# International Investment and Market Trends, 2018 (January - March)

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## I. Investment Trends Worldwide and in Taiwan

## Abstract

- According to World Economic Outlook published by IMF in January 2018, global output grew by 3.7% in 2017, 0.1 percentage point higher than the estimate and 0.5 percentage point higher than in 2016. The growth is particularly notable in Europe and Asia.
- According to Department of Statistics, MOEA, export orders totaled US\$492.81 billion in 2017, reaching a new high with a 10.9% increase (share of overseas manufacturing at 53.2%). However, the rise of trade protectionism worldwide will bring more uncertainties to Taiwan' s export markets and may impose an impact on some industries.
- Investment Commission of MOEA revealed statistics data of investment by overseas Chinese and foreign nationals, investment from China, outward investment, and investment in China in 2017. Only investment from China managed to grow year on year, while the other three types of investment posted YoY declines. However, the number and value of approved investment projects in and from Southeast and South Asia increased.

## 1. Global Economic Outlook

According to World Economic Outlook Update published by IMF in January 2018, global output grew by 3.7% in 2017, 0.1 percentage point higher than the estimate and 0.5 percentage point higher than in 2016. Major economies including the US, China, Germany, Japan, the UK, and India all posted over 1.5% growth.

Amid global economic growth and the impact of US tax policy changes, IMF has revised upward the global growth forecasts for 2018 and 2019 by 0.2% to 3.9%. The US tax policy changes are expected to have a positive effect on the economy of the US and its trade partners through 2020. Growth is projected to slow down after 2020.

According to IMF, risks to global economic growth remain broadly balanced in the near term, but are in a long term downward trend over the medium term. This is because of the possibility of a financial market correction which might weaken growth and confidence. However, a stronger cyclical rebound is expected in the near future as global economic activity firms up and financial conditions become looser.

			Unit: %
Country or Area	2017	<b>2018</b> ª	<b>2019</b> ª
World	3.7	3.9	3.9
Developed Markets	2.3	2.3	2.2
U.S.	2.3	2.7	2.5
European Union	2.4	2.2	2.0
Germany	2.5	2.3	2.0
France	1.8	1.9	1.9
Italy	1.6	1.4	1.1
Japan	1.8	1.2	0.9
U.K.	1.7	1.5	1.5
Canada	3.0	2.3	2.0
Other Developed Markets	2.7	2.6	2.6
Newly Opened and Developing Markets	4.7	4.9	5.0
Russia	1.8	1.7	1.5
China	6.8	6.6	6.4
India	6.7	7.4	7.8
ASEAN-5	5.3	5.3	5.3
Latin America and Caribbean	1.3	1.9	2.6
Middle East, North Africa, Afghanistan, and Pakistan	2.5	3.6	3.5
Sub-Saharan Africa	2.7	3.3	3.5

#### Forecast of Global Economic Outlook

Source: IMF; "a" forecasts

## 2. Foreign Trade

According to Department of Statistics, MOEA, Taiwan's export orders increased 19.7% year on year to US\$43.06 billion in January 2018, marking the 18th consecutive month of year-on-year increase. However, export orders only totaled US\$32.45 billion in February 2018, down by 3.8% year on year, due mainly to the Chinese New Year holiday effect. The rise of trade protectionism worldwide will bring more uncertainties to Taiwan's export markets and may impose an impact on some industries (such as the basic metal industry).

Taiwan's export orders amounted to US\$492.81 billion in 2017, reaching a new high with 10.9% YoY growth (share of overseas manufacturing at 53.2%). This is the highest growth rate since 2011.

In 2017, Taiwan's export orders mainly came from the US (US\$137.81 billion, up by 8.0% YoY), China and Hong Kong (US\$122.61 billion, up by 14.5% YoY), and Europe (US\$100.99 billion, up by 16.2% YoY).

Export orders received in 2017 were concentrated in ICT products (US\$147.57 billion, up by 10.5% YoY) and electronics products (US\$126.97 billion, up by 7.0%). Boosted by deferred orders placed by international mobile brands, export orders for ICT products surged in December, totaling US\$15.90 billion, the highest compared to the same month in previous years.

