

Feng Chia University Global Strategic Management Paper by Students

ASUSTEK Computer Inc. Strategic Business Analysis

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Chapter I Introduction

Why Asus?

Asus is one of the world's largest PC producer, after Lenovo, Dell, and HP. Asus also ranked first in the IT hardware category of the 2008 Taiwan top 10 Global Brand survey with a total brand value of USD \$1.3 Billion. By the year 2015, Asus was listed as one of the biggest companies in Taiwan with revenue of more than NTD \$477 Billion. Aside from being a big and successful company, Asus product's is famous for their high quality that ranges from Laptops, Notebooks, Personal Computers and Smartphones.

Company Introduction

Asus was founded in by Mr. T.H. Tung, Ted Hsu, Wayne Hsieh and M.T Liao in Taipei in 1989. The four founder of Asus previously worked at Acer as their hardware engineers. The name Asus came from the word "Pegasus", a mythical creature from Greece. In the development of the company, the name Pegasus was shortened in to "Asus".

At the beginning of their day, Asus's "headquarter" was only an apartment in Taipei. And their main business was computer consulting. One moment that propels them to become a huge business was their success in manufacturing of Intel's motherboard 486. After that the company began to concentrate on Hardware manufacturing

In December 2005, Asus entered new business by producing their first LCD TV named TLW32001 model. And cooperated with Lamborghini to develop the VX series in January 2006. With their rapid expansion in the technological products business,

Asus decided to do a major restructuring of its operations in January 2008. This restructuring split Asus in to three companies with different functions: Asus itself responsible for manufacturing computers and electronics, Pegatron handles on motherboards and components manufacturing and also have function as Original Equipment Manufacturing (OEM) and lastly Unihan who focuses on producing non-PC products such as cases and molding.

In 2009 Asus already had a total of 8 manufacturing facilities spread around the world, which 4 located in Taiwan (Taipei, Luzhu, Nangan and Guishan), 2 in China (Suzhou and Chonqing), 1 in Mexico (Ciudad Juarez) and 1 in Czech Republic (Ostrava).

Business Scope

Asus's main business scope is focused on electronic products that range from Personal computers, Laptops, Mobile phones, TVs, Tablet, and other support products like motherboards and Smart watch.

Strategic Business Unit

Asus company itself has several strategic business units that works interdependent with others department, namely Smart phone line, PC line, Laptop (netbook) line, Tablet line, mother board line and design center.

One of Asus' business units is their Smart phone line. Their newest division is the Asus's Zenphone which operated using Android system and has strong influence in big mobile markets like India, China, Indonesia and other Asian countries.

Other successful business unit is their Laptop division that has different kinds of products offered from low end to high end laptops like the Zen Book and Republic of Gamers. Up until now this division surely held the second biggest share after mother 5 FCU e-Paper (2016)

board manufacturing and OEM. However, this division has to face with the biggest market competition. Therefore, Asus is focusing to develop this division by increasing market share and launching more innovative products.

Asus' SBU that hold the biggest share is their OEM and mother board line. Asus (Pegatron) produces motherboard for other companies namely Dell, Hp and even Acer. Asus design center also help designing the design for other company laptop.



Chapter II Business Strategy

ASUS Company Philosophy

1. Vision

As stated in its website, ASUS vision is to be an "integrated 3C solution provider (Computer, Communications, Consumer electronics) that constantly delivers innovations which can simplify its customers' lives as well as to enable customers to realize their full potential".

2. Mission

Based on its vision above, ASUS' designed its corporate mission so that it can provide a good IT innovation which accommodates and support its customers to realize their full potential. ASUS' philosophy is "to accomplish the fundamentals well first before moving forward". Asus' mission is categorized in 4 categories, which are:

- 1. Pursue time-to-market leadership
- 2. Ensure utmost reliability and compatibility
- 3. Maintain technological leadership
- 4. Provide excellent service and technical support.



Figure 1. ASUS vision

To succeed in the highly-competitive IT industry, ASUS focuses on speed-to-market, cost and service quality. That is why every ASUS employee is trained to master the "ASUS Way of Total Quality Management". Guided by these precepts, ASUS has developed a strong advantage in product design, technology, products and service quality as well as value/cost advantage (ASUS website: https://www.asus.com/us/About_ASUS/Winning_formula/).

ASUS CORPORATE LEVEL STRATEGY

Asus is a private corporate. Asus corporate strategy evolves toward expansion and enhancement. Asus mainly focus in technology products. Asus previously only manufactured motherboard but then expand to PC, Laptop, Tablet and even Smartphone. Asus vision toward innovation, make Asus keep improving its product function every year. For example Asus recently release its Zenphone and PC for gamer with eco-friendly material. Asus also has its own recycling services.

ASUS corporate level – Growth Strategy.

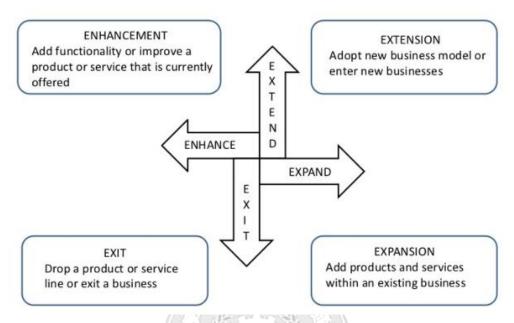


Figure 2. ASUS Corporate Level Strategy

1. Related Diversification

Asus acquired Maintek Computers in order to enter China market. Maintek Computers mainly known as computer manufacturer in China, by acquiring Maintek Computers Asus gained ability to produce its own computer in China.

2. Vertical Integration

Vertical integration is a strategy that allows an organization to create value by producing its own inputs or distributing its own products.

Backward vertical integration occurs when Asus involved on producing its own input, for example motherboard, LED, etc.

Forward vertical integration take place when Asus performs its function for customer (distribution, customer services).

3. Strategic Alliances

Asus formed strategic alliances with several big company in order to develop its own product and to grab market attention. For example, Asus joined hand 9 FCU e-Paper (2016)

with Nvidia, Silicon Image Inc and T-mobile to perfect its system. Asus also joined hand with Disney, Mercedes Benz and Lamborghini to attract more consumers.

4. International Expansion

Asus approached Standardized strategy where it used same technique to sell same product everywhere. Asus acquired a local company to enter China market and Asus built its own subsidiary in US, Europe and China to cut lead time. Asus formed a joint venture to acquire technology for developing its products.

ASUS BUSINESS LEVEL STRATEGY

Business level strategy is a way a firm uses to gain competitive advantages over its competitor by exploiting core competencies in specific product markets (Paul Krugman, 2012).

