

- (2) Take a pro-active approach in raising momo's brand image, further explore Asia's TV shopping market, export best-selling products across multiple countries, leverage the group's marketing resources and sales channels to enhance operating efficiency, and provide innovative services through mobile and cloud platforms.

Market and Sales Overview

Market analysis

Consumer Business Group

1. Main products and service areas

The Company provides nationwide and international roaming services. The coverage includes Taiwan and the outlying islands of Kinmen and Matsu.

2. Market status

As of November 2021, the mobile subscription penetration rate was 126.5%. Although it is a mature market, 5G's commercialization offers exciting opportunities as demand for IoT, broadband, smart devices and value-added services surges.

3. Competitive advantages

- (1) Fubon Group's internal synergy
- (2) The Company provides integrated and diversified telecom-cable-e-commerce rate plans to increase customer stickiness and create a win-win ecosystem.
- (3) The Company has developed various services based on customers' problems and usage scenarios, such as multiple OTT-video and music streaming, online cloud gaming, and mobile plan rebates from e-commerce purchases. It has also launched the Taiwan Mobile Smarter Home app to solve connection issues across different brands. These solutions are aimed at enhancing service value and brand differentiation.

4. Opportunities and challenges

Positive factors

- (1) Diversified 5G applications should boost value-added services and increase revenue.
- (2) With the rise of the lazy economy, users are more concerned with life convenience, ushering in opportunities for smart home.
- (3) Smart home and an aging society should further promote related needs and business opportunities, such as home security.

Negative factors

- (1) Low knowledge and low involvement of smart home.
- (2) The cost of IoT production is still high, and users are unwilling to pay a high price for it.

Countermeasures

- (1) The Company plans to attract potential users with Google's brand power to encourage them to upgrade to smart home.
- (2) The Company is cooperating with more Taiwanese home appliance brands, helping them convert their products into IoT and co-developing the smart home market.

Enterprise Business Group

1. Main products and service areas

Taiwan Mobile Enterprise Services provides international services in 247 countries. As of the end of 2021, its roaming services covered the following: 3G: 183 countries, 354 networks; 4G: 117 countries, 207 networks; 5G: 43 countries, 58 networks.

2. Market status

The industry trends listed by the Market Intelligence and Consulting Institute (MIC) include the rise of Open RAN and the rich potential of private 5G network business. As a result, enterprises expect to have more diverse, comprehensive and customized private 5G network services. In terms of traditional services, revenue from voice services has continued to decline, but the COVID-19 pandemic has increased demand for fixed-network communication. With remote working and learning becoming a trend, the fixed-network communications business is expected to grow steadily.

3. Competitive advantages

- (1) Premium brand equity and customer relationship: Taiwan Mobile Enterprise Services is a brand under Taiwan Mobile, and it has long served as a flexible partner for corporate customers. It actively responds to customer needs, possesses a wealth of experience in assisting different types of customers, offers diversified services and has won recognition among major enterprises.
- (2) Professional management team and efficient support group: Taiwan Mobile Enterprise Services has experienced sales and logistics teams, possesses extensive corporate group resources, and has obtained multiple information security certifications. Its cloud IDC computer room also serves as a data center that has won Uptime Tier III certifications for design, construction and operational sustainability.
- (3) Industry ecosystem partner resources: The Company effectively integrates the advantages of partners and creates customized industry solutions for corporate customers.

4. Opportunities and challenges

Positive factors

- (1) The launch of 5G services creates more possibilities for the development of AI and IoT, providing unlimited business opportunities for various smart applications.
- (2) Companies have stepped up their digital transformations in the post-pandemic era, driving up demand for cloud and information security products.
- (3) TrendForce predicts that in 2022, the pandemic will accelerate the digital transformation of enterprises, and the adoption rates of new types of AR and VR applications, such as virtual conferencing, remote collaborations and simulation design, would also increase. Taiwan Mobile Enterprise Services has actively invested in related fields to seize market opportunities.

Negative factors

- (1) Chunghwa Telecom has fixed network services and a scale advantage.
- (2) The popularity of mobile data has seen local and long-distance calls replaced by free communication software.