					Unit: %	
Year Month		Total Amount				
		(US\$100 million)	MoM growth rate	Seasonally adjusted MoM growth rate	YoY growth rate	
2017 January - December 4,928.1		4,928.1	-	-	10.9	
	January	359.7	-12.8	6.3	5.2	
	February	337.5	-6.2	-0.3	22.0	
	March	411.2	21.8	-0.7	12.3	

Statistics on Export Orders in 2017

	April	356.1	-13.4	-4.7	7.4
	May	368.1	3.4	1.6	9.1
	June	403.5	9.6	5.9	13.0
	July	387.2	-4.0	0.0	10.5
	August	407.8	5.3	0.7	7.5
	September	459.2	12.6	0.6	6.9
	October	466.0	1.5	1.5	9.2
	November	486.9	4.5	1.5	11.6
	December	484.7	-0.4	3.3	17.5
YoY Growth		Amount			%
		482.7			10.9

Source: Ministry of Economic Affairs

## 3. Foreign Investment

In January and February, 2018, the value of approved investment by overseas Chinese and foreign nationals and the value of approved investment from China increased year on year. However, the value of outward investment and investment to China posted year-on-year declines, according to Investment Commission of MOEA.

The Investment Commission's statistics shows that only investment from China managed to grow in value; investments by overseas Chinese and foreign nationals, outward investment, and investment to China all delinked year on year in 2017. In the meantime, the number and value of approved investment projects in and from Southeast and South Asia both increased, especially for investment in Australia (up by 2429.8%). Among the US\$7.51 billion worth of investment by overseas Chinese and foreign nationals in 2017, investment through capital increase accounted for the largest share (70.9%), followed by investment in existing companies (20.6%).

Electronic parts and components manufacturing accounted for the largest share in investment by overseas Chinese and foreign nationals, reaching US\$2.13 billion (28.41%). The other four industries heavily invested by overseas Chinese and foreign nationals are ICT product at US\$1.29 billion (16.09%), financial and

insurance at US\$940 million (12.51%), wholesale and retail trade, and real estate. These five sectors took 78.24% of the investment by overseas Chinese and foreign nationals.

				Unit: US	\$1000; %
Industry		Amount	YoY	YoY Comparison	
	Cases (ratio)		Amount	Amount	Growth rate
Electronic Parts and Component Manufacturing	92	2,134,308 (28.41)	3,632,124	-1,497,815	-41.24
ICT Product	359	1,208,813 (16.09)	187,664	1,021,149	544.14
Financial and Insurance	298	939,703 (12.51)	1,220,100	-280,397	-22.98
Wholesale and Retail	1,179	878,607 (11.69)	1,195,073	-316,467	-26.48
Real Estate	166	717,029 (9.54)	316,939	400,091	126.24

#### **2017** Foreign Investments for the Big 5 Industries

Source: Investment Commission, MOEA

## **II. Key Industrial Information**

- 1. Information and communications industry
- Shipments of Top 3 IT Products to Decline in 2018 after Higher-than-expected Shipment Performance in 2017

Shipment performance of the top three IT products was higher than expected in 2017. Notebook PC shipments signaled the first hike after two years of declines. However, applications of these IT products continue to wane. The strong demand in 2017 may increase pressure on shipments in 2018. Therefore, shipments of the top three IT products are likely to decline in 2018.

Looking back to 2017, IT product specifications continued to improve. Gaming monitors enjoyed the highest growth and the popularity of wide-angle monitors continued to rise. Bezel-less design was widely adopted in notebook PCs and the availability of high resolution models also increased. Compared to monitors and notebook PCs, tablet PC specifications have lacked innovation.

In 2017, notebook PC shipments managed to grow, but monitor and tablet PC shipments continued to decline. That said, the shipment performance was still higher than expected thanks to the global economic recovery and increased demand for business and consumer IT products. However, long replacement cycles of monitors, notebook PCs, and tablet PCs may drag down their shipment performance. For shipment performance in 2018, TRI suggests that tablet PC declines will slow down while notebook PCs may slide again and monitors are expected to fall further.

#### • Growing Popularity of Wireless Charging

After Apple brought wireless charging to iPhone, wireless charging companies have picked up their pace to roll out new products. Energous, which has been devoted to RF-based wireless charging technology, demonstrated its Mid Field wireless charging solution at CES 2018. This solution received FCC certification in late 2017, marking a major milestone for this company. However, the charging efficiency of this solution declines with distances. Even if Mid Field is commercialized, it can only charge low-power devices (3-5W) and the charging speed is very slow. Belkin has launched wireless chargers that allow more freedom in positioning, the number of devices supported, and charging scenarios. Some vendors have launched products combining a power bank with a wireless charger. With vendors becoming more aggressive and the ecosystem taking shape, wireless charging technology and solutions will diversify further in 2018.