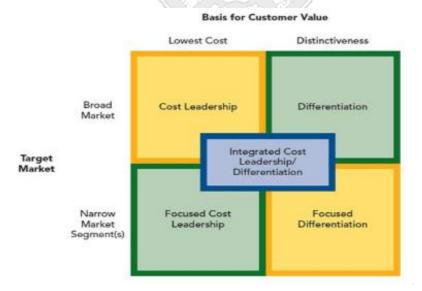


Figure 3. ASUS Business Level Strategy

ASUS Firm Infrastructure: Based in Taipei. Facilities in Taiwan, China, Europe, Mexico, US, Germany and Czech Republic.

ASUS Human Resources: around 20000 employees around the world (2015).

ASUS Technological development: Emphasis on R&D and Design.

ASUS Procurement: Big negotiating power, low cost because of high volume purchasing.

ASUS mainly uses <u>cost leadership strategy</u>, which is the company deliver its product to its consumers at the lowest competitive price. However, Asus also combined this strategy with <u>Differentiation strategy</u>. In the end Asus strategy categorized in Integrated Cost Leadership.

ASUS Inbound Logistic:

- a. Production capacity \rightarrow 2 million motherboards and 150.000 unit of laptops per month.
- b. Asus partly outsourced the production of its own component.

ASUS operation:

- a. Asus has three distinct operational units which are Unihan, Pegatron and Asus.
- b. Asus separated its own manufacture facility and contract manufacture facility.

ASUS Outbond Logistic:

- a. Fast delivery, due to its many production site.
- b. TQM
- c. Asus has external partner to shipped its product to Asus reseller, which is Reddington.

ASUS Marketing and Sale:

a. Advertising on Green Products.

b. Asus has two different types of costumers: end-user and contract manufacturing.

ASUS Services:

- a. Extension of warranty.
- b. Asus offered a bundled of customer services and product supports.

Correlation with Porter's 5 Competitive Strategy:

1. Competitors

Low-cost is surely a valuable strategy against Asus competitor (example: Acer, Dell, HP). Asus' late entry to market became it's own disadvantage, however thanks to its low price Asus quickly grab a market share in a short time.

Nowadays, Asus also releasing its own unique product to catch market and to increase loyalty (example: Asus PC for gaming, 3-in-1 Padfone).

2. Suppliers

Asus hold down its supplier price by purchasing a big amount of units.

Asus can produce its own components (part of it still outsourced/ vertical integration).

Asus formed partnership with its supplier to cut down the cost.

3. Buyers

Asus strategy removes the buyer bargaining power due to its low cost and lack of comparative of choice.

4. New Entrants

Patent and unique features make Asus hard to replicate.

Low-cost usually served as significant entry barrier to possible new competitors.

5. Substitutes

Low cost can maintain customer relationship (loyalty)

ASUS FUNCTIONAL LEVEL STRATEGY

Functional level strategy defines as the approach a functional areatakes to achieve corporate and business unit objectives and strategies by maximizing resource productivity.

1. Marketing

a. Product Strategy

Single-Branded Strategy (Standaridization): Use same brand for all its products line.

Position itself as low-cost products

Using eco-friendly material.

Product Development Strategy, which Asus always innovate and developed new product. For example, Asus released 3-in-1 padfone to its existing customers and also releases PC gaming for new customers/gamers.

b. Pricing Strategy

Penetration Pricing Strategy. Asus offered low cost product to gain market share.

c. Place Strategy (Distribution)

Distribution Partner → Reddington.

To reduce lead time, Asus built its own subsidiary in US, Germany, Europe and also China.

Asus chain stores are available in more than 40 countries.

d. Promotion Strategy

Asus focused on online advertising (Asus did not focusing on advertisement budget).

Asus actively participated in several campaigns especially after launching its Republic of Gamer.

Asus uses different strategy for different segment (ie. Direct selling for PC gaming).

2. Finance

Asus Financial strategy is to focus their financial expenses into R&D division and its Design Center. Asus emphasis more on technology development and invest less in distribution channel. Recently, with the new release of Asus' Republic of Gamer, Asus started to invest in their marketing.

Table 1. ASUS Financial Table

Year (Note 1)		Financial analysis in the past five years					As of April
Item (Note 3)		2010	2011	2012	2013	2014	15, 2015
Financial	Ratio of liabilities to assets			52.32	53.74	53.03	
structure (%)	Ratio of long-term capital to Property, plant and equipment			1,242.37	1,349.04	1810.02	
	Current ratio (%)			159.54	158.09	153.59	
Solvency (%)	Quick ratio (%)			94.53	101.94	93.16	
	Times interest earned			309.99	77.72	95.67	
	Account receivable turnover (times)			7.49	6.34	5.94	
	Days sales in accounts receivable			48.73	57.57	61.44	
	Inventory turnover (times)			5.15	4.58	4.10	
Operating ability	Account payable turnover (times)			6.65	6.27	5.48	
aomty	Average days in sales			70.87	79.69	89.02	(Note 2)
	Property, plant and equipment turnover (times)	N	/ A	43.07	43.07	46.97	
	Total assets turnover (times)	N/A		1.82	1.64	1.47	(11016 2)
	Ratio of return on total assets (%)			9.20	7.73	6.14	
	Ratio of return on equity (%)			18.48	16.27	13.03	
Profitability	Ratio of profit before tax to Paid-in capital (%) (Note 7)			359.52	363.86	341.93	
	Profit ratio (%)			5.02	4.65	4.13	
	Earnings per share (\$) (non-retroactive)			29.84	28.66	26.21	
	Cash flow ratio (%)			16.19	19.78	14.64	
Cash flow	Cash flow adequacy ratio (%)			130.40	145.59	97.63	
	Cash reinvestment ratio (%)			7.66	10.03	6.33	
Leverage	Degree of operating leverage			2.91	3.38	3.19	
Levelage	Degree of financial leverage			1.00	1.02	1.01	

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3. HRM

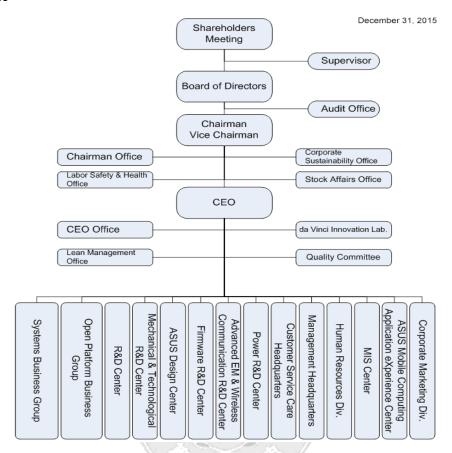


Figure 4. ASUS Organization Structure

- a. Asus has more than 12000 employees worldwide which focusing on R&D.
- b. Asus adopted Total Quality Management or continuous improvement.
- c. Asus Employee's Welfare Packages including health insurances, welfare fund with a percentage of sales revenue to its employee, employee activities and financial aid.
- d. Personal Training: Learning and Growth Plan.
- e. Intenal training, On-job training and External training.

