan in 2019

11. Studio2 Animation Lab Co., Ltd. consists of two affiliated studios that handle different businesses. The animations listed are joint productions.

Online video platforms that broadcast domestic animations can be roughly divided into dedicated platforms for domestic and overseas animations, such as Bahamute Anime, and domestic and overseas OTT platforms, including myVideo, FriDay, and Netflix. Their main profit models can be divided into Advertising Supported Video on Demand (AVOD), Subscription Video On-Demand (SVOD), and a combination of the two.

Domestic animations face international competition because of the massive amount of animations available on digital platforms. In addition, since many animation companies lack a dedicated channel for exposure, domestic animations have struggled to gain effective exposure. Domestic animations are mainly released on YouTube (42.87%), followed by myVideo (14.29%).



Source: Summarized by this survey from the questionnaire survey.

Figure 2-49. Breakdown of animations released by online platform

After taking an inventory of the platforms CatchPlay, friDay Videos, Hami Video, KKTv, LINE TV, Netflix, LiTV, PTS+, myVideo, FainTV, and iQiyi TW, a total of 4,398 animations were released on the platforms as of October 5, 2020, an increase of 650 animations compared with the previous year. The platforms released a large number of classic Japanese long animated motion pictures and animation series to meet consumers' leisure needs during the COVID-19 pandemic. This caused the significant increase in number of works released in 2020.

Most Taiwanese animations that are released are puppet animations and science education animations. The number and percentage of Taiwanese animations has stably increased since 2018. A total of 123 animations were released in 2020, accounting for 2.80% of all animations released.

The types of animations released on online platforms vary based on the nature of the platform: Catchplay mainly broadcasts animated motion pictures that are 60 minutes or longer, a relatively high percentage of these are European and American animations. friDay Videos focuses on long animated motion pictures and animation series from a large number of countries. Hami Video, KKTV, LINE TV, and LiTV mainly show Japanese animation series. Nearly 90% of animations on Netflix are animation series from Japan and the United States. Coture¹² and PTS+ mainly broadcast Taiwanese animations, and iQiyi TW focuses on Chinese animations. FainTV has animations from a relatively wide variety of countries, including China, South Korea, Spain, and Russia.

Furthermore, Netflix has begun to produce its own long animated motion pictures and animation series in recent years, such as jointly producing animation series with well-known animation IP and production companies, it has indirectly expanded and deepened its reach through well-known local animations.

Table 2-24. Animations released on each platform in Taiwan in 2018-2020

Unit: Number of animations, %

Platform	2018		2019		2020	
	Number of animations in Taiwan	Total animations	Number of animations in Taiwan	Total animations	Number of animations in Taiwan	Total animations
CatchPlay	2	79	3	206	4	332
LINE TV	3	60	3	203	4	338
Hami Video	10	334	-	675	13	205
friDay Videos	17	481	37	411	73	709
myVideo	-	-	21	391	18	552
LiTV	-	-	9	577	5	632
Yahoo TV	3	136	-	-	-	-
Netflix	-	263	-	294	-	557
iQiyi	3	719	6	636	-	480
KKTV	-	15	2	290	1	558
PTS+	4	4	3	3	4	4
FainTV	1	19	1	45	1	31
Coture	8	9	8	17	-	-
Total	51	2,119	93	3,748	123	4,398
Percentage	2.41%	100.00%	2.48%	100.00%	2.80%	100.00%

Notes: 1. The data was retrieved on 2018/08/25-2018/08/31, 2019/07/14-2019/07/20, and 2020/09/03-2020/10/05.

2. The platforms myVideo and LiTV were added and YahooTV was deleted in 2019; Coture stopped its services on March 31, 2020. Hence, some of the data is missing.

Source: Prepared by this survey.

12. Coture stopped providing services on March 31, 2020.

3.4.3. Domestic animated motion picture market analysis

A total of 72 animated motion pictures were released in Taiwan in 2019 with a total box office of approximately NT\$1.664 billion, a significant increase of 100.13% compared to 2018. In 2019, *Thunderbolt Fantasy – Bewitching Melody of the West*, a puppet animation jointly produced with Japan, was the highest grossing long animated motion picture in Taiwan, with a box office of approximately NT\$4.64 million. *On Happiness Road*, released in 2018, was the highest grossing animation in the past five years with a box office of NT\$12.38 million.

Table 2-25. Animated motion picture box office in Taiwan in 2015-2019

Unit: Number of motion pictures, NTD, %

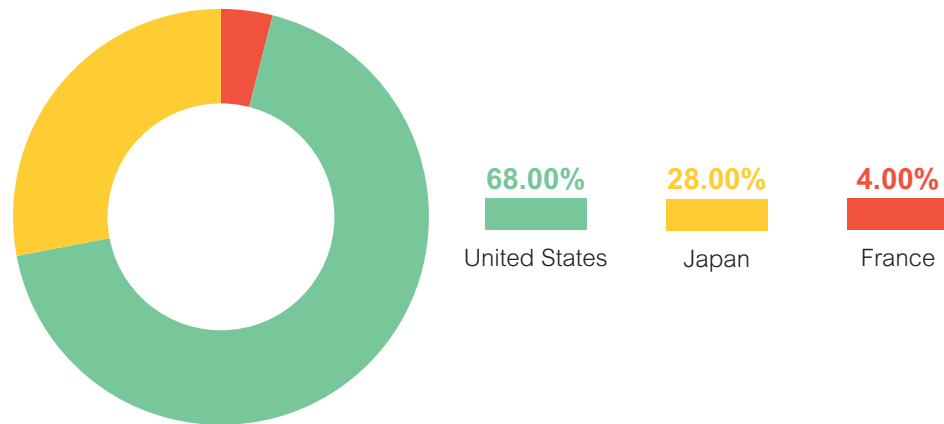
Country/Year	2015	2016	2017	2018	2019	
Taiwan	Quantity	1	-	3	2	4
	Box office	11,666,820	-	6,805,752	12,380,263	8,629,718
	Percentage	1.40%	-	0.70%	1.50%	0.52%
Japan	Quantity	23	21	31	33	46
	Box office	128,963,738	302,211,578	323,490,591	202,401,469	518,841,656
	Percentage	15.40%	27.90%	34.00%	24.30%	31.18%
Spain	Quantity	-	-	-	1	1
	Box office	-	-	-	20350	140,610
	Percentage	-	-	-	0.00%	0.01%
France	Quantity	1	-	1	3	1
	Box office	56,455,836	-	3,333,070	5,533,317	23,216,543
	Percentage	6.80%	-	0.40%	0.70%	1.40%
Finland	Quantity	-	-	-	-	-
	Box office	529,870	-	-	-	-
	Percentage	0.10%	-	-	-	-
Netherlands	Quantity	-	-	-	-	1
	Box office	-	-	-	-	140,610
	Percentage	-	-	-	-	0.01%
Germany	Quantity	-	-	-	-	4
	Box office	-	-	-	-	2,361,093
	Percentage	-	-	-	-	0.14%
United States	Quantity	10	16	10	11	14
	Box office	628,248,450	780,017,738	618,544,719	605,815,772	1,110,532,912
	Percentage	75.20%	72.10%	65.00%	72.90%	66.74%
United Kingdom	Quantity	5	-	-	1	-
	Box office	10,177,326	-	-	2,688,807	-
	Percentage	1.20%	-	-	0.30%	-
Korea	Quantity	-	1	-	1	1
	Box office	-	442,650	-	1,951,293	21,930
	Percentage	-	0.00%	-	0.20%	0.00%
Thailand	Quantity	-	-	-	1	-
	Box office	-	-	-	610,636	-
	Percentage	-	-	-	0.10%	-

Country/Year	2015	2016	2017	2018	2019	
Total	Quantity	41	38	45	53	72
	Box office	836,042,040	1,082,671,966	952,174,132	831,401,907	1,663,885,072
	Percentage	100.00%	100.00%	100.00%	100.00%	100.00%

Notes: 1. This survey defines animated motion pictures as 60-minute or longer per episode animated motion pictures, such as puppet animations and previews, and short animated motion pictures that are shorter than 60 minutes.
 2. Only long animated motion pictures released that year were included, so the box office of animated motion pictures in Taiwan in 2018 only includes *On Happiness Road*.
 3. *Buñuel in the Labyrinth of the Turtles*, released in 2019, is a joint production of Spain, Germany, and the Netherlands. The box office was double counted so the animated motion picture grossed a total of NT\$140,610.

Source: Data for 2015-2016 was summarized from data of the Taipei Film Trade Association; data for 2017-2018 was summarized from box office data of the Taiwan Film & Audiovisual Institute; data for 2019 was summarized from box office data provided by motion picture screening companies to the BAMID in accordance with the Motion Picture Act.

Among long animated motion pictures released in Taiwan in the past 5 years, the top 50 highest-grossing motion pictures were from the United States, Japan, and France. There were no Taiwanese long animated motion pictures in the top 50. A total of 18 animated motion pictures grossed over NT\$100 million. Out of these, 15 were from the United States and 3 from Japan. The highest-grossing animated motion picture was *Frozen 2* with a box office reaching NT\$326 million.

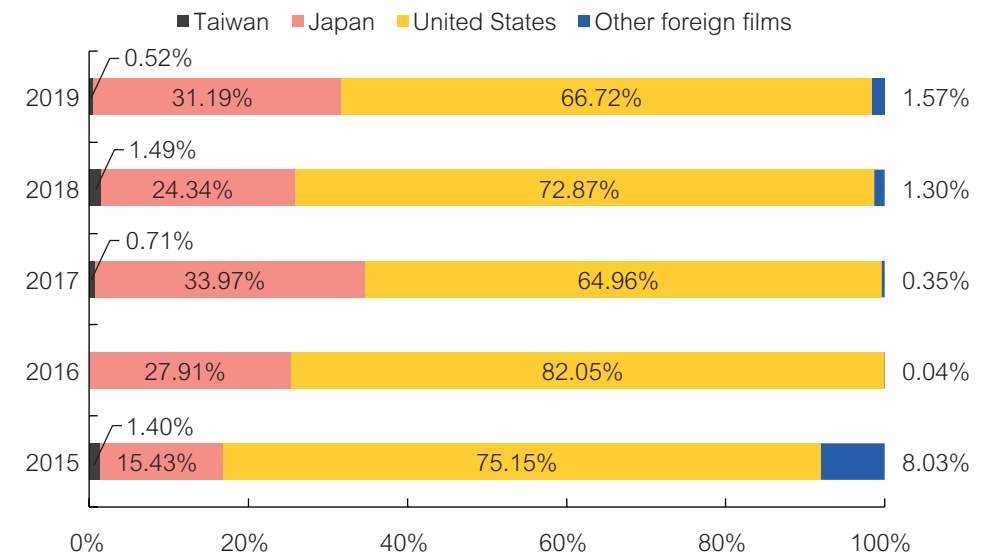


Notes: This survey defines "animated motion pictures" as long animated motion pictures with 60-minute or longer episodes, such as puppet animations and previews, and short animated motion pictures that are shorter than 60 minutes.

Source: Data for 2015-2016 was summarized from data of the Taipei Film Trade Association; data for 2017-2018 was summarized from box office data of the Taiwan Film & Audiovisual Institute; data for 2019 was summarized from box office data provided by motion picture screening companies to the BAMID in accordance with the Motion Picture Act.

Figure 2-50. Top 50 highest-grossing animated motion pictures breakdown in Taiwan in 2015-2019 by country

In 2019, animated motion pictures from the United States had the highest market share among animated motion pictures released in Taiwan at 66.72%, but saw a decrease compared to 2018. Japanese animated motion pictures had the second highest market share at 31.19%, an increase of 6.89% compared to 2018, which was mainly driven by the box office of *Weathering With You* directed by Japanese animator Shinkai Makoto in 2019. As for other foreign animated motion pictures, in 2019 a total of 6 animated motion pictures were released in Taiwan. They covered a wide variety of topics; out of these, the French long animated motion picture *The Queen's Corgi* had the best box office performance—NT\$13.22 million.