There are three development trends in wireless charging for mobile phones in 2018. Firstly, more devices can be charged at the same time. Secondly, the line between TX and RX blurs as charging one device from another becomes more

common. Frequently used devices such as mouse pads can also serve as mobile chargers for mobile phones. Thirdly, mobile phones can be placed anywhere on the charging pad during charging. In the past, mobile phones must be placed horizontally which made viewing difficult. This problem will be addressed in 2018.

## Penetration of Android-based Smartphones with Fingerprint Sensors Approximates to 60% in 2018

Since Apple acquired Authentic and incorporated its fingerprint recognition technology into the iPhone and iPad in 2013, Touch ID has become an iconic feature of Apple's mobile devices. However, Apple is expected to expand the adoption of Face ID in its new products in 2018, leading to a significant decline in Touch ID penetration. As for the Android camp, mobile phone vendors have continued to use fingerprint recognition systems as facial recognition is considered less secure. Examples include Samsung's S8 and Note 8 which simply identify the 2D image of the face and VIVO's X20 which performs facial recognition on the cloud. As a result, fingerprint recognition has remained the main biometric identification method in most Android phones.

TRI thinks the Android camp will stick to fingerprint recognition in 2018, driving up the global penetration of Smartphones with fingerprint sensors to 59%.

## Intensified Vertical/Horizontal Integration in Industrial PC Industry

Strategic alliance via M&A or purchase of share will continue to take place in the industrial PC industry. Vertical and horizontal integration will intensify. The acquisition targets have expanded from the domestic to overseas markets with upstream producers integrating with downstream distributors /system integrators.

While business opportunities in IoT are concentrated in data analysis and smart services, international companies have remained the leaders in cloud services and big data analysis. Taiwanese industrial PC vendors will mainly benefit from industrial upgrading fueled by factory automation and smart

factories. With strong demand and growth momentum in these areas, Taiwanese vendors will continue to enhance their software capabilities, SI channels, and networking technologies. For example, Advantech has recently announced the acquisition of 17.5 thousand shares of AzureWave for NT\$299 million via private placement in order to strengthen their cooperation on wireless communications modules.

## 2. Pharma & biotech industry

#### • Pollution boosts demand for stents for respiratory system

Deteriorating air quality has led to an increase in chronic sinusitis worldwide. When medicine does not work, FESS (Functional Endoscopic Sinus Surgery) is usually carried out. Over one million FESS procedures have been performed in the US and Europe and 30% of FESS patients have to undertake the surgery again after operation due to scarring and recurrent inflammation. Startup company S.T.Stent (STS Medical Ltd.) has developed a composite removable sinus stent system for FESS patients. The system can keep the ethmoid sinus open for 28 days to help the sinus tissue heal and improve the effectiveness of the treatment. China's Puyi (Shanghai) Biotechnology has developed a sinusitis stent coated with Mometasone furoate to reduce inflammation after FESS.

Due to the complicated structure of the respiratory tract and sinus tissue, only a few products are available to address the needs. There is still unfulfilled demand in the market. The stent market, which was US\$770 million in 2017, is expected to register CAGR of 4.9% by 2022. With stent design and material advancing, more stent products will be available in the future. In addition, the progress of imaging technology and minimally invasive surgery will further expand the application of stents.

## Rising medical demand in emerging markets, leading to steady growth of global medical device market

The global medical device market posted 4.7% growth in 2017, reaching US\$428.1 billion. Apart from rising medical demand in emerging markets, the

markets in the Middle East and North Africa region have also expanded. In addition, the implementation of the US ACA (Affordable Care Act) has encouraged the development of solutions designed to reduce overall health care spending, especially for medical device spending. As a result, the global medical device market has been growing steadily and is projected to reach US\$517.4 billion in 2021 with CAGR of 4.78%.

The US has remained the world's largest medical market with a market size of US\$140.8 billion in 2017. Japan and China are the major medical device markets in Asia with a size of US\$23.1 billion and US\$20.0 billion respectively. The medical device markets in the ASEAN, MENA, India, and Latin America have grown rapidly and are expected to be the main driving force for the global medical device market in the next five years.

## 3. Fintech industry

## Business model derived from blockchain to pose an impact on the market

Bitcoin has attracted significant attention after dramatic rises and falls in its value. The market has come to realize that blockchain can be utilized in various domains other than cryptocurrency. This technology will radically change existing business model. Currently, most companies use blockchain to pack an application and provide incentives to encourage users to use the application. For example, Kodak launched the KODAKOne image rights management platform and KODAKCoin cryptocurrency to protect photographers' work and give them a steady revenue stream.