Countermeasures

The Company will continue to combine the advantages of its ecosystem partners, strengthen vertical integration capabilities, create more comprehensive 5G, AIoT, Internet of Vehicles, cloud, and information security services, and work with customers to carry out digital transformation and deepen customer adhesion.

Home Business Group

1. Main products and service areas

TWM Broadband's main service areas are New Taipei City's Xinzhuang and Xizhi districts, Yilan County and Kaohsiung's Fongshan District among others.

2. Market status

- (1) Cable TV: Taiwan's CATV penetration rate has reached nearly 60% of households, according to NCC data. Watching TV is a major leisure activity in Taiwan – one that is relatively unaffected by fluctuations in the economy. However, intensifying competition from new cable multiple-system operators (MSO), Chunghwa Telecom's MOD system and the emergence of diverse OTT content providers has affected market pricing.
- (2) HD digital TV and broadband internet access: Thanks to rich HD content, stable and quality signals, expanding platforms for viewing TV programs, and rapid development of online video services and social media, the demand for HD digital TV and high-speed broadband Internet access has continued to increase.

3. Competitive advantages

- (1) TWM offers high-speed broadband network and WiFi 6 transmission which, coupled with its rich digital content and value-added services, should drive digital TV revenue growth.
- (2) The Company can leverage off the group's rich and varied resources to offer innovative digital convergence products and services.

4. Opportunities and challenges

Positive factors

- (1) High-speed broadband internet service has become the mainstream.
- (2) Demand for multi-screen viewing of video content has increased, demonstrating the growing importance of digital convergence for families.
- (3) Backed by a solid base in smart home applications, TWM leads the industry in launching comprehensive services, such as A1 Box and HomeSecurity services.

Negative factors

- (1) At its 840th meeting on Jan. 23, 2019, the NCC approved proposed changes to Chunghwa Telecom's operation of its multimedia content transmission platform, allowing the company to form its own channel packages, as well as add or remove channels, for its MOD system. The changes place cable TV operators at a disadvantage as they must still obtain the NCC's approval to switch channels, while their pricing schemes have to be reviewed by city/county governments on an annual basis. This unequitable competition could have an impact on the cable TV industry's future.
- (2) The competitiveness of cable system operators (SO) expanding their service areas has been ebbing. However, they still pose a risk of subscriber losses for TWM.
- (3) The TV industry is facing operational difficulties due to the rise of OTT platforms and unauthorized set-top boxes.

Countermeasures

- (1) TWM Broadband is observing developments in Taiwan's digital content industry and global industry trends, focusing on providing a richer assortment of digital channels and connected TV content.
- (2) With the launch of A1 Box – an open platform integrating cable TV channels and diverse OTT content – and 1Gbps+WiFi 6 service, TWM Broadband offers Smarter Home service, GeForce NOW cloud gaming and Disney+.

Retail Business

1. Main products and service areas

momo mainly provides e-commerce and TV home shopping services in Taiwan, mainland China and Thailand.

2. Market status

B2C e-commerce topline growth is accelerating, bolstered by share gains from offline and continued expansion in mobile and streaming platforms.

3. Competitive advantages

- (1) Scale benefit: momo is the largest B2C e-commerce in Taiwan and continues to expand its leading position. Its bargaining power has increased, and more and more first-tier brands are doing direct business with it, broadening its offerings of high-quality products.
- (2) Solid reputation: momo has built a solid reputation among suppliers and customers in the TV home shopping industry. Besides winning customers' confidence, it has enhanced suppliers' willingness to entrust their brands to the Company, boosting its product diversity.
- (3) Strong support from the group: momo is able to leverage the resources of affiliates to create opportunities in digital convergence, mobile platforms, mobile payment mechanisms and warehouse management system.

4. Opportunities and challenges

Positive factors

- (1) Mobile usage time and mobile shopping continue to increase.

Negative factors

- (1) High product homogeneity and intensifying market competition have led to margin pressure.
- (2) Risk management of product quality and food safety are increasingly important as momo's scale continues to increase.