Table 2. ASUS Human Resource Expenses

Item	Course	Expense	
Item	Course	(NTD)	
Professional	166	961,935	
Management	71	278,675	
Language	1	21,523	
Others	39	74,530	
Total	277	1,336,663	

4. R&D

- a. Strives for product innovation. Asus every years release its new product which is different in uniqueness. Latest release: Asus 3-in-1 PC.
- b. Focuses on R&D expenditures.
- c. Asus has its own design center focusing on designing its own manufacture products.
- d. Partnership and Strategic alliances. Asus collaborated with several company to perfect its own products. Nvidia (3D graphic system), Silicon Image Inc.(system), Disney, Mercedes Benz (marketing).

5. Social Responsibilities

- a. Asus Green: Eco Product, Eco Design, Energy Efficiency
- b. Safety Environment
- c. Healthy workplace
- d. Product Recycling services

Chapter III Strategy Map

In this case we are focusing on three point of Strategy Map for ASUS until it can create the customers loyalty against the customers. As we know that, most of the component from ASUS especially for the motherboard is produced by ASUS Company so mostly ASUS has no problem with the production of motherboard because it self-manufacturing for that. So since they used they own brand to produce it will keep the cost low and affordable by the customers comparing to other brand. For the quality of the ASUS product, most people know the quality of the computers are good and it has been tested from all of the place, such as, outer space, ASUS has been tested can withstand with the condition of the outer space for 600 days, ASUS notebook also used in the Patagonia race as a navigations on desert and also ASUS notebook work very well at the north pole.

The first one is the supply chain management of ASUS Company. ASUS hold most of the supplier especially for the motherboard, LED, Etc.,. Since ASUS produce its own motherboard, ASUS can easily get the product without any delay by the suppliers besides that ASUS Company also buy the product for the unbranded suppliers such as adaptor from china with a big amount so the cost will be lower.

Supply Chain Management

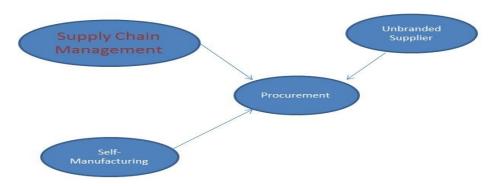


Figure 5. ASUS Supply Chain Management

The second is the High Quality Products. ASUS Company formed with NVIDIA, silicon image, T-Mobile to perfecting their product to produce their product such as PC, Laptop, Smartphone (Zenphone), and also tablet. These products is produced by ASUS Company its own by using their own component, so they can reduce the cost of the production and sell it with the lowest cost comparing to other laptop or smartphone.

High Quality Products

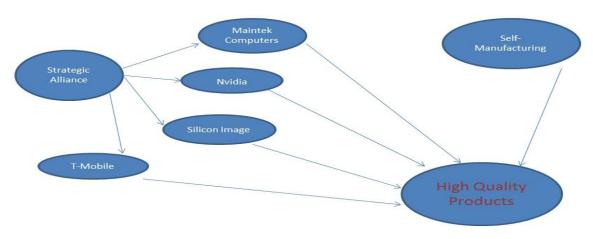


Figure 6. High Quality Product

So since ASUS Company controlling the suppliers and also they formed with other company such as NVIDIA, silicon image, T-Mobile to produce their product, ASUS company have a tight control for the production because they have their own headquarters for controlling the production. So in this ASUS Company case, we can see that how they produce their product with the lower cost and with the high quality products. ASUS used their own component for the production and ASUS also controlling the suppliers and they also formed with other company to perfecting their product besides that ASUS has a good control for the management of the production because of the headquarters in many country.

Low Cost

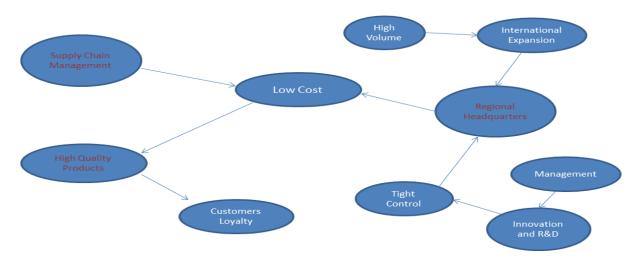


Figure 7. Low Cost

Chapter IV Five Forces Analysis

1. Rivalry Between Established Competitors

Asus competitors in this industry are Apple, Samsung, Lenovo, Dell, Acer, HP, and Toshiba. As the latecomer of this industry, Asus quickly grab its market share, especially in the Asian country. Asus strategy is to grab middle-lower market (cost advantage) in order to compete with this industry. Not only Asus provide consumers with its low cost products, it also produces high-quality products. Technology industry is a very concentrated industry with highly competitive among each competitors, that's why Asus strive to innovate each years. In order to cut down cost, Asus built several factories in China, Europe and USA so it can cut lead time and transportation cost (Asus has its own supply chain company to help them with distributing it own products).

Asus also use product differentiation strategy by producing many kinds of products in the same category to absorb market share.

2. Bargaining Power of Suppliers

Asus has the power to control its supplier by forming a partnership / alliances. Asus can hold down the price because of the agreement. For instances, Asus partnership with Nvidia which Asus produces the hardware and Nvidia provide the programming. Asus also collaborate with Intel, which Intel provides the chip for Asus motherboard and Asus provides the motherboard for Intel.

For other unbranded companies, Asus take control of them by signed a contract with them and purchased a big quantity of materials in one order. Asus also adopts vertical integration method which Asus can produce its own products components, motherboard and their main products.

3. Bargaining Power of Buyers

Technology industry is a highly competitive industry because there are many products in the market. This competition makes buyers eager to find a lower price product (they become more price sensitive). Asus cost-advantage strategy is success in absorbing market. They reduce bargaining power due to its low price.

To keep the buyers loyal to them, Asus provide low-cost but high in quality products. Asus keep producing new types of products (product differentiation), and this situation makes consumers lack of choice to switch brand.

4. Competition from Substitutes

In this competition, usually PC, netbook, tablet and smartphone are substitute for each other. Therefore, each company who producing those products are threat to each other. However Asus creates a new type "all-in-one", Asus padfone to substitute the current product. Asus hold customers from switching to its substitute product by providing customers with high-quality and low price products.