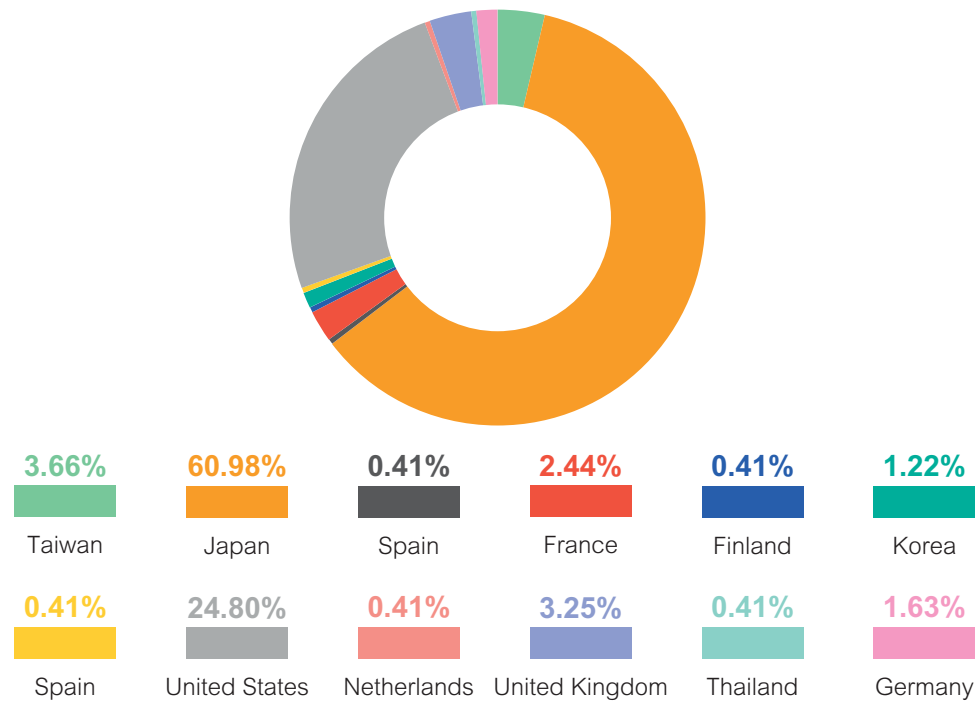
Notes: This survey defines "animated motion pictures" as long animated motion pictures with 60-minute or longer episodes, such as puppet animations and previews, and short animated motion pictures that are shorter than 60 minutes.

Source: Data for 2015-2016 was summarized from data of the Taipei Film Trade Association; data for 2017-2018 was summarized from box office data of the Taiwan Film & Audiovisual Institute; data for 2019 was summarized from box office data provided by motion picture screening companies to the BAMID in accordance with the Motion Picture Act.

Figure 2-51. Box office market share of overseas animations in Taiwan in 2015-2019

A total of 244 animated motion pictures were screened in movie theaters in 2015-2019. Out of these, the majority were Japanese animated motion pictures (150), accounting for 60.98%, followed by 61 from the United States, accounting for 24.80%. Nine Taiwanese animated motion pictures have been released in the past five years, and accounted for 3.66% of all animated motion pictures that were in theaters.

Three Taiwanese long animated motion pictures were released in movie theaters in 2019, namely *Taichi Cats*, *Deus Ex: Baryon*, and puppet comic *Thunderbolt Fantasy – Bewitching Melody of the West*. The first two have original scripts, while the latter is a joint production of Pili International and a Japanese animation production company. Furthermore, *Gold Fish* was released in Eslite Art House in 2019 and won the best short animated motion picture at the Golden Horse Awards.



Notes: 1. This survey defines animated motion pictures as 60-minute or longer per episode animated motion pictures, such as puppet animations and previews, and short animated motion pictures that are shorter than 60 minutes.

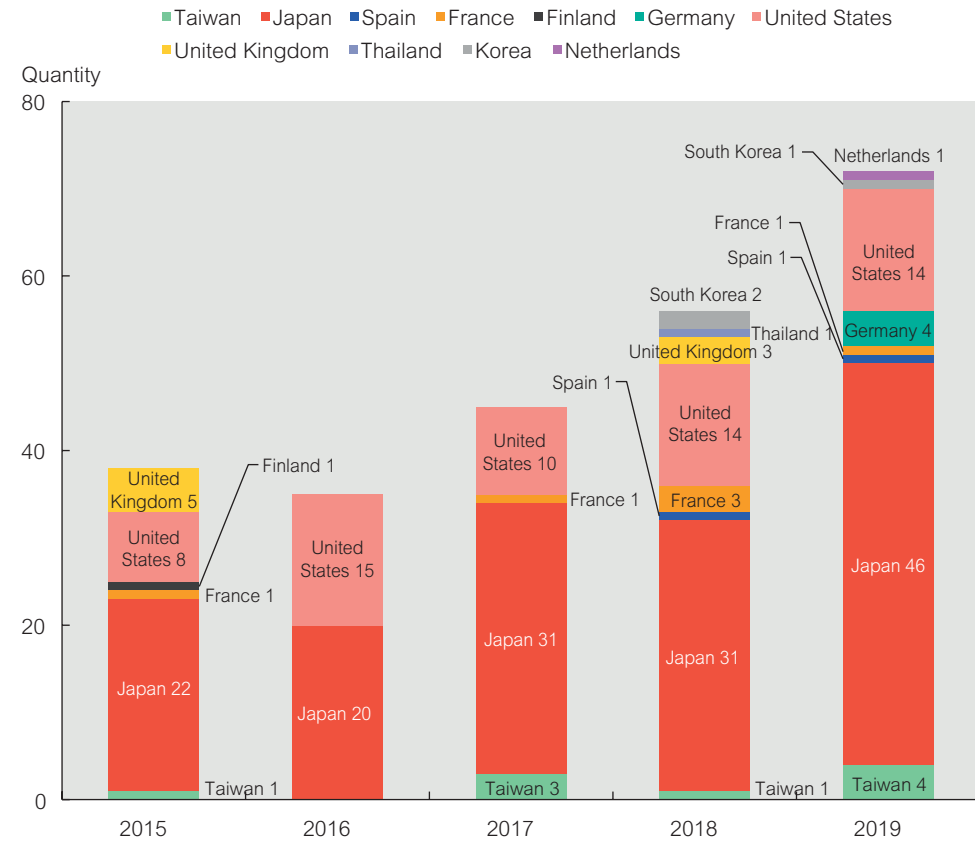
2. Only long animated motion pictures (including previews) released in the current year were included in the data. Animated motion pictures in 2018 include *On Happiness Road* and the preview of *AKA's Adventure: The Secret of Light*.

3. *Buñuel in the Labyrinth of the Turtles*, released in 2019, is a joint production of Spain, Germany, and the Netherlands, thus it was double counted.

Source: Data for 2015-2016 was summarized from data of the Taipei Film Trade Association; data for 2017-2018 was summarized from box office data of the Taiwan Film & Audiovisual Institute; data for 2019 was summarized from box office data provided by motion picture screening companies to the BAMID in accordance with the Motion Picture Act.

Figure 2-52. Long animated motion pictures released in Taiwan in 2015-2019 by country

By observing domestic animated motion pictures released in the past five years, we can see that there were no animated motion pictures released in 2016. However, there was at least one long animated motion picture released in movie theaters in all other years. A total of 71 animated motion pictures were released in Taiwan in 2019, which represented an increase of 16 compared to 2018. Most of the animated motion pictures were from Japan, with 46 motion pictures, accounting for 63.88%, followed by animated motion pictures from the United States with 14 motion pictures, accounting for 19.44%.



Notes: This survey defines "animated motion pictures" as long animated motion pictures with 60-minute or longer episodes, such as puppet animations and previews, and short animated motion pictures that are shorter than 60 minutes.

Source: Data for 2015-2016 was summarized from data of the Taipei Film Trade Association; data for 2017-2018 was summarized from box office data of the Taiwan Film & Audiovisual Institute; data for 2019 was summarized from box office data provided by motion picture screening companies to the BAMID in accordance with the Motion Picture Act.

Figure 2-53. Animated motion pictures released in movie theaters in 2015-2019 by country

Most of the top 10 long animated motion picture distributors, in Taiwan, in the past five years are foreign distributors. The majority of animated motion pictures were distributed by Mighty Media, Crown Films, and Muse Communication. Animated motion pictures from the United States were mainly distributed by Buena Vista Film, Twentieth Century-Fox, and Universal Studios. Domestic animated motion pictures do not have a distributor that specializes in the distribution of animated motion pictures. Generally speaking, animated motion pictures from the United States had the highest distribution concentration in 2015-2019, followed by Japan; Taiwan had the lowest distribution concentration.

Table 2-26. Main distributors of domestic and foreign animated motion pictures in 2015-2019

Name of distributor	Unit: Number of animations, %	
	Quantity	Percentage
Mighty Media	28	11.48%
Crown Films	22	9.02%
Muse Communication	20	8.20%
GaragePlay	19	7.79%
Applause Entertainment Limited Taiwan Branch	14	5.74%
Buena Vista Film	13	5.33%
Twentieth Century-Fox	11	4.51%
The Walt Disney Company (Taiwan)	10	4.10%
iFilm	10	4.10%
Universal Picture Corporation of China Taiwan Branch (U.S.A.)	10	4.10%
Other	87	35.66%
Total	244	100.00%

Source: Prepared by this survey.

3.4.4. Average views of animated motion pictures in Taiwan

Domestic long animated motion pictures had an average of over 70,000 views each year in 2015-2019, which is lower than the average views of domestic motion pictures.

Animated motion pictures released in Taiwan in 2019 on average had over 100,000 views, but Taiwanese animated motion pictures only had an average of over 9,000 views. In 2019, animated motion pictures from the United States had an average of over 340,000 views in Taiwan,—the highest among all countries and an increase compared to 2018. Japanese animated motion pictures had an average of 47,000 views, which also increased compared to 2018.

Table 2-27. Average views of animated motion pictures from different countries in Taiwan in 2015-2019

Country/Year	Unit: Views, views/number of motion pictures					Average views of each country in 2015-2019
	2015	2016	2017	2018	2019	
Taiwan	21,756.00	-	9,438.67	32,536.00	9,501.00	15,314.80
Japan	11,634.40	29,215.48	43,242.94	20,099.58	46,596.47	31,886.38
France	119,228.00	-	15,688.00	6,248.00	105,065.00	37,853.29
United States	128,112.40	100,208.50	273,047.70	144,526.63	340,292.07	190,217.86
United Kingdom	4,304.00	-	-	4,115.00	-	4,233.13
Korea	-	987.00	-	8,526.00	100.00	3,204.33
Germany	-	-	-	-	3,322.00	3,322.00
Other countries	1,148.00	-	-	1,405.00	647.00	1,151.25
Average number of views each year	41,765.02	58,364.42	91,444.71	50,324.77	100,875.84	70,263.31

Notes: 1. This survey defines animated motion pictures as 60-minute or longer per episode animated motion pictures, such as puppet animations and previews, and short animated motion pictures that are shorter than 60 minutes.

2. Only long animated motion pictures (including previews) released in the current year were included in the data. Animated motion pictures in 2018 include *On Happiness Road* and the preview of *AKA's Adventure: The Secret of Light*.

Source: Data for 2015-2016 was summarized from data of the Taipei Film Trade Association; data for 2017-2018 was summarized from box office data of the Taiwan Film & Audiovisual Institute; data for 2019 was summarized from box office data provided by motion picture screening companies to the BAMID in accordance with the Motion Picture Act.

4. Radio industry

4.1 Overall industry overview

4.1.1. Companies in the domestic radio industry in 2019

Due to regulatory requirements on capital¹³, radio stations are divided into four categories, namely trans-regional and high-power radio stations, medium-power radio stations, low-power radio stations, government-run radio stations, and AM radio stations.

After conducting a review and referencing data announced by the NCC, a total of 171 operators held a radio broadcasting license in Taiwan at the end of 2019, which is the same number found in the radio industry survey conducted in 2015. However, these are not the same operators. Of the 171 operators, 10 are government-run radio stations (including 1 international radio station¹⁴), including 8 existing radio stations, Hakka Radio (operated by the Hakka Affairs Council) and Alian 96.3 (operated by the Indigenous Peoples Cultural Foundation), which began broadcasting in 2017. Sixteen are privately-run AM radio stations, 4 are trans-regional and high-power, 65 are medium-power, and 76 are low-power.

Table 2-28. Classification of radio stations in 2019

Category	Number of companies
Government-run radio stations	10
AM radio stations	16
Trans-regional and high-power radio stations	4
Medium-power radio stations	65
Low-power radio stations ¹⁵	76

Source: This survey.