Countermeasures

- (1) momo has an extensive system of suppliers and a professional product development team. This facilitated its expansion into mobile and streaming platforms, as it already has a trove of best-selling products to tap into, which not only prolonged their product life cycle, but also increased sales volumes and differentiated it from the competition.
- (2) momo has an online shopping mobile app to tap into the mobile commerce market and optimize customer experience. By promoting limited time and livestream promotions, momo is able to reach more consumers and stimulate buying willingness. The mobile platform also offers convenience, encouraging consumers to increase their shopping frequency.
- (3) momo has set up a quality control team to visit new suppliers' factories, outsource product testing to reduce food safety risks, filter out controversial products and clarify supplier responsibility to provide consumers with a safe place to shop.

Main features and production process of major products:

The Company provides wireless/fixed-line telecom services, digital TV subscription, cable broadband, e-commerce/TV home shopping, and integrated information and communication services.

Supply of raw materials: Not applicable as the Company is not a manufacturer.

Major suppliers and customers in the past two years

- A supplier/customer that accounts for at least 10% of consolidated procurement/revenue

1. Major suppliers

Unit: NT\$'000

		2020			2021			
	Company	Procurement amount	As % of 2020 Total Net Procurement	Nature of relationship	Company	Procurement amount	As % of 2021 Total Net Procurement	Nature of relationship
1	Company A	8,555,514	10	Third party	Company A	13,111,786	12	Third party
	Others	76,771,168	90		Others	95,569,791	88	
	Total	85,326,682	100		Total	108,681,577	100	

2. Major customers:

Not applicable as the Company's revenue from a single customer did not exceed 10% of its consolidated operating revenue.

3. Reasons for variation

Procurements from suppliers varied as the Company purchased handsets from different vendors to meet its business development needs and market demand.

Production volume in the past two years:

Not applicable as the Company is not a manufacturer.

Sales volume in the past two years

Services		2020		2021	
		Sales volume	Revenue (NT\$'000)	Sales volume	Revenue (NT\$'000)
Mobile	Mobile services ('000 subs at year-end)	7,264	39,946,961	7,270	40,216,905
Domestic fixed telephony	Local calls ('000 minutes) ¹	243,016	446,242	233,294	443,466
	Long distance calls ('000 minutes) ¹	85,360	60,932	77,488	51,738
International fixed telephony	International calls ('000 minutes) ¹	44,784	665,186	27,997	485,141
Fixed-line data transmission ('000 lines)		198	2,564,409	243	2,652,809
Sales revenue ²		NA	81,100,093	NA	104,122,968
Others		NA	8,077,161	NA	8,136,506

Services	2020		2021	
	Sales volume	Revenue (NT\$'000)	Sales volume	Revenue (NT\$'000)
Total		132,860,984		156,109,533

1: Outgoing minutes only.

2: Including retail sales of handsets, accessories, IT products and 3C home appliances.

Human Resources

Employee statistics in the past two years up to the publication date

Year		2020	2021	2022 (as of February 23)
Number of employees	Consolidated	8,508	8,925	8,946
	Stand-alone	3,831	3,739	3,744
Education level	Ph.D.	0.20%	0.17%	0.18%
	Master's	13.52%	12.8%	12.96%
	University	59.59%	60.74%	60.57%
	College	15.30%	14.39%	14.43%
	Others	11.39%	11.90%	11.86%
Average age		38.08	38.27	38.37
Average years of service		8.19	8.32	8.41

Environmental Protection Expenditure

Loss or penalty due to environmental pollution in 2021 up to the publication date in 2022

None.

Countermeasures:

TWM has taken into consideration any potential risks or breach of environmental regulations in formulating its environmental management system. The Company also closely monitors developments in the government's environmental policies or regulations to design precautionary measures. It does not expect any substantial expenditure arising from environmental pollution. The Company is committed to protecting the environment and has adopted various measures, such as promoting green procurement, establishing energy-efficient base stations and data centers, minimizing the use of water and paper in offices and stores, exchanging old devices for new ones, recycling waste cables, batteries and handsets, and encouraging users to switch to e-billing and online services.