5. Threat of New Entry

In this Industry, it is hard for a new enterprise to compete. Asus low-cost manufacturing process, vertical integration, distribution, product differentiation, and low-price products make a tough entry barrier for new entrants. For a new company to compete with Asus they have to invest a lot in the process. However, there are threats from Asus competitor to start producing products that they have not produce before. In example, if Acer produces tablet and smartphone to compete with Asus tablet and smartphone.

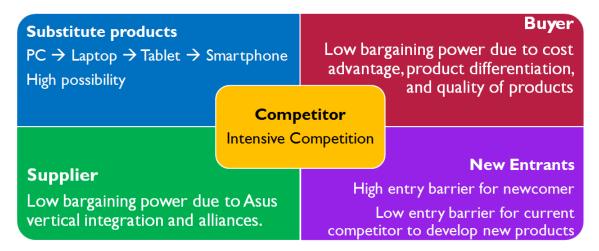


Figure 8. Five Forces Analysis



Chapter V Perceptual Map

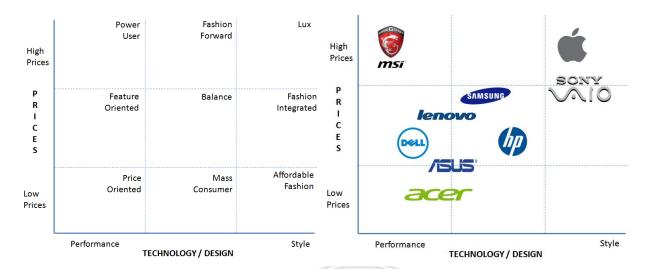


Figure 9. ASUS Perceptual Map

First, to compare Asus with other brands from the same category products, we tried to draw a perceptual map. The map was drawn based on price comparison and technology/design comparison between brands. We divide the map into 9 clusters and name it based on customer purchasing habit.

- First cluster is Power Buyer. In this cluster we categorized them as the buyer
 focus heavily on the computer performance such as gamer and designer.
 For example, MSi who produce computer solely for gaming purpose.
- 2. Fashion Forward Buyer. In this cluster we categorized them as the buyer who likes to buy expensive but more fashionable item.
- 3. Lux User. Lux user is the user who likes to purchase stylist item no matter what the price is. Belong to this category is Apple Inc. Apple seems to focus more on the appearance but is expensive.
- 4. Feature Oriented User. This type of user is the buyer who purchase notebook just for some performance purpose (i.e. academic purpose), so

- they don't have the urge to buy fashionable products. According to the data, Dell and Lenovo belong to this category.
- 5. Balance Buyer. When purchasing a notebook/handphone, this type of user always considers price and performance and design. In example, Samsung and HP.
- 6. Fashion Integrated Buyer. This type of user always considers trying to buy the best design item but not too pricy. For example, Sony Vaio belong to this category.
- 7. Price oriented means buyer who buy products solely on based on the price and the performance. Acer belong into this category as Acer strategy only focusing on low-price and the quality keeps dropping.
- 8. Mass Consumer. This buyer buys the cheapest products but a little trendy.

 They focus more on the feature.
- 9. Affordable Fashion. This kind of buyer wants to buy fashion products but can't afford to buy expensive item.

Asus positioned itself as the low-price products but recently, the new types of ASUS products started to become pricier as the feature become better. Asus started to focus on innovation (ASUS Design) as they recruited more expertise in that area and collaborate with other company.

As we can see from the above graph, there is a high mobility barrier in the lux cluster, because Apple already absorbed the majority of consumer there as Apple has high switching cost. Therefore it is hard for competitor to enter the cluster. However in the below part of the graph, it shows that there is only small effect of mobility barrier. Asus, Acer, Samsung, Dell, Lenovo, and Hp can freely move to different clusters depend on their strategy.

There is a competition inside each clusters, for example Dell and Lenovo. However the competition is not significant since they targeted different area market. Dell targeted US region, while Lenovo majority shares are in China region. It is the same with Samsung and Hp. The real competition we can actually see is Asus and Acer. However, Asus strive to move into different cluster with their latest innovation toward performance and style. Meanwhile, Acer strategy is still focusing on low budget netbook.



Chapter VI

Resources and Capabilities VRIS Analysis

The key elements of Business Strategies are understanding resources, capabilities and competencies of the company. Business Strategies should be selected based on the valuable resources and distinctive competencies (ie. Competitive advantages). Both resources and capabilities must be ensured that they are fully employed and exploited. However, by exploiting it the company has to make sure that they are not depleting it. Building and regenerating valuable resources and distinctive competencies is necessary.

Table 3. ASUS Strength and Weakness

Superfluous Strength	Key Strength
-Costumer Loyalty	- Low Cost
	 High Performance Products International Expansion R&D
	- After Sales Service
Inconsequential Weakness	Key Weakness
-Brand Image	-Design
	-Marketing

Key strength:

 Low cost: Asus low cost products has always been one of the most urgent strength of this company. It ensures their customer loyalty, removes their bargaining power, and also blocks away current or new competitors.

- High Performance Products: ASUS used their own component for the production and ASUS also controlling the suppliers and they also formed with other company to perfecting their product besides that ASUS has a good control for the management of the production because of the headquarters in many country.
- International Expansion: Selling the same products everywhere enables Asus toacquired a local company to enter China market and Asus built its own subsidiary in US, Europe and China to cut lead time. Asus formed a joint venture to acquire technology for developing its products.
- R&D: Strives for product innovation. Asus every years release its new product which is different in uniqueness. They focuses on R&D expenditures and has its own design center focusing on designing its own manufacture products. Asus collaborated with several company to perfect its own products. Nvidia (3D graphic system), Silicon Image Inc.(system), Disney, Mercedes Benz (marketing).
- After Sales Service: By having many subsidiaries in many countries, Asus are able to give a satisfactory services for their customers. Asus service centers can be found in many place around the world making maintenance and parts distribution easier.

Superfluous Strength

 Customer loyalty: Asus has earned their customers loyalty by providing satisfactory products. However, this is irrelevant because there are not many competition for their products, leaving many buyers with limited budget a limited options.

Key Weakness

- Design: Asus product designs cannot compete with other company such as Apple to attract fashion forward buyer or lux user, limiting their market.
- Marketing: Asus puts little effort on marketing to keep the cost of their products low. And they only advertise their products online/

Inconsequential Weakness

- Brand Image: ASUS are often considered a cheap brand by some costumer. Owning ASUS products did not give a sense of pride to their owners because due to their low price, anyone can own ASUS products.