13. The minimum paid-in capital or amount of assets donated to a radio company must reach NT\$200 million for nationwide radio broadcasting and NT\$30 million for regional radio broadcasting. If the purpose for applying to establish a radio station is to serve a specific group or remote area or to drive regional development, after providing a reasonable explanation, the minimum paid-in capital or amount of assets donated to the radio station will not be limited by Subparagraph 2 of the preceding paragraph. If the organization is a company limited by shares, the radio station must comply with the Company Act and related regulations. If the organization is an institution, the amount of assets donated may not be lower than NT\$10 million.

14. Radio Taiwan International is a shortwave radio station. It is the only public media that provides international radio broadcasting services in the country. Shortwave radio is a range of wavelengths for radio transmission that corresponds to high frequencies. Hence, shortwave radio is radio transmission using shortwave radio frequencies. The radio waves have stronger penetrating ability and are less susceptible to interference. For this reason, international radio usually uses shortwave bands.

15. Starting in 2017, the name on the company registration of the Voice of Xinying was changed to Tainan Online, and the name on the company registration of Hsinchu Labor was changed to Pulse Broadcasting.

Riding on the development of the radio industry, low and medium-power radio stations are applying strategic alliance broadcast network methods to increase the reach of radio listening and reduce program production costs, in order to overcome broadcasting range limitations. According to the radio station program schedule of the NCC¹⁶ and the official website of broadcast networks, there are currently 13 official and 3 unofficial broadcast networks.

4.1.2. Average capital scale of the domestic radio industry in 2019

According to business registration data of the Ministry of Economic Affairs, the capital of radio stations in 2019 was concentrated in the NT\$10 million to NT\$50 million (exclusive) range, accounting for 38.04% of all radio stations, followed by NT\$50 million to NT\$100 million (exclusive), accounting for 28.22%. The capital of 11 companies was less than NT\$5 million. The company with the lowest capital had a capital of no less than NT\$3.5 million. There were two companies with a capital of NT\$1 million or above. Generally speaking, nearly 90% of radio stations had a capital of NT\$5 million to NT\$100 million (exclusive).

Table 2-29. Capital structure of the radio industry in 2019

Industry	Number of companies	Percentage
<NT\$5 million	11	6.75%
NT\$5 million-NT\$10 million (exclusive)	38	23.31%
NT\$10 million-NT\$50 million (exclusive)	62	38.04%
NT\$50 million-NT\$100 million (exclusive)	46	28.22%
NT\$100 million-NT\$500 million (exclusive)	4	2.45%
NT\$500 million-NT\$1 billion (exclusive)	0	0.00%
>NT\$1 billion	2	1.23%
Total	163	100.00%

Unit: Companies, %

Notes: There is no information on the capital of the Ministry of the Interior National Police Agency Police Broadcasting Service, Executive Yuan Council of Agriculture Fisheries Agency Fishery Radio Station, Taipei Broadcasting Station, Fuhsing Broadcasting Station, Kaohsiung Broadcasting Station, National Education Radio, Ministry of National Defense Psychological Warfare Battalion (Voice of Han Broadcasting Network), and Hakka Affairs Council (Hakka Radio). Hence, the table above only contains data of 163 radio stations.

Source: Summarized from business registration data of the Ministry of Economic Affairs.

16. Website: <http://nccstat2.ncc.gov.tw/ncc/stnccpr.jsp?sys=10&funid=prsel>

4.1.3. People employed in the domestic radio industry

According to statistics of radio station employees and supervisors provided by the NCC, domestic radio stations had a total of 6,868 employees in 2019, down 1.32% compared to 2018, with relatively less male employees (62).

Among different types of radio stations, government-run radio stations had the most employees with over 2,000, followed by medium-power radio stations with 1,160 employees. AM radio stations had the fewest employees at 578.

Table 2-30. Domestic radio station employees in 2014-2019

	2014		2015		2016		2017		2018		2019	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
Trans-regional and high-power	462	380	444	370	444	370	326	284	328	282	330	272
Low-power (none)	402	424	418	384	402	414	406	402	418	402	406	398
Low-power (network)	486	416	482	402	504	400	462	352	482	368	484	342
Medium-power (none)	506	404	486	396	514	396	480	392	490	360	498	366
Medium-power (network)	812	556	862	532	822	548	790	538	730	476	710	450
Government-run	652	1,006	624	1,040	632	1,004	830	1,108	916	1,120	926	1,108
AM	342	308	334	308	312	306	302	288	306	282	286	292
Total	3,662	3,494	3,650	3,432	3,630	3,438	3,596	3,364	3,670	3,290	3,640	3,228
	7,156	7,082	7,068	6,960	6,960	6,868						

Source: Number of employees and supervisors of radio stations provided by the NCC.

The talent shortfall in the domestic radio industry is currently the most severe in medium-power and low-power radio stations. This is mainly due to the gradual decline of radio stations as consumers have more and more entertainment options available. In addition, new media have thrived and the younger generations are looking to become YouTubers and Podcasters. Moreover, the second generation of radio station owners is not willing to take over the business. These issues have caused a talent shortfall in the overall radio industry.

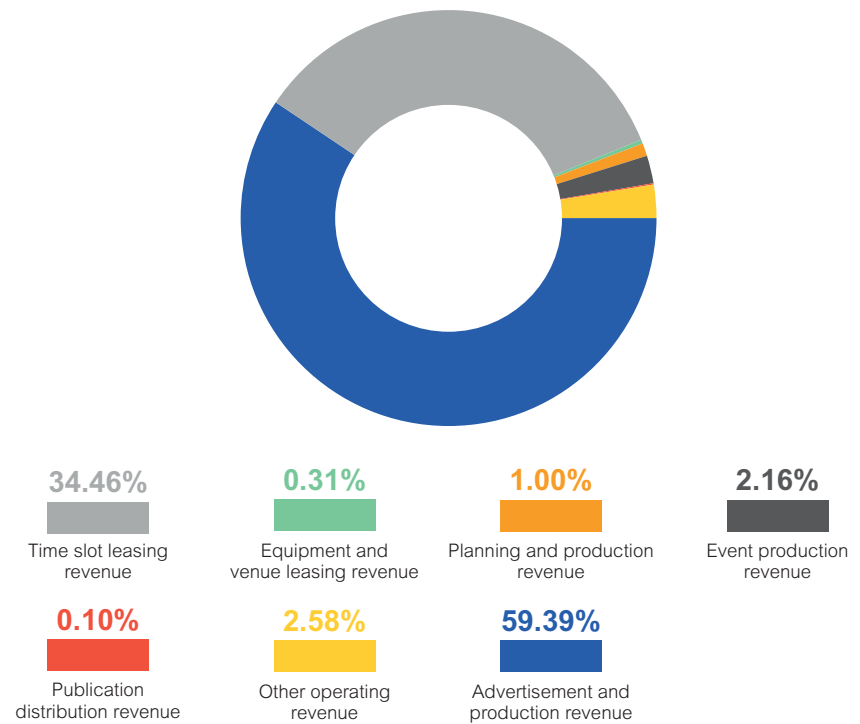
4.2. Revenue and business model

4.2.1. Domestic radio industry revenue overview in 2019— Revenue items

The revenue of most domestic radio stations in 2019 was NT\$1-20 million, accounting for over 80% of radio stations; the highest revenue range is NT\$80-100 million.

Breaking down revenue by different types of radio stations, medium-power broadcast networks have the highest revenue with over 15% of radio stations exceeding NT\$50 million, followed by AM radio stations with 62.50% generating revenue in the NT\$10-20 million range. Additionally, low-power radio stations in broadcast networks have lower revenue than low-power radio stations that are not in broadcast networks.

In terms of revenue source, advertisement and production revenue accounted for the highest percentage of revenue at 59.39%, followed by time slot leasing revenue at 34.46%.



Source: Summarized by this survey from the questionnaire survey.

Figure 2-54. Radio industry breakdown in 2019 by revenue source

Advertisement and production revenue is the main source of revenue for broadcast network operators, including medium and low-power radio stations. A portion of low-power radio stations have time slot leasing revenue as a secondary source of revenue. Medium-power radio stations that are not in a broadcast network generate over 60% of their revenue from advertisement and production, but they do not have as many resources as radio stations in a broadcast network. Therefore, they are developing other sources of revenue, including event production revenue and other operating revenue, which account for over 15% of their overall revenue. Low-power radio stations that are not in a broadcast network and AM radio stations mainly generate their revenue from time slot leasing, while advertisement and production only account for 40.44% and 23.70% of their revenue, respectively.

Table 2-31. Breakdown of the revenue of different types of radio stations in 2019

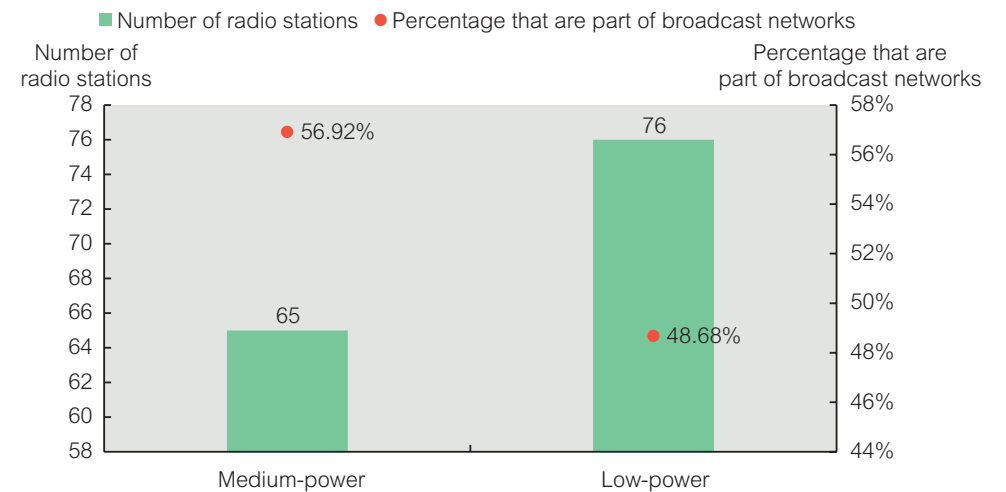
Category	Advertisement and production revenue	Time slot leasing revenue	Equipment and venue leasing revenue	Planning and production revenue	Event production revenue	Publication distribution revenue	Other operating revenue
Low-power (none)	40.44%	54.67%	0.10%	1.86%	1.24%	0.05%	1.65%
Low-power (network)	68.07%	30.80%	0.00%	0.33%	0.00%	0.00%	0.80%
Medium-power (none)	69.61%	11.15%	0.73%	0.42%	9.84%	0.50%	7.75%
Medium-power (network)	90.16%	7.86%	0.26%	0.00%	0.36%	0.00%	1.37%
AM	23.70%	69.81%	0.88%	2.63%	0.25%	0.00%	2.74%

Source: Summarized by this survey from the questionnaire survey.

4.2.2. Business model

Advertisements and time slot leasing are the main sources of revenue for the radio industry, but the market share of radio advertisements has declined over the years as new types of entertainment are developed. After radio station licenses were approved in large numbers, the severe competition has made it difficult for some radio stations to survive and maintain operations, which gradually led to the business model of time slot leasing. However, with prices for time slots declining in recent years, more and more radio stations are moving towards broadcast networks.

At present, nearly half of all medium and low-power radio stations are in broadcast networks. As mentioned above, the statistics show that 56.92% of medium-power radio stations and 48.68% of low-power radio stations are in broadcast networks. Based on the 11th batch of radio station licenses approved in 2018, 6 of the 15 medium and low-power radio station applications came from broadcast networks, such as Super FM98.5 Broadcasting Corp., Smile Taiwan, and Goodnews. This shows that the radio industry will develop towards broadcast networks in the future.