Since blockchain is a foundational technology, it will bring not only innovation but also new thinking to every industry, just like the Internet. However, blockchain is not suitable for every industry at this moment as the technology is still in the initial phase and regulations on bitcoin remain tight. Even the financial industry needs to evaluate the applicability of blockchain thoroughly. The technology is likely to be used in supply chain management or the aviation industry at first where multi-factor authentication is required and native digital data is available.

#### • China's new Ethercoin miner to boost revenues in mining supply chain

Designed for bitcoin, the Bitmain S9 miner is Bitmain's key product. However, with bitcoin decreasing and mining difficulty increasing, coupled with the heavy use of the computationally intensive and energy-hungry SHA-256 algorithm, Bitmain has developed the F3 miner for Ethercoin. The F3 miner consumes less power and provides more memory. Compared to Bitmain S9 which only uses 512 MB of memory (DDR3), one unit of the F3 miner contains 72 Gigabyte DRAM memory. The availability of the F3 is expected to impact the graphics chip PC mining market.

Besides the miner supply chain, the requirement for high computational power has also benefited motherboard vendors. Motherboard demand is expected to continue until April. In January 2018, revenues of some first- and second-tier motherboard vendors such as GIGABYTE, TUL, and Leadtek reached a record high; MSI, BIOSTAR, and ASRock also enjoyed a doubledigit increase in revenues. MSI even achieved the second highest consolidated revenues in the company's history. The mining demand also boosted the ASP of GIGABYTE's graphic cards with retail prices rising by 5% to 10%. While motherboard demand will continue into April 2018, mining disasters and cryptocurrency bubble may pose daunting concerns in the long term.

4. E-commerce industry

#### New consumer retail experience gradually embraced by retailers

After progressing from physical retailing to e-commerce, the consumer retail industry is undergoing another transformation. On one hand, e-commerce vendors have faced intensive competition and surging customer development costs. On the other hand, physical retailers are rapidly losing their market share to e-commerce counterparts due to the limitations of physical retailing. To get out of the predicament, both sides have started to learn from each other. As a result, the retail industry is embracing the convergence of physical and digital commerce. In the future, pure physical retail or ecommerce will be replaced by New Retail, a pan-retail business model driven by data with consumer experience as the core. The core value of New Retail is streaming

data which integrates online and offline retail channels and provides consumers with seamless experience through technology and supply chain integration. Many leading retailers such as Walmart and Alibaba have been trying to realize the concept which is expected to see wider adoption in the future.

As New Retail focuses on online and offline integration and optimal customer experience, it involves not only advanced technology but also userfriendliness. One of the examples is the new Starbucks Roastery in Shanghai, established in collaboration with Alibaba. This store adopts AR technology, allowing consumers to see the entire coffee-making process such as roasting, producing, and brewing on their mobile phones. This enables consumers to know more about Starbucks during consumption. Another example is Tmall which provides consumers with maps as well as product and activity information. Consumer psychology plays a key role in New Retail. By helping consumers understand the history and value of the products, their consumption experience will translate into brand identity. As a result, consumers will not solely focus on the price when shopping.

#### Integration of IoT and AI as key to realize unmanned stores

Unmanned stores have become a hot topic after Amazon rolled out its unmanned store Amazon Go, prompting many retailers to follow suit. Amazon Go adopts a variety of IoT and AI technologies such as RFID readers, cameras, and weight sensors to detect when consumers pick something off the shelf and put it back. Items are added to the customer's Amazon Go App immediately and the customer is billed after leaving the store to ensure a seamless consumer experience. Since unmanned stores need to deal with a variety of situations and shopping patterns, accurate sensing is the most important requirement. Many late entrants such as Alibaba, 7-11, FamilyMart, Watsons have rolled out similar stores. However, the usage scenarios, requirements, and purposes of the technologies adopted will vary due to the nature of the stores.

As most technologies adopted in unmanned stores are not new, seamless

integration of the technologies will be the key to success. In addition, consumers' acceptance of unmanned stores is still low. The store system must be tested and adjusted constantly after the introduction of a technology to ensure stability and convenience. The ultimate goal of unmanned stores is to enhance consumer experience and operational efficiency. In other words, even if the technologies used in unmanned stores can be flexibly manipulated, they will be discarded if they fail to improve consumer experience or even interfere consumption processes, no matter how advanced they are.