VRIS ANALYSIS

Table 4. VRIS Analysis

CAPABILITIES

					Competitive	Performance
	Valuable	Rarity	Imitability	Substitutability	Consequence	Implication
					Sustainable	
					Competitive	Above Average
Low Cost	✓	✓	\checkmark	✓	Advantage	Returns
High					Sustainable	
Performance					Competitive	Above Average
Products	✓	✓	✓	✓	Advantage	Returns
R&D	✓	×	×	た	Competitive Parity	Average Returns
After Sales			1 43 1		3	
Service	✓	×	×		Competitive Parity	Average Returns
					Temporary	
International					Competitive	Above Average to
Operation	✓	✓	×	x	Advantage	Average Returns

RESOURCES

					Competitive	Performance
	Valuable	Rarity	Imitability	Substitutability	Consequence	Implication
Costumer						
Loyalty	✓	×	×	×	Competitive Parity	Average Returns
Brand	✓	×	×	×	Competitive Parity	Average Returns
					Temporary	
International					Competitive	Above Average to
Subsidiary	✓	✓	×	✓	Advantage	Average Returns
					Sustainable	
					Competitive	Above Average
Patent	✓	✓	✓	✓	Advantage	Returns
Strategic						
Partnership	✓	×	×	×	Competitive Parity	Average Returns

Chapter VII Value Chain Analysis

Value Chain Analysis

Value Chain is a set of activities that performed by specific firms in order to produce product and service as well as to deliver it to the market. Value chain analysis is based on perspective of organizations as a system, made up of subsystems each with input, process and output (Porter, 1985). The whole process involves acquisitions and resource consumptions including money, labor, material, equipment, building, land, administration, and management. Those factors and the process itself determine cost and therefore it will affect the company profitability (Porter, 1985).

In Porter's value chain, there are two categories of activities which are primary activities (inbound logistics, operations, outbound logistics, marketing and sales, and services) and supporting activities (procurement, Human Resource Management (HRM), technology, and infrastructure).

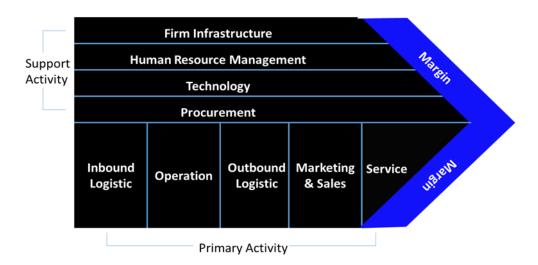


Figure 10. Porter's Value Chain

Asus Value Chain Analysis

1. Support activities

• Firm Infrastructure

As per 2008, Asus had three independent companies which focused on different strategy but complementing with each other. First one is Asus which focused on applied first-party branded computer and electronics. Second one is Pegatron, an OEM / ODM and components manufacturing plant. The other one is Unihan which focused on non-PC manufacturing. Thus, Asus can cut cost by self producing its components.

Asus global presence can be seen by the amount of its branches located all over the world. Asus has many branches located in 32 countries. Therefore, Asus already covered any area and so has a focus on internationalization stage. Asus divided the world region into 4 main regions and built its regional headquarters in every 4 of the regions. Asus main headquarter (HQ) is based in Taipei, Taiwan, ROC. Asus first headquarter is also located in Taiwan, which cover Asia-Pacific region (Taiwan, ASEAN, Australia, Africa, Middle East exclude China). Next, the second headquarter located in USA and cover all America continent region. The third headquarter located in Suzhou, China and only cover China region. Last one is located in Germany and cover European region. China regional headquarter main focus is to compete in competitor located in China, namely Lenovo.

Asus has 8 manufacturing facilities, 1 located in Mexico (to cut producing and delivery lead time to its US counterparts), 1 located in Czech Republic (to cover the demand from Europe), 4 in Taiwan (Taipei, Luzhu, Nangan, Guishan) and 2 in China (Suzhou, Chongqing). This strategy is successes in cutting the delivery cost and time.

•HRM

Asus has around 20000 employees all over the world, and most of them are assigned in R&D department. Asus has good welfare for its employee. Asus developed Asus Healthcare program and its free for its employees.



Figure 8. ASUS Healthcare

Asus put emphasis on Total Quality Management (TQM) on its employee training. Asus training is focusing on combination of quality thinking and design thinking as its value core and lean thinking, innovation and aesthetic as it pillar. Asus 5 virtues (Humility, Integrity, Diligence, Agility and Courage) act as its foundation.



Figure 12. ASUS DNA

Technology

Asus acquired or joint partnership with several companies to gain knowledge, technology and advantage in producing its products. Before, Asus R&D only focus on how to create laptop with cost as low as possible. However, recently, the concept changed. Asus started to put more focus on its R&D and technology development department. The R&D grew bigger and has play crucial part in Asus development and recent innovation called "Republic of Gamer". Asus even open its own design centre which is different from the trend of PC industry. Asus recent innovation is different from its competitor, means Asus started to differentiate its product.

Asus is the first company in PC industry to apply green technology on its value chain started from design, manufacturing, procurement and also marketing and services. This process makes Asus different with its competitor. Asus also has big brand portfolio means Asus have the ability to produce a lot of types of products which its competitor do not even have the capability. Asus even create cloud service to compete with ios.

Procurement

Asus has its technology from previous activities as OEM manufacturing firms then developed toward first-party applied PC manufacturing. Several foreign manufacturing facilities get the facility by acquiring other company (for example, Asus acquired Maintek Corp, and turn it into its manufacturing site in China). Asus leave the procurement into SRM department to handle it. Now Asus manufacturing site is developing toward green manufacturing site which is less energy consumption and not damaging the surrounding environment.

2. Primary activities

•Inbound Logistic

What makes Asus different from its competitor is Asus main activity in inbound logistic which consists in three parts. First of all, it focuses on vertical integration which Asus can produce its own component that it needs. For example it's motherboard, Chip, Ram and others. Thus Asus has low dependency toward it supplier (low bargain power of supplier). Asus then depends on its partner (in group supply chain) to provide program and graphic as the exchange of raw material to its partner companies such as Nvidia and Intel. Then the rest of material, Asus purchase it from outside supplier. This system is different with acer and dell (outsourcing) and apple (full vertical integration).

Operation

As per 2008, Asus has capacity to produce around 2 millions of motherboards and 150000 notebooks per month in a single facility. Asus has its own motherboard and component manufacturing site, PC manufacturing site, OEM / ODM site and even non-PC manufacturing site. Due to increasing demand of Asus high quality products, Asus open its R&D and Design Centre. This is main value of this value chain.