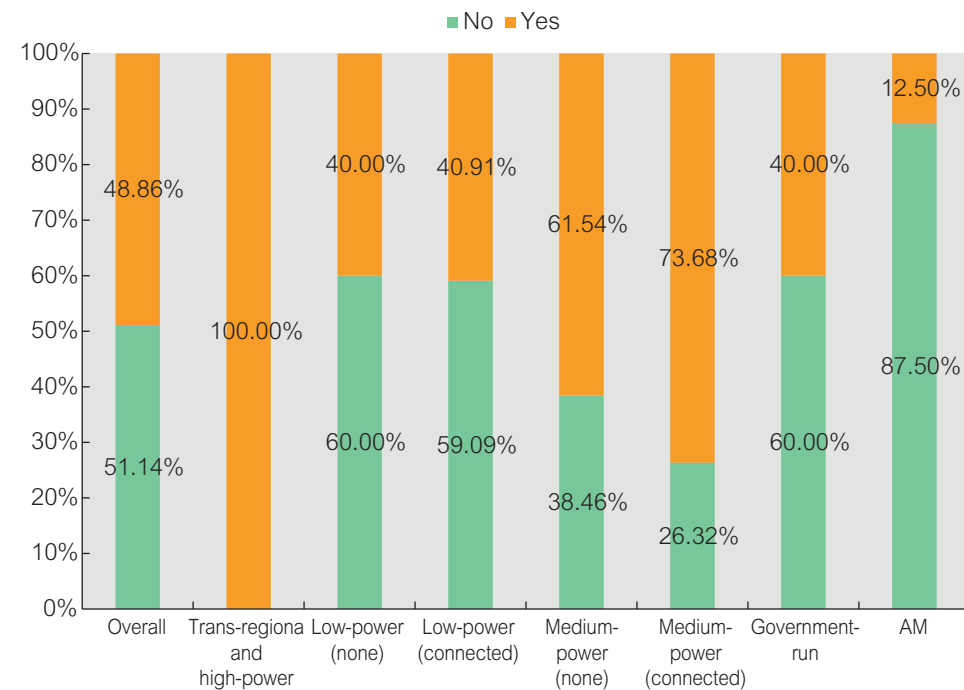
Source: This survey.

Figure 2-55. Radio stations joining broadcast networks overview

In addition to the two models described above, radio stations have been actively developing other business models in recent years, including working with product and services providers, such as biotech companies, securities firms, commodities manufacturers, and gift shops, using the charisma of hosts to increase the sales of related products. Furthermore, some radio stations have also developed other business models, such as launching online shopping websites and organizing events on different issues. For example, Asia Radio co-organized events with temples and Chengsheng Broadcasting became a talent agency.

Nearly half of domestic radio stations are engaging in upstream and downstream expansion, digital technology application, or business model innovation. The ratio of each radio station type is about the same as radio stations that are able to legally provide online music services, with broadcast networks accounting for the highest percentage.

Operators are also developing new media platforms to diversify their revenue. For example, since 2020 was the first year of the podcast in Taiwan, many radio stations transformed their best content into podcasts, including the trans-regional Chengsheng Broadcasting, broadcast networks CITYFM, Goodnews, and Chungbu Broadcast, CityFM, and Super FM98.5 Broadcasting. Radio stations that are not in broadcast networks also participated in this trend, including Taichung Broadcasting, M-Radio, Sen Nong Broadcasting Station, Trans-universe Radio, and Chungbu Broadcast.



Source: Summarized by this survey from the questionnaire survey.

Figure 2-56. Ratio of radio stations that developed innovative business models in 2019

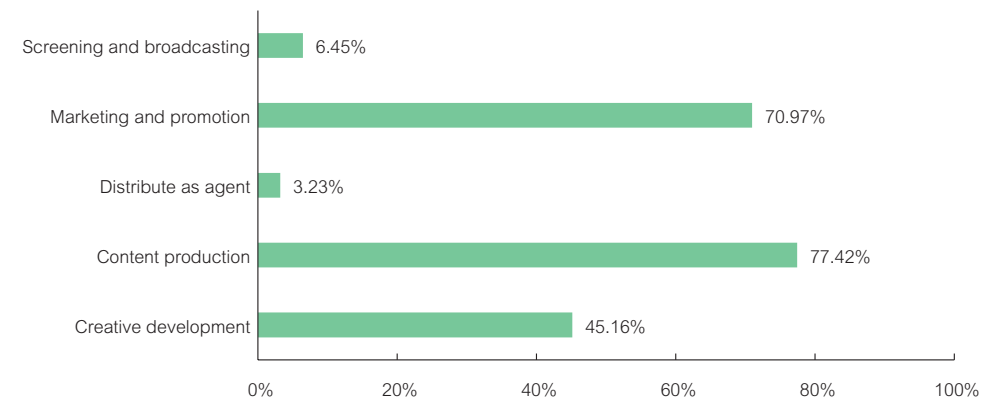
In terms of upstream and downstream expansion, digital technology application, and business model innovation, radio stations are mainly applying digital technologies supported by innovative business models, and relatively few companies are engaging in upstream and downstream expansion. The ratio of different types of radio stations is about the same as the overall ratio of radio stations. However, it is noteworthy that 62.50% of medium-power radio stations that are not in a broadcast network are attempting upstream and downstream expansion, and enhancing their competitive advantages through vertical integration.

Table 2-32. Ratio of radio stations engaging in cross-sector operations in 2019

	Upstream and downstream expansion	Digital technology application	Business model innovation
Overall	16.28%	79.07%	34.88%
Trans-regional and high-power	0.00%	100.00%	100.00%
Low-power (none)	0.00%	87.50%	37.50%
Low-power (network)	11.11%	77.78%	33.33%
Medium-power (none)	62.50%	62.50%	37.50%
Medium-power (network)	7.14%	78.57%	35.71%
Government-run	0.00%	100.00%	0.00%
AM	0.00%	100.00%	0.00%

Source: Summarized by this survey from the questionnaire survey.

In terms of upstream and downstream expansion, digital technology application, or business model innovation, radio stations are mainly engaging in content production, accounting for 77.42%, including the production of interview videos, new content development, and remote program production. This shows the importance of content. Out of these companies, 70.97% are utilizing marketing techniques, such as actively increasing interactions with the audience through social media to increase listeners' "stickiness."



Source: Summarized by this survey from the questionnaire survey.

Figure 2-57. Breakdown of innovation and development in the radio industry in 2019

4.3. Industry observation indexes

4.3.1. Broadcasting situation in the Taiwanese radio market

The 171 domestic radio stations broadcast a total of 1,872,858 hours of content in 2019. In terms of types of programs, entertainment programs accounted for the most hours, followed by public service, education, and lastly news and policy announcement.

Table 2-33. Hours each type of program is broadcast

Unit: Hours, %						
Category	2014	2015	2016	2017	2018	2019
Entertainment	31.78%	31.72%	29.20%	33.54%	33.39%	31.02%
Public service	26.30%	26.35%	26.04%	31.60%	27.88%	27.46%
Education	24.63%	24.44%	28.35%	20.20%	24.05%	25.11%
News and policy announcement	17.29%	17.49%	16.41%	14.67%	14.68%	16.42%
Total	1,887,086	1,913,752	2,161,524	2,441,007	2,411,779	1,872,858

Source: Radio station program hours provided by the NCC.

In terms of different types of radio stations, trans-regional and high-power radio stations provide a wider range of services. For this reason, public service programs are their main type of programs, followed by entertainment. The programs of medium-power, low-power, and AM radio stations are all mainly entertainment programs; educational programs account for the highest percentage of government-run radio station programs at 54.44%.

Table 2-34. Hours and percentage of programs on different types of radio stations in 2014-2019

Unit: %							
Radio station	Type of program	2014	2015	2016	2017	2018	2019
High-power radio station	Entertainment	28.25%	30.99%	30.05%	28.31%	29.36%	29.51%
	Public service	34.50%	29.18%	30.93%	32.64%	34.64%	33.67%
	Education	21.37%	22.55%	21.10%	21.23%	19.89%	20.07%
	News and policy announcement	15.89%	17.28%	17.92%	17.82%	16.10%	16.74%
Medium-power radio station (broadcast network)	Entertainment	28.25%	30.99%	30.05%	28.31%	29.36%	29.51%
	Public service	34.50%	29.18%	30.93%	32.64%	34.64%	33.67%
	Education	21.37%	22.55%	21.10%	21.23%	19.89%	20.07%
	News and policy announcement	15.89%	17.28%	17.92%	17.82%	16.10%	16.74%
Medium-power radio station (non-broadcast network)	Entertainment	34.13%	33.03%	32.37%	33.45%	33.44%	32.32%
	Public service	25.80%	27.45%	28.59%	29.11%	30.11%	30.78%
	Education	23.83%	24.16%	23.17%	22.26%	22.77%	22.32%
	News and policy announcement	16.23%	15.36%	15.86%	15.18%	13.68%	14.58%
Low-power radio station (broadcast network)	Entertainment	33.11%	32.92%	32.50%	31.08%	31.01%	31.98%
	Public service	25.61%	27.27%	28.18%	29.23%	30.34%	29.43%
	Education	23.01%	22.02%	22.17%	21.91%	19.70%	19.38%
	News and policy announcement	18.27%	17.78%	17.15%	17.78%	18.95%	19.21%
Low-power radio station (non-broadcast network)	Entertainment	34.05%	33.98%	33.57%	40.55%	37.91%	33.45%
	Public service	26.33%	26.32%	26.48%	36.22%	27.68%	26.31%
	Education	20.96%	20.39%	20.49%	10.64%	20.93%	20.75%
	News and policy announcement	18.65%	19.31%	19.46%	12.58%	13.47%	19.48%
AM radio stations	Entertainment	35.42%	33.78%	33.32%	32.13%	31.90%	32.61%
	Public service	25.46%	25.98%	27.17%	34.31%	33.24%	32.45%
	Education	23.02%	23.34%	23.39%	20.75%	21.76%	21.91%
	News and policy announcement	16.11%	16.90%	16.13%	12.82%	13.10%	13.04%
Government-run radio stations	Entertainment	19.11%	20.41%	16.88%	19.78%	22.47%	21.99%
	Public service	23.15%	19.63%	18.63%	22.75%	10.48%	10.58%
	Education	41.29%	42.59%	51.33%	43.69%	53.84%	54.44%
	News and policy announcement	16.46%	17.37%	13.16%	13.78%	13.21%	12.99%

Source: Radio station program hours provided by the NCC.

In terms of program sources, domestic radio station programs mainly produce their own content at over 60%, followed by outsourced production programs. Despite the high percentage of medium and low-power radio stations in broadcast networks, broadcast network programs only account for about 10%.

Table 2-35. Radio program breakdown by source

Unit: %						
	2014	2015	2016	2017	2018	2019
Independent production	65.15%	64.24%	66.18%	60.61%	62.13%	61.84%
Outsourced production	24.03%	24.11%	24.26%	31.39%	27.18%	27.89%
Broadcast	10.81%	11.65%	9.56%	8.00%	10.69%	10.27%

Source: Radio station program hours provided by the NCC.

In terms of different types of radio stations, trans-regional and high-power radio stations have relatively more channels and higher program production costs, so production is outsourced for a relatively high percentage of programs. With regard to medium and low-power radio stations, which are further divided into part of a broadcast network and not part of a broadcast network, the content of medium-power broadcast network is mainly independently produced, and broadcasted in different regions by low-power radio stations. Hence, a high percentage of low-power broadcast network programs are broadcast. The content of medium-power, low-power, and AM radio stations is mainly independently produced, and supported by programs produced by others.

Table 2-36. Radio station program breakdown in 2014-2019 by source

Radio station	Type of program	2014	2015	2016	2017	2018	2019
High-power radio station	Independent production	44.30%	39.26%	44.60%	42.67%	43.80%	44.56%
	Outsourced production	55.70%	51.05%	55.39%	57.14%	56.07%	55.17%
Medium-power radio station (broadcast network)	Broadcast	0.00%	9.69%	0.00%	0.19%	0.13%	0.27%
	Independent production	71.88%	72.60%	72.64%	71.66%	73.76%	73.05%
Medium-power radio station (non-broadcast network)	Outsourced production	4.45%	4.34%	4.52%	13.02%	4.82%	7.35%
	Broadcast	23.67%	23.06%	22.84%	15.33%	21.42%	19.59%
Low-power radio station (broadcast network)	Independent production	77.49%	79.43%	76.31%	74.69%	72.62%	72.29%
	Outsourced production	21.17%	19.26%	22.37%	24.45%	26.38%	26.93%
Low-power radio station (non-broadcast network)	Broadcast	1.34%	1.31%	1.32%	0.85%	1.00%	0.78%
	Independent production	57.27%	57.62%	56.85%	55.81%	56.27%	55.58%
AM radio stations	Outsourced production	8.24%	7.93%	7.99%	12.26%	8.72%	10.19%
	Broadcast	34.49%	34.45%	35.15%	31.93%	35.01%	34.23%
Government-run radio stations	Independent production	58.67%	58.84%	57.19%	53.42%	53.88%	53.42%
	Outsourced production	40.89%	40.45%	42.61%	46.56%	46.04%	46.50%
Government-run radio stations	Broadcast	0.43%	0.71%	0.19%	0.02%	0.08%	0.08%
	Independent production	49.19%	48.92%	46.89%	41.81%	40.65%	41.45%
Government-run radio stations	Outsourced production	50.27%	50.53%	52.55%	57.64%	58.79%	57.99%
	Broadcast	0.54%	0.56%	0.55%	0.56%	0.56%	0.56%
Government-run radio stations	Independent production	91.83%	91.95%	86.49%	81.68%	89.92%	89.38%
	Outsourced production	5.92%	6.06%	11.44%	4.62%	5.43%	5.87%
Government-run radio stations	Broadcast	2.25%	1.99%	2.08%	13.71%	4.65%	4.74%

Source: Radio station program hours provided by the NCC.