## 5. Startups industry

#### Business opportunities in smart meters in 2018 attract technology companies

The Taiwan Power Company will install 200,000 smart meters starting 2018, mainly in SMBs and households. With the aim of installing more than three million smart meters by 2024, the project is expected to generate new market opportunities worth NT\$24 to NT\$25 billion. Potential players include CHEM, Tatung, CHT, and Sercomm. As there is no restriction on the communications modules and services used in the smart meters, it can be Wi-Fi, 4G, PLC, or LPWAN. The most important requirement is successful connection and reliability. For data transmission, the meter must generate one piece of data every 15 minutes and transmit data once every four hours. A total of 96 pieces of data must be transmitted in a day.

Power companies can install smart meters alone or in collaboration with telecoms. The former results in a higher deployment and maintenance cost while the latter enables power companies to enjoy warranty services and flexibility in price negotiation. Given the data transmission characteristics of smart meters, LPWAN technologies are ideal choices. As leading Taiwanese telecoms have aggressively deployed and sought to commercialize NB-IoT, it may become the mainstream communications technology for smart meters in Taiwan.

# • Expansion of smart speaker ecosystem to be key in 2018 amid intensified competition

The launch of the Amazon Echo in 2014 has cast the spotlight on smart speakers. By the second half of 2017, smart speakers had sprung up in the market. Besides

professional speaker vendors Harman and Sonos, Xiaomi, Alibaba, Tencent, and Line have also jumped on the smart home bandwagon. To seize the opportunities ahead of others, Amazon reduced the price of Echo by 25% to 40%, forcing Google to follow suit. The price reduction not only resulted in outstanding sales performance of Echo, but also attracted more users to become Amazon's members to use its Alexa voice assistant, thereby expanding Amazon's smart speaker ecosystem.

The development of the smart speaker ecosystem includes two parts: internally and externally. For internal development, smart speakers must act as the hub of a smart home to connect every smart device. Given the fragmentation of the smart home market, every leading home appliance vendor wants to become the center of smart homes. As for external development, the key lies in the expansion of the services. Most of the existing smart speakers have enabled users to set timers, check the weather, and play music. If vendors fail to bring in new application services, they will have difficulty motivating people to buy smart speakers. Without sufficient users, vendors are less interested in taking part in, leading to a vicious circle. Therefore, providing diversified services will be the key driving force for smart speaker development.

## Booming eSports industry drives demand for talent, though industry support still needed to make gaming mainstream

The development of eSports dates back to 1999 and 2000. Starting off as a form of personal entertainment, eSports has become a form of competition that can be watched worldwide thanks to the emergence of live streaming. Contributed by sponsorship, advertising, merchandising ranging from software to hardware and peripheral products, ticket sales, broadcast rights, amateurs, and small competitions, eSports market size has increased significantly. The global eSports market amounted to US\$1.5 billion in 2017 with sports brands accounting for 50%. The eSports market is expected to increase by 26% by 2020. Besides a growing mainstream audience attracted by competitions, third-party investment will also increase.

The eSports industry is sprouting in Asia and its future will hinge on industry support. Recent years have seen an upsurge of interest in eSport among financial

companies. After Mega Bank took the lead in hosting a college gaming tournament, Taiwan Shin Kong Security also turned its eyes to the eSports industry. The company has raised Series A rounds for the ahq-eSports Club, an eSports organization based in Taiwan. Taiwan provides a great environment for developing eSports. Besides a number of leading eSports hardware vendors and outstanding players and teams, Taiwan's eSports audience ranks fifth in the world. The well development of the video entertainment industry, the widespread popularity of live streaming, and the government's recognition of eSports as a sport in in 2017 also prove that Taiwan has many advantages in developing the eSports industry.

The eSport industry involves software, hardware, and media. Taiwan currently suffers from a shortage in game development which is almost stagnant. In addition, while demand for eSports talent has surged in Taiwan, China has also aggressively recruited talent in this field and offered an annual salary of tens of millions of NT dollars for high-ranked players. Taiwanese team leaders, marketing specialists, managers, and commentators are all potential candidates. Therefore, talent retention is a critical issue facing Taiwan's eSports industry.

## III. Investment case study

Major investments during this period of time include a joint venture between Hon Hai and Sharp for producing automotive cameras and an eSports company set up by Asus in China. Below is an analysis of the impact and future development of these investments.