Outbound Logistic

Asus has two types of delivery methods. Direct delivery method which covers the delivery of OEM / ODM products to its clients, delivery in Taiwan, delivery over online purchasing in order to reduce lead time. Then the next one is using Asus partner distribution channel as Asus is not strong enough in foreign market, especially US and Europe. This partner also helps Asus to deliver product from its manufacturing site in US and Europe to cut lead time.

Marketing and Sales

Asus is not strong on its promotion as Asus originally only conduct online marketing through its website and partnership. However, the trend changed when Asus promoting its new product "Republic of Gamer". Asus promote in other category such as games (make games that only compatible with Asus laptop) and hold several game competitions.

Service

Asus has around 200 service provider with the help from its partner or retailer who want to work together with Asus. What makes its different from its competitor is that Asus provide 2 years warranty while on average in IT industry only provide a year warranty. Asus also has online service on its website.

Finally, where is Asus main strength in this value chain analysis? Asus is strong on emphasis its R&D (technology), inbound logistic, manufacturing and assembling but weak in marketing, sales, distribution and services. From its strategy explained above, we conclude that Asus emphasis both cost-advantage and differentiation strategy. Cost advantage is from its vertical integration, in-house SC, manufacturing innovation and technology and location advantage. Differentiation is because of R&D expenses, design focus, product differentiation, quality of products and type of service.

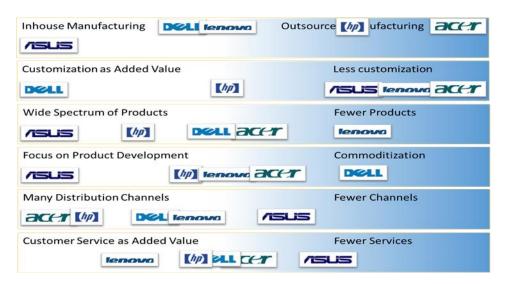


Figure 13. ASUS Comparison

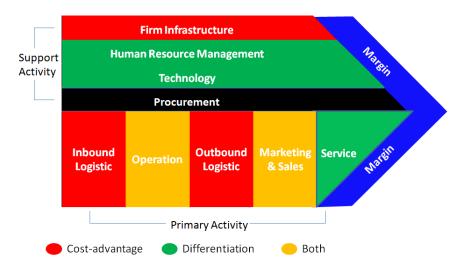


Figure 14. ASUS Cost Advantage or Differentiation?



Chapter VIII BCG Analysis

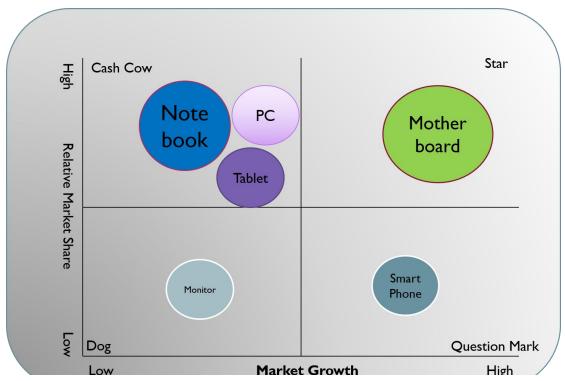


Figure 15. BCG Analysis

• Motherboard:

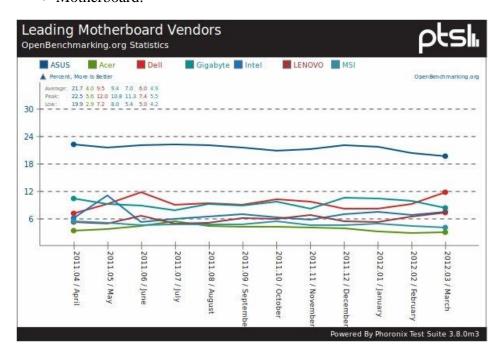


Figure 16. Leading Motherboard vendor

Asus's motherboard is still dominating the market with market share of around 19% in 2012. Although the market growth is slowing but ASUS's motherboard can still be considered as the start product. Furthermore since ASUS start as a motherboard company thus they have lots of experience in the motherboard market.

• Notebook:

Table: Top Notebook Brands Worldwide by Shipments, 2014~2016

Ranking	2014 Company	Market Share	2015 Company	Market Share	2016 Company	Market Share (E)
1	HP	20.1%	HP	20.5%	HP	20.7%
2	Lenovo	17.5%	Lenovo	19.9%	Lenovo	20.0%
3	Dell	12.3%	Dell	13.7%	Dell	14.0%
4	ASUS	11.0%	Apple	10.34%	ASUS	10.7%
5	acer	10.0%	ASUS	10.31%	Apple	10.3%
6	Apple	9.3%	acer	8.9%	acer	9.0%
7	Toshiba	6.6%	Toshiba	4.2%	Samsung	2.4%
8	Samsung	2.7%	Samsung	_1.7%	Toshiba	1.6%
9	Vaio (Sony)	0.6%	TREN	DFORC	E	-
	Others	9.9%	Others	10.3%	Others	11.4%
Shipment Total (Unit: M)		175.5		164.4		159.2

Note: Vaio (Sony) was included in "Others" category in 2015.

Source: Trendforce, Feb., 2016

Figure 9. Worldwide Notebook Market

In 2016 ASUS control about 10.7% of market share on the Notebook global notebook sales putting ASUS as the 4th largest notebook manufacturer in the world. Although the market grow is still quite slow but ASUS has firm position in the market thus ASUS's notebook can be considered as their cash cow.

• PC:

Table 5. Worldwide PC Market

Company	4Q15 Shipments	4Q15 Market Share (%)	4Q14 Shipments	4Q14 Market Share (%)	4Q15-4Q14 Growth (%)
Lenovo	15,384	20.3	16,061	19.4	-4.2
HP	14,206	18.8	15,452	18.7	-8.1
Dell	10,236	13.5	10,783	13.1	-5.1
Asus	6,002	7.9	6,201	7.5	-3.2
Apple	5,675	7.5	5,519	6.7	2.8
Acer Group	5,277	7.0	5,939	7.2	-11.2
Others	18,940	25.0	22,635	27.4	-16.3
Total	75,720	100.0	82,590	100.0	-8.3

By the year 2015, ASUS is still considered as the fourth largest PC manufacturer in the world with 7.9% of market share, but since the market is slowing for the PC market as evident from their market growth of -3.2%, ASUS's PC product is considered in "Cash Cow" zone.