In terms of language, programs of domestic radio stations mainly spoke in Taiwanese (56.62%) supported by Mandarin. Following the launch of Hakka and indigenous radio programs, the number of hours of programs in their respective languages showed an upward trend¹⁷.

Table 2-37. Hours of programs in each language

Language	2014	2015	2016	2017	2018	2019
Mandarin	38.03%	38.72%	43.54%	23.08%	28.61%	35.48%
Taiwanese	53.34%	53.28%	49.24%	58.96%	65.37%	56.62%
Hakka	3.61%	3.36%	3.10%	15.41%	2.75%	3.87%
Indigenous language	1.46%	1.24%	1.00%	0.68%	1.21%	1.47%
Other dialects	0.05%	0.05%	0.34%	0.06%	0.08%	0.10%
English	1.86%	1.71%	1.49%	0.83%	1.02%	1.48%
Other foreign languages	1.66%	1.65%	1.29%	0.98%	0.96%	0.97%

Source: Radio station program hours provided by the NCC.

17. Hakka Radio was launched by the Hakka Affairs Council in 2017. The increase that year may be due to the radio station mainly using Hakka when it first began operations. After subsequent adjustments to the language of programs, the number of hours of Hakka programs returned to normal.

Among different types of radio stations, medium and low-power radio stations in broadcast networks mainly broadcast music programs in Mandarin, resulting in the relatively high number of hours of Mandarin programs. High radio stations, medium and low-power radio stations that are not in broadcast networks, and AM radio stations mainly broadcast Taiwanese programs.

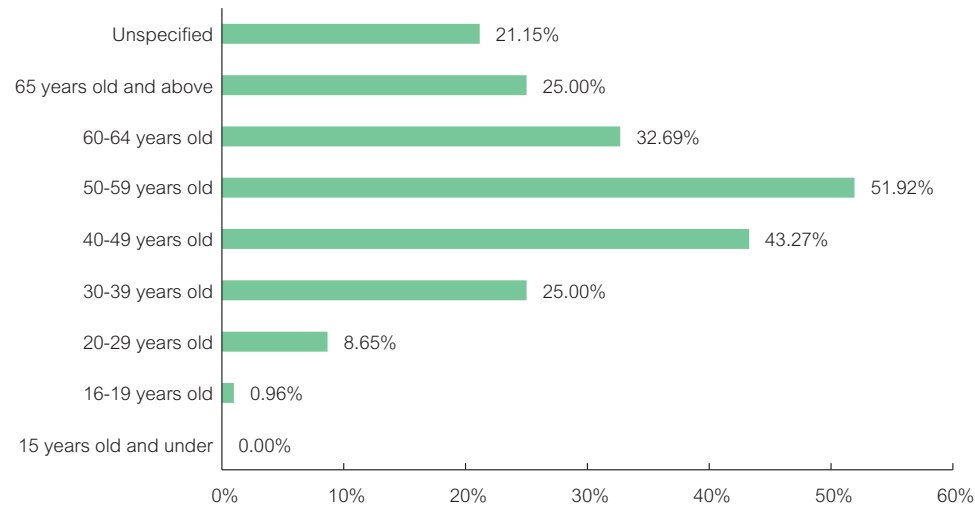
Table 2-38. Radio station program breakdown in 2014-2019 by language

Radio station	Type of program	2014	2015	2016	2017	2018	2019
High-power radio station	Mandarin	15.95%	22.71%	20.50%	18.81%	19.70%	19.12%
	Taiwanese	76.47%	71.02%	72.99%	75.37%	75.56%	76.12%
	Hakka	0.41%	0.46%	0.48%	0.37%	0.14%	0.15%
	Indigenous language	0.91%	0.15%	0.20%	0.22%	0.02%	0.01%
	Other dialects	0.00%	0.00%	0.02%	0.02%	0.02%	0.02%
	English	5.73%	4.70%	4.87%	4.60%	4.11%	4.12%
	Other foreign languages	0.52%	0.96%	0.95%	0.60%	0.45%	0.46%
	Medium-power radio station (broadcast network)	Mandarin	52.96%	52.89%	52.26%	25.63%	51.07%
Taiwanese		33.84%	33.87%	32.88%	12.71%	35.82%	37.98%
Hakka		8.13%	8.24%	8.35%	58.61%	8.16%	8.55%
Indigenous language		2.50%	2.45%	2.51%	1.04%	2.86%	2.83%
Other dialects		0.10%	0.00%	1.64%	0.00%	0.00%	0.00%
English		1.88%	1.90%	1.78%	0.93%	1.32%	1.61%
Other foreign languages		0.59%	0.66%	0.57%	1.08%	0.78%	0.69%
Medium-power radio station (non-broadcast network)	Mandarin	43.57%	41.69%	39.29%	38.95%	38.71%	39.04%
	Taiwanese	54.71%	55.98%	58.65%	59.09%	59.39%	59.38%
	Hakka	0.32%	0.29%	0.39%	0.35%	0.31%	0.35%
	Indigenous language	0.28%	0.60%	0.27%	0.20%	0.18%	0.20%
	Other dialects	0.22%	0.33%	0.35%	0.35%	0.35%	0.35%
	English	0.74%	0.93%	0.82%	0.82%	0.81%	0.46%
Low-power radio station (broadcast network)	Other foreign languages	0.15%	0.19%	0.22%	0.24%	0.24%	0.22%
	Mandarin	51.53%	49.45%	49.72%	51.62%	46.95%	47.48%
	Taiwanese	39.56%	42.31%	41.72%	41.74%	48.87%	45.61%
	Hakka	5.18%	5.11%	5.31%	5.18%	2.74%	5.34%
	Indigenous language	0.31%	0.19%	0.19%	0.20%	0.19%	0.20%
	Other dialects	0.00%	0.00%	0.06%	0.01%	0.00%	0.00%
Low-power radio station (non-broadcast network)	English	2.82%	2.28%	2.28%	0.80%	0.79%	1.06%
	Other foreign languages	0.60%	0.66%	0.71%	0.44%	0.46%	0.31%
	Mandarin	12.44%	12.26%	10.70%	4.79%	5.22%	11.36%
	Taiwanese	79.69%	81.34%	83.51%	93.85%	92.52%	83.31%
	Hakka	4.57%	3.56%	3.79%	0.85%	1.41%	3.03%
	Indigenous language	3.12%	2.76%	1.81%	0.47%	0.80%	2.20%
AM radio stations	Other dialects	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	English	0.12%	0.03%	0.03%	0.01%	0.01%	0.00%
	Other foreign languages	0.07%	0.04%	0.15%	0.02%	0.03%	0.10%
	Mandarin	4.70%	16.42%	4.61%	3.98%	4.35%	5.33%
	Taiwanese	94.85%	83.10%	94.92%	95.63%	95.24%	94.18%
	Hakka	0.15%	0.15%	0.18%	0.14%	0.16%	0.19%
Government-run radio stations	Indigenous language	0.06%	0.06%	0.00%	0.02%	0.03%	0.09%
	Other dialects	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	English	0.10%	0.10%	0.10%	0.03%	0.03%	0.02%
	Other foreign languages	0.14%	0.16%	0.19%	0.18%	0.19%	0.19%
	Mandarin	74.94%	76.19%	83.04%	72.83%	73.41%	73.39%
	Taiwanese	6.61%	6.17%	8.97%	9.31%	4.43%	5.68%
Government-run radio stations	Hakka	2.78%	2.50%	1.39%	5.11%	6.82%	6.75%
	Indigenous language	2.21%	1.55%	1.07%	2.40%	4.81%	4.17%
	Other dialects	0.00%	0.06%	0.20%	0.36%	0.45%	0.42%
	English	3.06%	2.82%	1.40%	2.72%	3.11%	4.22%
	Other foreign languages	10.39%	10.71%	3.94%	7.26%	6.97%	5.36%

Source: Radio station program hours provided by the NCC.

4.3.2. Domestic radio station target audience overview

Domestic radio stations' main target audiences include: 50-59 year olds, 40-49 year olds, and 60-64 year olds. Furthermore, 21.15% of radio stations have an unspecified target audience.



Source: Summarized by this survey from the questionnaire survey.

Figure 2-58. Radio station target audience—Age groups

Observing the target audience of different types of radio stations, it is clear that they all target roughly the same age groups. Only medium and low-power radio stations in broadcast networks, as well as medium-power radio stations that are not in a broadcast network, target younger audiences.

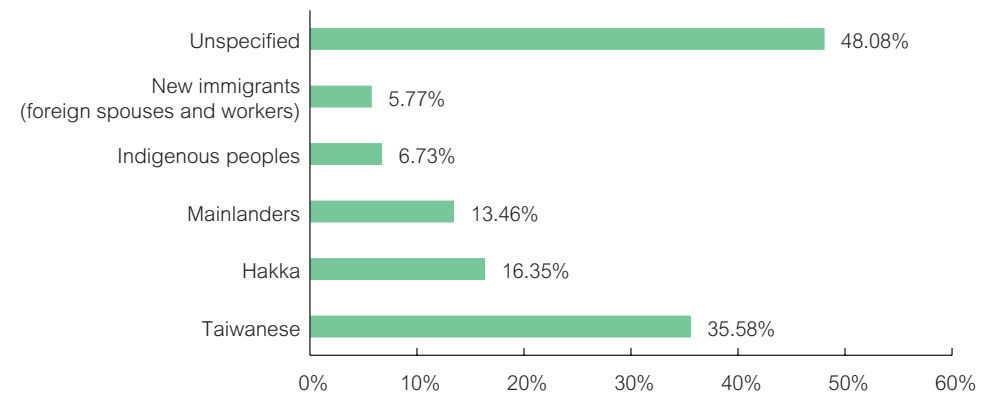
Table 2-39. Radio station target audiences—Age group

	Trans-regional and high-power	Low-power (none)	Low-power (network)	Medium-power (none)	Medium-power (network)	Government-run	AM
15 years old and under	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
16-19 years old	0.00%	0.00%	0.00%	0.00%	4.00%	0.00%	0.00%
20-29 years old	0.00%	4.76%	13.33%	15.38%	8.00%	0.00%	0.00%
30-39 years old	0.00%	14.29%	20.00%	38.46%	40.00%	40.00%	0.00%
40-49 years old	100.00%	38.10%	36.67%	53.85%	48.00%	40.00%	44.44%
50-59 years old	100.00%	71.43%	33.33%	46.15%	44.00%	60.00%	88.89%
60-64 years old	100.00%	71.43%	16.67%	23.08%	8.00%	20.00%	77.78%
65 years old and above	0.00%	61.90%	13.33%	23.08%	4.00%	0.00%	55.56%
Unspecified	0.00%	14.29%	30.00%	15.38%	16.00%	60.00%	11.11%

Notes: (none) refers to radio stations that are not part of a broadcast network; (network) means they are part of one.

Source: Summarized by this survey from the questionnaire survey.

Nearly 50% have an unspecified target audience, while 35.58% target Taiwanese-speaking audiences, which matches the language of programs described above.



Source: Summarized by this survey from the questionnaire survey.