Event	Related	Event Analysis and Future Development
	Companies	Evaluation
February 2018-	Foxconn and	Demand for ADAS (Advanced Driver
Hon Hai's subsidiary	Sharp	Assistance Systems) has escalated in
Foxconn announced		recent years. ADAS' functions have
nartnershin with Sharn to		expanded from giving warning to
octablish a joint vonture		intervening in vehicle control and will
		develop towards autonomous driving. The
with 3.02 billion Yen		operation of ADAS involves environmental
(NT\$800 million) for		sensing, data analysis, decision making,
producing automotive		and implementation. However, common
cameras		sensors such as ultrasonic radars and
Hop Hai will take a E1%		mmWave radars can only detect objects
		and distance instead of identifying objects.
stake in the venture with		With advancement in image recognition
Sharp owning the		algorithms and image processors, the
remaining 49%. Targeting		combination of cameras and automotive
leading car vendors, the		radars for environmental sensing has
company will develop,		become a mainstream solution for ADAS.
design, manufacture, and		
sell automotive cameras		<ul> <li>Currently, ADAS-equipped vehicles have</li> </ul>
and electronic rear-view		an average of four to eight cameras. As
mirrors.		ADAS functionality advances, more
		cameras will be needed in high-end
		vehicles. Worldwide governments' new
		vehicle assessment programs
		or regulations for mandatory installation

Major Investments

Event	Related	Event Analysis and Future Development
Event	Companies	Evaluation
		<ul> <li>of ADAS in vehicles will also boost the penetration of automotive cameras in mid-range and value-line vehicles. As a result, demand for automotive cameras will continue to rise.</li> <li>In this project, Sharp's subsidiary Kantatsu will provide its camera technology while Hon Hai's reinvested companies Zhong Yang and Eterge will provide optical modules and optical lenses respectively. Sharp is likely to be responsible for technological development and product design while Hon Hai will use its mass production capabilities and sales experience to tap into the automotive camera market.</li> <li>According to Sharp's medium-term plan, Sharp aims to boost its component sales to 800 billion Yen by mid-2019, including automotive cameras. However, the molding technology of automotive camera modules will be a concern. Zong Yang has focused on plastic molded lens. With a small share of glass mold equipment, it remains to be seen whether the company can grasp the technology of glass molded aspherical lenses. In addition, Eterge has focused on aftermarket parts. Therefore, it needs to meet the standards of OEM.</li> </ul>
January 2018- Asus set up an eSports	Asus	• Competition in the eSports industry is fierce. With little difference in product

Fuent	Related	Event Analysis and Future Development
Event	Companies	Evaluation
company named Huajing		offerings and technology development
Culture Media in China		and increased similarity in marketing
with NT\$473 million.		strategies and peripheral product design,
Use the Coltons Media will		vendors need to break away from the
Huajing Culture Media Will		traditional manufacturing and sales
focus on the development		patterns of consumer electronics in order
of Asus' eSports business		to stand out in the market. They need to
in China including		shift their focus from product
organizing an eSports team		specifications to product design and
and join in gaming		gaming communities while creating an
competitions.		ecosystem centered on customer
		experience such as brand marketing,
		service channels, and eSport ecosystem.
		<ul> <li>Huajing Culture Media has launched an</li> </ul>
		eSports team in Shanghai, known as Rogue
		Warriors, which will compete in the
		League of Legends Pro League led by
		Tencent. Rogue Warriors is Asus' first
		eSports team.
		• This move shows Asus' eSports
		deployment is no longer confined to
		hardware sales such as PCs, gaming
		motherboards, displays, routers,
		peripheral devices, and gaming mobile
		phones. Instead, Asus has started to form
		a complete eSports industry chain and
		ecosystem to consolidate its market
		position. With this approach, Asus is able
		to improve its development in China's
		eSports industry while tightening its ties
		with eSports lovers and increasing user
		identification, hence paving the way for its

Event	Related Companies	Event Analysis and Future Development Evaluation
		<ul> <li>future deployment.</li> <li>When eSports becomes a professional sports, business opportunities in new media, Internet celebrities' live streaming, game broadcasting, ticket sales, and clubs will increase. In 2018, gaming hardware vendors are expected to adopt more aggressive marketing strategies. Investment in eSports teams and streamers that helps companies connect directly with players will also increase. Sponsors will also be engaged in managing players and peripheral economic benefits. Key roles in the eSport ecosystem such as players, game companies, eSports organizations, and live streaming platform providers, will be able to form mutually beneficial partnerships via cross-industry alliances.</li> </ul>

Source: TRI

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