• Tablet:

Top Five Tablet Vendors, Shipments, Market Share, and Growth, First Quarter 2015

op i ive rabiet	Tendors, Singa	ible 6. Worldwic	le Tablet Marke	ket		
Vendor	1Q15 Unit Shipments	1Q15 Market Share	1Q14 Unit Shipments	1Q14 Market Share	Year-over- Year Growth	
Apple	12.6	26.8%	16.4	32.7%	-22.9%	
Samsung	9.0	19.1%	10.8	21.6%	-16.5%	
Lenovo	2.5	5.3%	2.0	4.1%	23.0%	
ASUS	1.8	3.8%	2.6	5.2%	-30.6%	
LG Electronics	1.4	3.1%	0.1	0.2%	1423.7%	
Others	19.7	41.8%	18.1	36.3%	8.6%	
Total	47.1	100.0%	50.0	100.0%	-5.9%	
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Quite similar to their PC product, ASUS still considered as the 4th largest tablet producer but since the growth is -30.6% thus ASUS's tablet is in for the "Cash Cow" zone.

• Smartphone:

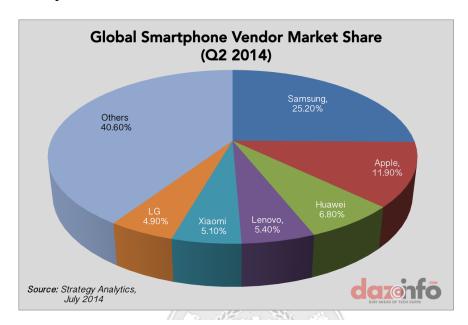


Figure 10. Global Smartphone Market

As we can see from the pie chart above, ASUS's smartphone market share is very small that it's covered, thus ASUS's smartphone is considered as "dog"

WW PC Monitor Top 5 Vendor Market Share,

• Monitor:

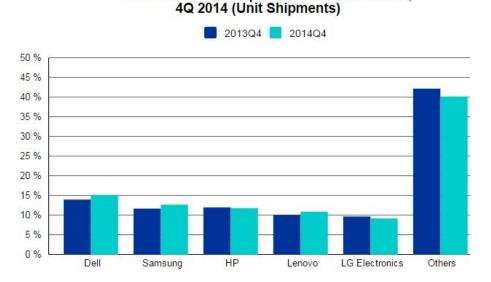


Figure 19. Worldwide Monitor Market

Chapter IX Vertical Integration

Vertical integration is an arrangement in which the supply chain of a company is owned by that company. Usually each member of the supply chain produces a different product or (market-specific) service, and the products combine to satisfy a common need.

Backward vertical integration occurs when Asus is involved on producing its own input, for example motherboard, graphic cards, sound cards, LCD monitors, etc.

Forward vertical integration take place when Asus performs its function for customer (distribution, customer services).

Value Chain

- Raw Materials

Asus value chains begin when they procure the raw materials to produce computer hardware. They have a steady supplier supporting them, the 2 main components used to make the hardware are copper and gold. Copper is used to line the printed circuit board (PCB). Copper comes from Australia, where it is mined by the BHP Billion company (BHP Billion, 2012). The gold which is an excellent conductor of electricity as well as being corrosion resistant and very light is very ideal for circuitry. Asus biggest suppliers of gold is PT Aneka Tambang, which extracts gold from the West Java region in Indonesia (PT ANTAM, 2012).

- Hardware

Asus hardware is acknowledged throughout the world. In the beginning Asus approached Intel to request a processor to test it, Intel itself had a problem with their motherboard. Asus solved Intel's problem and it turned out that Asus' own motherboard worked correctly without the need for further modification. Since then, Asus was receiving Intel engineering samples ahead of its competitors. However, Asus focused on applied first-party branded computers and electronics, while their child company Pegatron focused on OEM manufacturing of motherboards and components.

- Computers & Gadgets

Asus final products which are the PC, laptop, and gadgets are all made by themselves. No outsourcing or rebranding. However they do have some alliances to help them manufacture several delicate hardware such as Nvidia, Intel, AMD, T-mobile, etc. This is where the backwards vertical integration happens in Asus.

- Software Integration

As we all know computers and gadgets needs software and operating system to operate. Asus then depends on its partner (in group supply chain) to provide software and graphic programs as the exchange of raw material to its partner companies such as Nvidia and Intel.

- Distribution & Services

Asus has around 200 service provider with the help from its partner or retailer who want to work together with Asus. What makes its different from its competitor is that Asus provide 2 years warranty while on average in IT industry only provide a year warranty. Asus also has online service on its website.

Why Asus uses Vertical Integration:

- More control in the value chain

As a large complex manufacturing company, Asus has to produce many parts so it may not be possible for the manufacturer to make all the various parts in-house. But when they depend on contractors, should a part fail in its function, the manufacturer cannot point a finger at the supplier and absolve itself from blame.

- Cost control throughout distribution

In the traditional distribution process, every step in product movement involves mark-ups so the reseller can earn profit. By selling directly to end buyers, manufacturers can "eliminate the middle man," removing one or more steps of mark-ups along the way. A single entity managing the distribution process also has more ability to optimize resource utilization and avoid wasted costs. Lower transportation costs are common.

Competitive advantages

Asus increases their advantages over competition and block competitors from gaining access to resources and important markets. For example, the company Dell being unable to produce their own Hardware chooses to outsource them from Asus. This gives Asus cost advantage against Dell.

Diversification Strategy

Diversification strategy is the strategy that used by one company to expand the market venture by open several business units or new subsidiary in the same business that already exist. Diversified can be a good option for the company when the company facing a tight competition in the market.

Related diversification strategy is a process that takes place when a business expands its activities into product lines that are similar to those it currently offers.

This strategy used by one company to produce the similar product but the company adding some new technology and how the company markets their product is still the same.

Unrelated diversification strategy is the strategy used by one company to produce the new product and used another technology. The unrelated diversification strategy is still using produce their product under the company name but with different product and also how the company markets their product is not the same.

ASUS Related Diversification

The main product of ASUS is the Laptop or computer; in this case ASUS used the related diversification strategy to produce the new product. ASUS Company formed with NVIDIA to perfecting their computer. ASUS Company has been considered as the Laptop producer by many people but if only producing computer, there is also so many competitor in producing the laptop or computer. In make their product work better with the other competitor, ASUS Company formed with NVIDIA to perfecting their product but still with lowest cost because their produce the motherboard by them self and also ASUS acquired Maintek Computers in order to enter China market.

ASUS Unrelated Diversification

To compete with other competitors with only producing the laptop is not enough; ASUS tend to produce another product such as ZenPhone and Tablet but still using the ASUS brand. In this case, unrelated Diversification has some risk, which is the decreasing of the sales and profit. ASUS unrelated diversification is not work very well in this company because most of the people know that ASUS computer is a good quality computer with the lowest cost but not with their other product.