Figure 2-59. Radio station target audiences—Ethnic groups

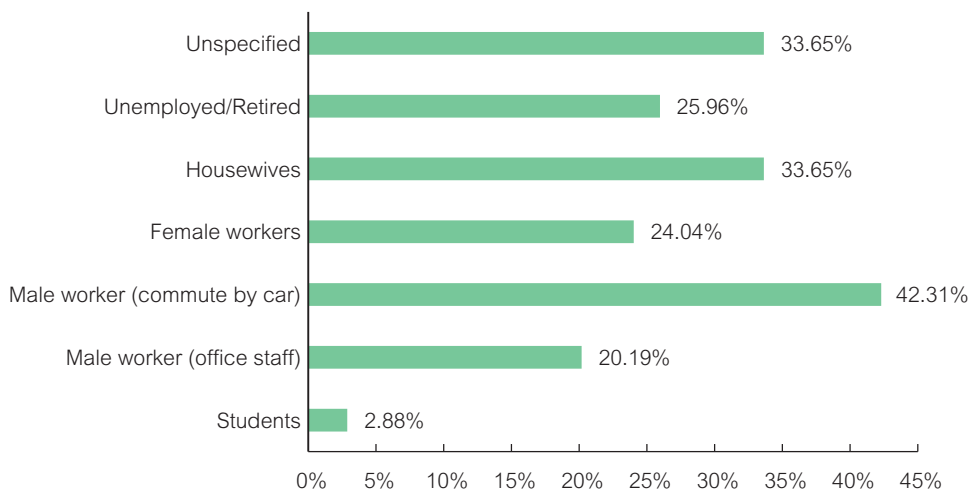
Because most AM radio stations came to Taiwan with the nationalist government, a portion of AM radio stations mainly targets mainlanders.

Table 2-40. Radio station target audiences—Ethnic groups

	Taiwanese	Hakka	Mainlanders	Indigenous peoples	New immigrants (foreign spouses and workers)	Unspecified
Trans-regional and high-power	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%
Low-power (none)	66.67%	23.81%	4.76%	9.52%	14.29%	42.86%
Low-power (network)	20.00%	13.33%	6.67%	6.67%	0.00%	53.33%
Medium-power (none)	38.46%	7.69%	23.08%	15.38%	7.69%	46.15%
Medium-power (network)	12.00%	12.00%	12.00%	0.00%	4.00%	48.00%
Government-run	20.00%	20.00%	20.00%	0.00%	0.00%	80.00%
AM	77.78%	33.33%	44.44%	11.11%	11.11%	22.22%

Source: Summarized from the survey questionnaire.

Occupational target audiences are mainly male workers (drivers), such as taxi drivers and truck drivers, followed by housewives.



Source: Summarized by this survey from the questionnaire survey.

Figure 2-60. Radio station target audiences—Employment type

A high percentage of listeners of medium-power broadcast networks are male and female office workers, which is consistent with the overall situation of the domestic radio market. For example, some factories or companies will broadcast the specific programs through the company broadcasting system.

Table 2-41. Radio station target audiences—Employment type

Category	Students	Male workers (office workers)	Male workers (Drivers)	Female workers	Housewives	Unemployed/Retired	Unspecified
Trans-regional and high-power	0.00%	0.00%	100.00%	0.00%	100.00%	100.00%	0.00%
Low-power (none)	0.00%	4.76%	47.62%	9.52%	57.14%	52.38%	42.86%
Low-power (network)	3.33%	13.33%	33.33%	23.33%	20.00%	6.67%	43.33%
Medium-power (none)	15.38%	30.77%	46.15%	30.77%	15.38%	23.08%	38.46%
Medium-power (network)	0.00%	32.00%	48.00%	36.00%	28.00%	8.00%	16.00%
Government-run	0.00%	20.00%	40.00%	0.00%	0.00%	20.00%	60.00%
AM	0.00%	33.33%	33.33%	33.33%	77.78%	77.78%	11.11%

Source: Summarized by this survey from the questionnaire survey.



Forecast

03

● 1. Television industry

1.1. Digital development trends

1.1.1. The development of OTT platforms has driven a growth in production scale and made content production more flexible

Current digital applications of television and motion picture content production come from an OTT-focused perspective; in fact, producing different formats of content for online audiovisual platforms has become a trend. For example, the 2019 online dramas *Triad Princess* and *Nowhere Man* have 10 episodes or less. They also have episodes with different lengths. The former has a total of 6 episodes each 34-47 minutes long, and the latter has 8 episodes each 33-67 minutes long. Since subscription-based platforms do not have any advertisements, they do not need to follow past production principles of television.

This application model has also made the boundaries between content even more blurry. In the case of the mini-series *Kill for Love*, which came out in 2020, it was originally produced in the format of television and motion pictures with 100 minutes of content. After considering the platform that it was released on, the content was edited into 25-minute episodes and presented in the format of a series, breaking down the existing form of content from production to broadcasting.

1.1.2. Utilizing technology products in the development of value-added services to improve consumers' experience

In recent years, television platforms have directed their efforts towards broadband services, connecting smart TV boxes, sharing content resources with OTT platforms, and expanding the scope of customers. At present, "Ha TV"¹⁸ and "A1 Open Platform"¹⁹ both provide people with functions for accessing OTT audiovisual and television channel content, and further integrate digital application services, such as games and music.

As for digital distribution and broadcasting platforms, online video advertisements are still valued by advertisers. For example, LiTV developed CTV advertising technology to target consumers' preference for viewing video content on bigger screens, and shows customized advertisements for viewers in households, helping bring the digital advertisement market back from mobile devices to television screens.²⁰

At the same time, domestic video platforms, such as CatchPlay and GagaOOLala, are no longer limited to the domestic market and are actively expanding to overseas niche markets. This has increased the number of their subscribers in Southeast Asia and led to successful collaborations with local telecom operators.

18. Website: <https://www.ettoday.net/news/20190725/1498383.htm>

19. Website: <https://technews.tw/2019/09/25/kbro-launches-a1-open-platform/>

20. Website: <https://www.inside.com.tw/article/23858-litv-ctv-videoads>

Furthermore, there has been an emphasis on trends in back-end big data analytics applications in recent years. Television and OTT video platforms have member databases, which give them the advantage of having data on their target audiences and video consumer behaviors. These platforms have recently begun to organize their data and content, discovering possibilities for cross-industry collaboration and more in-depth data applications. By doing so, they are not only gaining accurate data on consumers' preferences, but also helping companies determine potential customers, which can enhance their target consumer market.

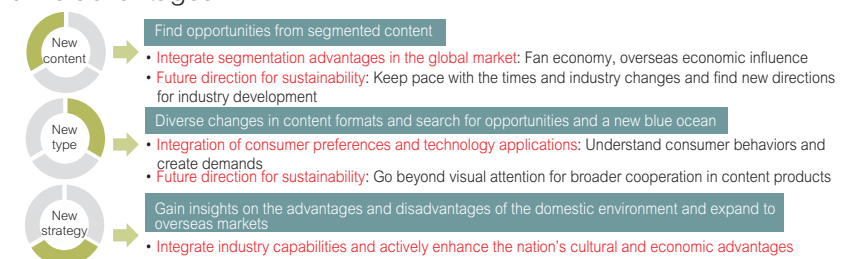
1.2. Changes in the television industry ecosystem in the digital era

1.2.1. Content creators develop new strategies in response to the new era

Digital convergence has accelerated integration and cooperation in the television and motion picture industry. Entertainment and consumption habits of consumers have become more personalized and segmented. Moreover, the content industry is currently in a transformation phase. From the perspective of domestic and overseas motion picture and television content development, the industry is actively trying out contents for different segments, such as BL and senior citizens, in order to find sustainable business models that meet current demands, or to utilize OTT platforms and social media to facilitate interactions with domestic and overseas audiences, thereby extending the benefits of content and developing overseas markets.

From another perspective, as motion picture and television content gradually moves towards online platforms, companies are paying more attention to viewers' experience, reflecting the change from public to individual. The distribution of this content has expanded to new media, and portable devices with screens have become content receptors, in which the scenario for receiving content is transitioning to create an "individual experience." Hence, short clips and VR content are standing out from the numerous forms of entertainment.

Furthermore, based on the development of Turkish television dramas and Korean television formats in recent years, in successful cases overseas, content developers play a key role in resource integration, leading the expansion into overseas markets. In addition, by sharing creativity and considering innovative overseas expansion models, they are enhancing the nation's overall cultural and economic advantages.



Source: Summarized by this survey.

Figure 3-1. Diverse developments and applications of motion picture and television content

1.2.2. Programs develop IP contents to expand the revenue from content

Television channels have integrated their advantages in their channel, content production, and news promotion and marketing, building the program's brand while managing television content as IP. They are also developing products with their exclusive apps to direct user flow towards e-commerce platforms, which increases the revenue from television content.

Taiwan has experience combining domestic dramas such as *Mom's House*, *Queen*, and *Super Taste* with e-commerce apps. A recent example of this is *OWO Werewolf*, which used IP to develop limited celebrity groupings and offered premium content on YouTube. This shows that many domestic companies are providing their target audience with extended value content services, thus not only successfully cashing in on traffic, but also gaining a loyal audience with buying power.

1.2.3. The average scale of content production has increased along with post-production budgets, but the ratio is still relatively low

The overseas revenue of main exporters (television channels, television program production and distribution, and online program production companies) in the television industry in 2019 came mainly from China, accounting for approximately 65.63%, followed by Southeast Asia, accounting for approximately 53.13%.

Due to the continued development of OTT platforms, domestic television program content can be exported to China on China's three major OTT platforms, or BAT (Baidu, Alibaba, and Tencent). Taiwan's television program content has been rarely broadcast on television channels in Japan and Hong Kong in recent years, but an increasing amount of content produced in the current year has been broadcast on local OTT platforms, increasing the overseas revenue of some companies.

1.2.4. The industry's demand for professional talent on and off the screen has increased

As the production scale of domestic television programs increases and the quality of content improves, the television and motion picture industries' demand for talent is also growing. There is growing emphasis on the expertise of crews behind the scenes, e.g., more professional producers who can integrate the needs of investors and the opinions of the film crew and are able to accurately control budgets are in high demand. There are already companies offering producer agency services to cultivate industry talent. As the production scale of television content continues to grow, the number of staff required behind the scenes has increased compared with the past as division of labor between screenwriters, actors, and other professionals becomes more detailed. It is hard for a single person to communicate with all personnel and assign tasks, so there is an increase in demand for the planning role in each specialized team. Each

crew can coordinate and utilize personnel through overall task assignments, and assist in the process of filming motion picture and television content.

1.2.5. Domestic motion picture and television content lacks casts that are appealing to the market, and diverse content is being developed to reduce the impact of the gap in actors

Observing domestic motion picture and television content in recent years, main actors are relatively older. This is due to the outflow of high box office grossing actors, which has created a gap in domestic entertainers. Hence, there is a gap in domestic actors, which has led to the relatively high age of actors in domestic motion picture and television content. Despite actors returning to Taiwan due to recent external factors, there is still a void in terms of new generation actors that are appealing to overseas markets. This has affected the output of works.

As greater effort is being put into the development of different types of content and online dramas are exploring innovative themes, some companies are giving new actors an opportunity. In addition content broadcasting, marketing, and promotion strategies can reduce the impact of the gap of celebrities in the market.

1.2.6. Promoting channel diversification to reach potential audiences in a stay-at-home economy driven by the pandemic

The spread of COVID-19 around the world has accelerated digitalization and driven the development of the stay-at-home economy. Traffic of domestic OTT platforms has increased and the number of subscribers of some platforms has also grown, showing that digitalization and the pandemic have accelerated the shift of consumers to view content online. This has helped the online video consumer market grow.

Due to the increasing cost of content production and audience fragmentation, channel operators have a limited budget, which has driven them to make joint investments in development and form strategic alliances to share their operating costs, or to find new media platforms for cross-platform broadcasting. New media platforms have also set out to work with television channels, and upload highlights, behind the scenes, or derived content on social media platforms to reach even more potential audiences.

Furthermore, cable TV operators, telecom operators, and OTT platforms are attempting to diversify through joint development, and even become shareholders to integrate resources within the group and across industries. This has shifted market competition towards co-opetition and led to the possibility of more innovative business models, products, and services.

● 2. Motion picture industry

2.1. Digital development trends

2.1.1. The boundaries between content formats are becoming blurred and diverse content development is being attempted

The appearance of online video platforms has caused motion picture production companies to rethink their commercial value and positioning, and they have adjusted their filming and presentation methods in response. The companies are actively introducing new business models and forms of entertainment content to attract the attention of a generation of digital native consumers. For example, they are combining software and hardware technology to release virtual reality (VR) motion picture and television content, and attempting to produce videos in different formats to give the audience an immersive experience.

Recently, some production companies have broken down longer television and motion picture content into series with multiple episodes or online dramas, so that they can gain exposure through different broadcasting channels, such as television channels and online platforms. By showing the same content on different channels, they can not only increase exposure, but also effectively recover production costs from the consumer market.

On the other hand, VR motion pictures provide the audience with an interactive experience. Viewers are able to experience the story of characters. The richness and diversity of narrative approaches is quite different from the past, when the audience unilaterally received the linear narrative of the content determined by a director. This approach offers new creative ways of thinking, narrative approaches, and forms of content. International film festivals have been actively promoting VR content in recent years. This has encouraged related companies to face and consider developing VR content.

Generally speaking, digital convergence has changed the viewing behavior of consumers, and it has blurred the boundaries and definitions of formats in content production. Content production companies have changed the formats of content in response to the drastic changes brought by digital convergence, and attempted to produce different content that will increase the competitiveness and visibility of motion picture and television content, in order to stand out from the many forms of entertainment and attract consumers' attention.

2.1.2. The theatrical window is shrinking, thus changing current business models

Due to the impact of digital convergence and the pandemic, the theatrical window that guarantees the exclusive right of movie theaters to screen motion pictures is shortening from 90 days to 30 days and even 17 days. Some companies have even adopted a day-and-date strategy.

From the perspective of distributors, the shorter theatrical window and day-and-date strategy have affected their source of revenue. This has led them to seek other sources of revenue to maintain their operations. From the perspective of independent distributors, the shorter theatrical window allows online video platforms to purchase the right to screen motion pictures earlier, and makes it difficult for independent distributors to purchase the right to screen motion pictures.

From the perspective of movie theaters, the shorter theatrical window has significantly affected their box office and profit sharing, and they can only maintain operations through other sources of revenue (such as providing venue lease, food delivery services, etc.). However, from the perspective of large scale chain movie theaters with a mature profit model, the profits of production companies from subscriptions can be shared with the movie theater according to the ratio specified in their agreement, creating a new business model for them to find a new direction.

2.1.3. Movie theaters increasing their sources of revenue through the application of new technologies

After the appearance of dominant international video platforms, such as Netflix and Amazon, people have gradually turned from conventional movie theaters to online platforms to watch motion picture content. This has impacted the box office of individual motion pictures, as well as the overall revenue of screening companies. Currently, over 90% of screening companies' revenue comes from screening motion pictures. This is why screening companies in different countries are attempting to upgrade their hardware equipment and use new technologies to encourage people to watch motion pictures in movie theaters, so as to increase their source of revenue.

With regard to the use of screening technology, 4DX can simulate the movement on screen by using motion seats and 21 environmental effects. By combining the plot with a somatosensory experience, they offer audiences a theme-park-like entertainment experience. In addition, this technology uses Screen X to provide visual effects unlike before, with 270 degree multi-screen screening, projecting images onto the left and right walls of the theater, splitting up the image and allowing viewers to enjoy a customized experience based on their preference and viewing location. The technology enhances the atmosphere through lighting, brightness, and sound effects, and breaks through the framework of screens to offer viewers a more immersive experience based on the theme and style of the movie.

In another aspect, Global Digital Creations Holdings Limited (GDC) established the platform GoGo Cinema to revitalize real viewing spaces. Viewers can use the platform to make customized adjustments by choosing the motion picture they want to see and when they want to see it. The difference between GoGo Cinema and Netflix or Amazon is that viewers are limited to a movie theater, which increases the number of viewers and solves the issue of empty seats in movie theaters. The platform can be connected to users' social media to maintain data on users' preferences and viewing history in the back end, in order to provide customized recommendations.

2.2. Changes in the motion picture industry ecosystem in the digital era

2.2.1. Sources of funding for motion picture production in Taiwan have become more diverse in recent years, and production work has become more specialized

The sources of funding for producing domestic films have become more diverse in recent years. For example, resources outside the industry include the finance, gaming, entertainment agency, and technology industries, as well as charity organizations; screening and distribution companies are also continuing to invest in pre-production. Existing structural issues (such as theatrical window and limited space) are improved by integrating resources in each aspect of the industry, and incorporating recommendations from the market during the planning phase, making plans for domestic films more complete, and improving subsequent production quality.

In terms of content production, the ratio of Taiwanese motion pictures where the director is also the screenwriter or the production company is also the distribution company has decreased, showing that the production of domestic films is becoming more specialized. Having professionals write the script and plan the distribution strategy for motion pictures can make content planning more well-rounded.

Additionally, the ratio of new directors directing domestic motion pictures has increased since 2018. This is mainly because the cinematographic language that new directors use resonates more with modern audiences. New directors can also provide different topics and narrative approaches. During this survey, companies indicated that having senior directors lead new directors can help new directors accumulate experience in filming full-length motion pictures, which contributes to talent cultivation.

2.2.2. Domestic films are developing diverse stories and elements, and continuing to attempt adaptations of other content

Currently, domestic motion pictures mainly use original scripts, but the ratio of original scripts has slightly declined since 2018. Over the years, more and more high box office grossing domestic motion pictures have been adaptations, such as *More Than Blue* in 2018, which is an adaptation of a Korean motion picture, and *Detention* in 2019, which is an adaptation of a game with the same name. This shows that the domestic motion picture production industry is starting to use adaptations as a source of creativity.

By observing elements of domestic motion pictures, it is clear that a relatively high percentage of them belong to the romance, family, and inspirational genres, while the percentage of thrillers/suspense and horror motion pictures has slightly decreased compared with the previous year. Meanwhile, action, music/dance, war, and crime motion pictures have seen a slight increase, showing that domestic

production companies are actively attempting new elements to provide citizens with more options, while accumulating domestic film crew capabilities for filming movies with different elements.

2.2.3. Taiwanese movies lack production talent with international joint production experience and abilities

International joint productions highly rely on integration and communication, and even rely on cooperation opportunities with key producers. However, Taiwan's motion picture industry lacks practical experience from international joint productions. For the industry, this concept is limited to investments from overseas capital and not in-depth participation in the creative process. The domestic motion picture industry is led by directors and still needs to dedicate its efforts to create an environment for producers and cultivate production talent in order to gain more cooperation opportunities for international joint productions.

2.2.4. Domestic motion picture production companies continue to diversify and develop hybrid business models

Facing the impact of digital convergence on the theatrical window, both chain and independent movie theaters are diversifying their operations, so that movie theaters are no longer just considered places to watch movies, but also spaces to socialize and relax. Movie theater chains are not only increasing the types of content they screen (such as concerts and stage shows), they are also providing food services and focusing on high-end customers, in order to increase sources of revenue other than the box office. Independent movie theaters are attempting to turn movie theaters into a local cultural gathering place, and strengthen the emotional connection with local residents. Furthermore, some movie theaters are offering virtual movie theater services in response to changes in viewer behavior due to the impact of COVID-19, extending their source of revenue from offline to online.

In response to international OTT platforms actively working with motion picture and television production companies in different countries to produce localized content, domestic motion picture production companies are adopting a diversification strategy to increase their profits due to the limited number of domestic films produced. Therefore, they are beginning to participate in the production of television programs and series to maintain their operations.

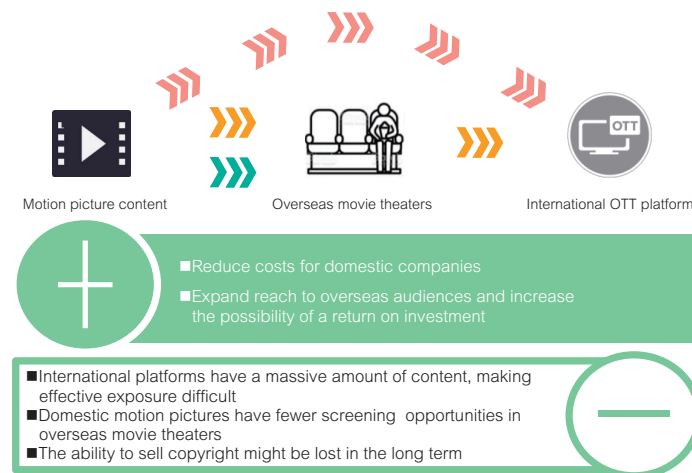
2.2.5. Domestic screening spaces are stably growing with a strategy for smaller screens

In 2019, there were 915 screens in total in Taiwan, an increase of approximately 3.62% compared to the 883 screens in 2018. Domestic movie theater chains are not only actively expanding locations, some have adopted a strategy of smaller screens with fewer seats to increase the flexibility of scheduling films. Even though the increase in number of screens in Taiwan may provide more spaces and resources for domestic motion pictures, the relatively few seats available for a single screen still limits the number of viewers and box office for domestic motion pictures.

2.2.6. Facing the continuous development of international OTT platforms, overseas sales channels for domestic motion pictures are becoming more diverse, so it is crucial to pay attention to future forms of cooperation with these platforms

In the past, Taiwanese motion pictures were mostly licensed individually to each market. Following the development of international OTT platforms, multi-national licenses are now being sold to international OTT platforms. There are currently many ways for selling overseas licenses for Taiwanese motion pictures, but they are mainly divided into three methods: Only selling licenses to overseas movie theaters, first releasing the motion pictures in overseas movie theaters and then releasing them on international OTT platforms (e.g. *The Bridge Curse* and *A Choo*), and directly releasing the films on international OTT platforms (e.g. *A Sun, Your Name Engraved Herein*, and *Little Big Women*).

The digital convergence and COVID-19 have affected movie theaters' operations, thus negatively impacting Taiwanese motion pictures in overseas movie theaters. As a result, it has become increasingly common to sell licenses of Taiwanese motion pictures to international OTT platforms. From the perspective of companies, selling licenses to platforms reduces their cost, and since international platforms are not limited by borders, companies are able to reach a wider overseas audience and increase their chances of recovering investment. However, because international OTT platforms have vast and extensive content, the chances of Taiwanese motion pictures being seen are relatively small, or the chances of them being released in local movie theaters are somewhat slight. This has a negative effect on promoting motion pictures in international film festivals, or on increasing the visibility and reputation of domestic directors in the international market. If this continues, Taiwanese motion pictures may lose their ability to take the lead in overseas markets. Hence, it is necessary to continue observing the situation and form of cooperation with these platforms in the future.



Source: Summarized by this survey.

Figure 3-2. Recent sales model of television and motion picture content licenses

● 3. Animation industry

3.1. Digital development trends

3.1.1. Establishing virtual studios

Some domestic Animation OEM and special effects companies are establishing virtual studios to simplify the production process and reduce their cost, and are incorporating Matte Painting technology to create motion picture special effects or scenarios needed in game advertisements.

Matte Painting can be used for scene and background design in the filming stage. It uses 270-degree LED-ring screen to project high quality, high resolution backgrounds; actors only need to move in front of the screen and the crew can finish filming, significantly reducing production cost.

3.1.2. Fully utilizing software and 3D motion capture technology

Domestic animation companies are currently attempting to use 3D motion capture software, such as Cartoon Animator 4, Motion LIVE 2D, and Character Creator 3, along with iClone and Unreal Live Link, etc., to produce animation scenes and create characters, significantly simplifying the animation production process.

3D motion capture technology requires actors to wear reflective marks made from highly reflective material at specific places. The reflected light is matched with the character's skeletal structure, allowing for the camera to capture more accurate and detailed movements of the actors. Their movements are then rapidly accessed and output into animations. This saves animation companies time and effort building models, reducing time and costs.

3.1.3. Utilizing AI technology to simulate animation costs and carry out script planning

The development of AI technology has enabled animation companies to configure the style and color tone of a single frame through software for previewing simulated images, such as Styleframe, after they complete setting the background framework and characters. Initial animation contents can be displayed using AI processing and training results, and detailed facial expression technologies, such as deep fake, can simulate what animations that are still in the prototype phase will look like when they are completed, helping animation production teams make adjustments to their style and script planning.

Furthermore, large-scale, high-budget motion pictures overseas are currently using 3D animations for script planning to present the core contents of motion pictures, helping motion picture production companies to quickly make proposals. However, this model is only suitable for countries with high budgets for motion picture production, such as the United States and China. Carrying out script planning beforehand can reduce the cost of personnel dispatch and leasing filming locations.

3.2. Changes in the animation industry ecosystem in the digital era

3.2.1. Content target audiences must be clearly defined for market segmentation

Domestic and overseas animation companies currently divide target customers into two main groups, children and teenagers, and use different business models and strategies for these two groups.

Most animation production companies in Taiwan target children when producing animations. This is mainly due to the relatively low threshold for producing animations for children, as they have relatively lower requirements for background settings, dubbing, and music than teenagers. Domestic animation companies can gradually accumulate animation production capabilities by grasping the plot and rhythm of children's animations.

Children's animations that are rich with educational meaning and in line with good social customs are widely accepted by parents ages 30 and above. These animations encourage parents, who are financially capable young adults, to purchase merchandise of animations, increasing the ability of children's animations to recover their investment from the market. These contents can accompany children as they grow into their teenage years. Creators can develop different world views or extended works, and make themes that teenagers like, in order to extend the profit model.

3.2.2. Multiple domestic platforms and channels for releasing animations increase opportunities for exposure

Due to the lack of a dedicated screening platform in Taiwan for domestic animations, many domestic animation production companies are releasing their works on general OTT platforms with social media functions (such as YouTube and Facebook), in order to increase their exposure in Taiwan and attract the attention of consumers.

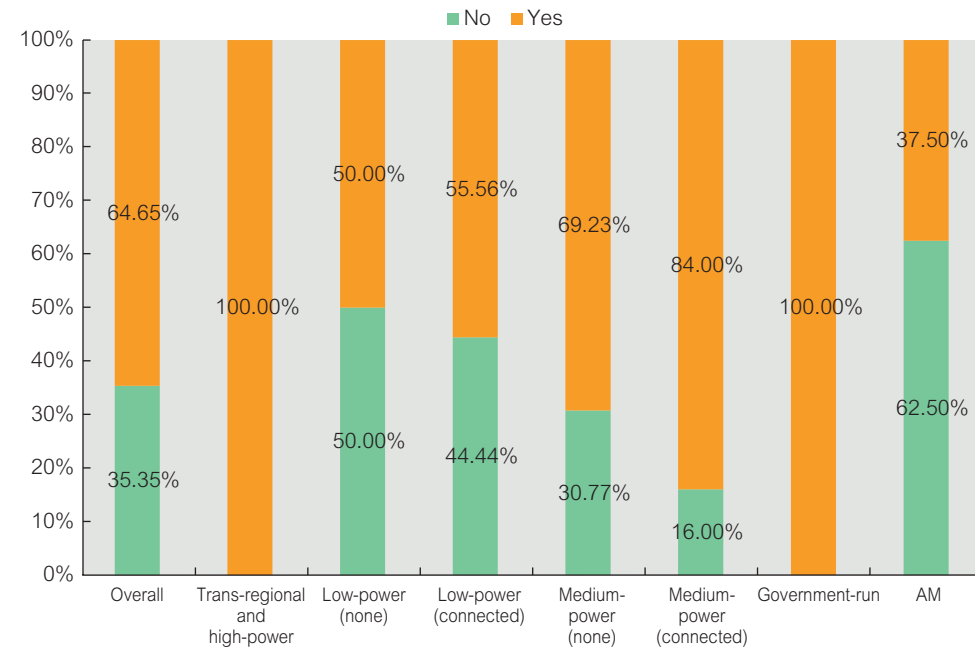
However, since general OTT platforms are filled with large amounts of diverse content, they dilute the ability for dedicated platforms to highlight animations. As a result, domestic animations not only need to compete with overseas animations for consumers' attention, but also with other forms of entertainment (such as television series, motion pictures, games, and music), making it difficult for original animation works to reach domestic consumers.

4. Radio industry

4.1. Digital development trends

4.1.1. Online music services and the trend towards broadcast networks

In 2019, 64.65% of radio stations in Taiwan provided legal online music services, in which the ratio among trans-regional and high-power radio stations and government-run radio stations has already reached 100%. A higher percentage of radio stations that were in broadcast networks provided legal online music services than those that were not in broadcast networks.



Source: Summarized by this survey from the questionnaire survey.

Figure 3-3. Ratio of radio stations that provided legal online music services in 2019

Among the different types of online music services, the highest percentage was online streaming services, such as Hichannel, followed by live streaming platforms, such as YouTube channels, Facebook, and dedicated mobile apps of radio stations (broadcast networks).

Among different types of operators, a higher percentage of low and medium-power radio stations and government-run radio stations that are not in broadcast networks provide live streaming services compared to radio stations in broadcast networks. Radio stations are developing towards live streaming services, such as CSBC and Radio Taiwan International. In a different aspect, a higher percentage of listeners of radio stations in broadcast networks use stations' dedicated mobile apps or podcasts, which have been very popular lately. This shows that radio stations in broadcast networks are making considerable investments in new media

platforms in order to follow listeners in the Internet era. Market segmentation has become even more apparent in the Internet era, and domestic radio stations are actively trying to reach their target customers through different channels, in hopes of maximizing the value of their content.

Table 3-1. Channels used by radio stations to provide legal online music services in 2019

	Online streaming services such as Hichannel	Online video streaming services such as Ustream	Live streaming online platforms such as YouTube channels and Facebook	Collaboration with webcasting radio stations (e.g., iWant-radio and experimental radio stations of schools)	Podcast services	One-stop radio mobile apps (e.g., TuneIn and myTuner Radio)	Dedicated mobile apps of radio stations (or broadcast networks)	Other
Overall	62.50%	0.00%	45.31%	0.00%	28.13%	12.50%	37.50%	20.31%
Trans-regional and high-power	100.00%	0.00%	100.00%	0.00%	100.00%	0.00%	100.00%	0.00%
Low-power (none)	30.00%	0.00%	60.00%	0.00%	10.00%	40.00%	0.00%	0.00%
Low-power (network)	73.33%	0.00%	26.67%	0.00%	13.33%	13.33%	40.00%	33.33%
Medium-power (none)	88.89%	0.00%	66.67%	0.00%	44.44%	11.11%	44.44%	22.22%
Medium-power (network)	61.90%	0.00%	38.10%	0.00%	38.10%	4.76%	47.62%	19.05%
Government-run	60.00%	0.00%	80.00%	0.00%	40.00%	0.00%	20.00%	40.00%
AM	25.00%	0.00%	0.00%	0.00%	0.00%	0.00%	50.00%	0.00%

Source: Summarized by this survey from the questionnaire survey.

4.1.2. In-vehicle radio use is still the mainstream as online listenership continues to grow, but there are still worries

According to the Nielson Radio Survey, in recent years radio listenership has remained stable, and drivers are still the main listeners of radio; in fact, the number of drivers who listen to the radio has not decreased. However, the number of online listeners (through the official website of radio stations, official apps, Internet radio apps, and live streaming platforms) has continued to grow, in which listeners of live streams grew the most and were mainly young people below the age of 30.

Recently, radio stations have been actively cooperating with digital events to increase their interaction with communities. Whether it may be continuing to operate the radio station's official website, social media presence, or live streaming events, these events keep radio programs fresh for young adults. This also secures listenership and increases "stickiness" among young adults, and may be viewed as an opportunity for transformation and the rebirth of the radio industry.

However, following the arrival of the 5G era, major automakers are actively developing V2X technology. With the majority of automobiles in Taiwan being imported, Taiwan is not in the driver's seat when it comes to developing V2X technology. This will impact radio listeners in vehicles and may cause radio stations to face business difficulties as they lose their main listenership.

4.1.3. The Internet has removed the limitations of radio

Facing growingly diverse online entertainment options and the loss of radio listenership, radio stations continue to expand their listenership through online services. Besides integrated websites, such as HiNet Hichannel, such services mainly include live streaming on official websites, radio on demand on official websites, and official apps. Online services eliminate transmission limitations, and have greater reach than high-power radio stations and broadcast networks. Even radio stations that had their license revoked can continue to serve listeners through different methods. Combined with interactions in comment sections and video live streaming functions, radio stations are closer to fans now more than ever.

Except for the official websites and apps of individual radio stations, live streaming channels on online platforms, such as YouTube, or social media pages, such as Facebook, are also a type of webcasting service. Radio programs have operated via video live streaming or saving programs on online channels, such as HitFM and Baodao Radio, for many years. The broadcast network A-Line Radio established a new channel, CheerULive, in 2018, showing that radio programs are developing towards live streaming.

4.1.4. The rapid rise of podcasts is driving the "voice economy"

According to the survey data of the Nielsen Media Research of 2012 to the first half of 2020, people are on the Internet for longer periods of time, and podcasts have rapidly risen to popularity among different forms of entertainment; in fact, 2020 is referred to as the first year of podcasting²¹. Podcasts have the advantage of not requiring listeners to pay attention to the screen, allowing them to absorb information by listening in different scenarios, and to play and stop at any time. Therefore, podcasts are able to share the attention of online audiences, and can co-exist with other information media.

Furthermore, the outbreak of COVID-19 in the first half of 2020 accelerated the use of podcasts by domestic consumers, and many creators began to actively produce podcast content. Domestic podcast content is becoming more diverse, including finance, gender issues, and parenting issues. In addition, radio series in the form of podcasts are popular among different segments.

With regard to the business model, podcast listeners have high levels of "stickiness," high completion conversion rates. In addition, a considerably high ratio of listeners also follow hosts' social media. Verbal product placement marketing by the host is a model that has been developed to achieve product marketing and drive the voice economy. Many radio stations in Taiwan have already broadcast high-quality content originally produced for radio on podcasts.

21. Website: <https://topic.udn.com/event/Podcast>

The podcast market has become growingly competitive in recent years, and more and more platforms are engaging in vertical integration through mergers and acquisitions and even offering one-stop services in order to diversify their revenue sources. These measures include investing in content creators, providing placement marketing services as an advertising agent, acquiring hosting service providers, developing content management and data analysis services, or developing a voice influencer economy and agency business. Podcast services will continue to develop towards a wide range of cross-sector applications.

4.2. Changes in the radio industry ecosystem in the digital era

4.2.1. Segmented content management with integrated resources

The global radio industry is mostly related to music content, and Taiwan is following the same trend. The top radio stations in Taiwan are mainly related to music, including UFO Radio, HitFM, KISS Radio, and Best Radio. In response to developments in the digital era and unlike online music streaming platforms, music radio stations not only play songs, but also provide listeners with music related knowledge, such as information on singers and contents of songs, allowing listeners to learn related knowledge while they enjoy songs. Besides providing music content, some radio stations are conducting offline events, such as the Hito Music Awards of HitFM. By doing so the station can engage more with listeners to increase listener “stickiness.”

In addition, the National Education Radio developed a platform called Channel+, which reuses archived radio program resources to produce and arrange new programs, designing different topics and categories based on the concept of “exhibition planning” in hopes of attracting listeners from different segments. In the future, the radio industry can make itself more valuable by having a clear target audience and creating added value for popular music, audio publishing, performing arts, and other content industries. As people begin to pay more attention to Hakka and indigenous peoples’ cultures, the Hakka Public Communication Foundation and Indigenous Peoples Cultural Foundation will take over BCC Formosa Network and i-radio, Hakka Radio, and Alian 96.3, in order to broadcast Hakka and indigenous languages and culture.

Regarding the segmented management mentioned above, an increasing number of people are listening to the radio on a mobile app. This gives radio stations access to listeners’ basic information, and further increases the accuracy of radio advertisements.

4.2.2. Integrating resources of different parties for in-depth management and development of thematic content

Due to the gradual loss of radio listenership over the years, advertisers are less willing to place advertisements on the radio. This has significantly reduced the radio industry’s source of revenue. Therefore, radio stations must actively search for new business models, such as management and development based on thematic content, and the integration of public relations, content resources, and platform channels in the radio industry. Radio stations are focusing on resource matching, such as providing knowledge on long-term care and healthcare, inviting experts to share their knowledge and expertise and then selling healthcare products and health foods on radio stations, as their main platform. These innovative business models can create new sources of revenue for radio stations. For example, the Asia Radio Family utilized temple culture to launch the app “Taiwan Temple Fair Intelligence Bureau” and organize a series of events, such as live streaming blessing ceremonies and holding temple fair activities through online platforms.

4.2.3. Merchandise sales by radio stations have grown despite the impact of the COVID-19 pandemic

Advertising revenue and merchandise sales are currently the main sources of revenue for the domestic radio industry. However, events and promotions of many industries have been put on hold due to the outbreak of COVID-19 in 2020, and the media began to cut its advertising budget. Many advertisers directly terminated or suspended their contracts. Radio stations do not have any bargaining power, so their advertising revenue significantly decreased in the first half of 2020. According to the survey of Nielsen’s advertising information service, the radio industry’s advertising revenue from January to April 2020 was approximately NT\$533 million, down 6.31% compared with the same period in 2019.

However, merchandise sales by radio stations increased. This was mainly due to the pandemic accelerating the development of the stay-at-home economy. Radio stations combined merchandise with their programs, and sold health products to increase the purchase intention of listeners. This has become one of the radio industry’s main sources of revenue during the pandemic.

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