Asus Inspiring Innovation and persistent Perfection has already success got the customers satisfaction based on the product and services. ASUS Company has a large 44 FCU e-Paper (2016)

market around the world and customers also enjoyed variety product produced by ASUS. ASUS has develop the Related diversification strategy and also unrelated diversification strategy by producing the Laptop until they make another product such as smartphone and tablet with they own brand. Some companies have to make the new product to attract the customers. In this case ASUS company doing well in the related diversification strategy because ASUS formed with other company to perfecting their product and also ASUS acquired Maintek Computers in order to enter China market. Maintek Computers mainly known as computer manufacturer in China, by acquiring Maintek Computers Asus gained ability to produce its own computer in China.

Chapter X National Diamond Analysis

Porter's National Diamond Analysis

1. Factor Endowment

•Technology (R&D)

During this past years, Taiwanese industry orientation was shifted from labor –oriented that produced consumer good products towards technology oriented. Taiwanese IT industry raised from 6.89% to around 32% in 2014. Taiwan's products are marketed worldwide, its technology industry is a world-leader, and has innovative research and development (R&D) capabilities. The output values of many Taiwanese products and industries, such as motherboards, semiconductor foundry, optical discs, and bicycles, are world-leading. By integrating hardware production and software services, innovative cross-field service industries are being developed. The customized production service models they provide expand market needs and raise industrial value.

In its most recent report, the World Economic Forum (WEF) ranked Taiwan second globally on the technology index and the innovation index, underscoring the strength of Taiwan's innovative R&D.

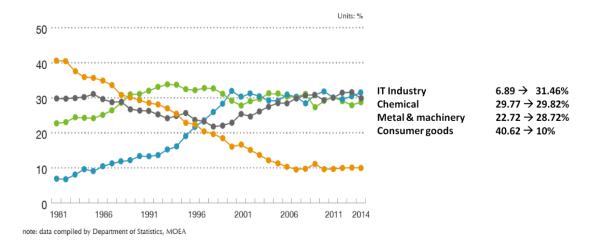


Figure 20. Taiwan Industry Development

• Human Resources

Taiwan's excellent labor force is boosted each year by the addition of 320,000 new graduates above junior college and university level. In 2014, 47.9% of the labor force had at least a junior college degree. In 2013, there were 12.2 research professionals for every 1,000 employed workers, and in recent years their numbers have been growing by an average of 8.3% annually. Such highly qualified professionals provide companies with the capacity for innovative R&D.

•Infrastructure

Taiwan has a dense, comprehensive transportation network. External links include highly developed sea and air transport systems that connect via seven international harbors and 17 airports. Internal links include railways and highways, such as the island-wide conventional rail and highway systems, the west coast high-speed rail line, a national freeway system, and several east-west expressways that link the north-south freeways. These convenient transportation networks allow cost-effective, fast and efficient shipment and storage of commercial goods. Other advantages include relatively inexpensive

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water, electricity and telecommunications utilities that reach 100% penetration, and preferential electricity rates for industrial use. Moreover, Taiwan has high penetration rates of IT products in domestic market.

Location

Taiwan is located at the heart of the Asia-Pacific region, which puts it in an advantageous position to make use of global production resources and marketplace. Taiwan's north is the world's second largest economy-Japan, its south are the 10 countries of the Association of Southeast Asian Nations and India. Taiwan's east is the world's largest economy-the US, and its west is mainland China-the world's fourth largest economy and the center of the world's economic growth. Taiwan is the hub of Asian transportation and the logistic center in the East-Asian region. Investors who choose Taiwan to serve as their Asian regional innovation center or operational headquarters will quickly be able to penetrate the emerging markets of the Asia-Pacific.

2. Demand Condition

Although Taiwan has small population (around 22 millions peoples), the purchasing power of IT products are big from domestic markets. Great location and business environment of Taiwan attracts many demands from international market, especially US and ASEAN country surrounding Taiwan (proven by increasing export ratios of ICT products). In terms of quality and quantity, the competitive nature of Taiwanese products is a major reason why foreign investors choose the island as an investment destination.

Preliminary official statistics released on 31 July showed that Taiwan's Q2 GDP growth was 0.64% year-on-year (yoy), the lowest in the last 11 quarters, down from 3.37% in Q1.. Domestic consumption and investment contributed 1.50% and 1.19% (yoy) to the GDP growth respectively. However, Taiwan's FCU e-Paper (2016)

commitment to the Information Technology Agreement (ITA II) helped the agreement to reach the 'critical mass' of 90% of global ICT trade included in the next stage of tariff eliminations. With relatively small FTA coverage, Taiwan's ICT manufacturing will particularly benefit from this new tariff-cutting deal with an estimated £58.5 billion worth of ICT exports and £530 million in tariff reductions, according to the Ministry of Economic Affairs (MOEA). Therefore, it can be estimate that the small plunge of GDP represents reducing of domestic demands, but it contrast, the foreign demand is increasing.

3. Related & Supporting Industry

- •Its industrial sector possesses outstanding production capacity, and its investment environment has performed strongly in international rankings.
- •Taiwan has the world's densest industrial clusters, each rich in innovative R&D capabilities and production experience.
- •The distribution of industrial clusters in Taiwan can generally be broken down into electronics and technology in the north, precision machinery in central regions, and petrochemicals and heavy industry in the south (key industry distribution is further described in the attachments at the end of the book). The World Economic Forum's "Global Competitiveness Report, 2014-2015" named Taiwan's "State of Cluster Development" second best in the world. From upstream to midstream to downstream, Taiwan offers sound industrial supply chains that can meet client needs, offer fast responses and quickly provide customized components. These highly dense cluster makes sharing knowledge between enterprises could take place and help with the development of each firm. The highly developed nature of its industrial clusters has helped Taiwan to become the world's second-largest information hardware producer, its semiconductor foundry industry and semiconductor

packaging and testing industry to become tops in the world, its ICT design industry to rank second in the world and its PC products industry third.



Figure 21. Industrial Cluster in Taiwan

4. Strategy, Structure and Rivalry

• Highly intensive competition

IT industry in Taiwan is categorized as highly-competitive industry because there are a lot small-medium companies competing in this sectors.

Subsidy from government - Strong in technology development (R&D)
 Due to subsidy given by government, this industry focuses more on R&D development.

ASUSTeK Computer Inc. Strategic Business Analysis

- Advanced Technology Research Plan (A+ Industrial Innovation R&D program)
 Subsidies are available for 40% to 50%, of total development funding for new technologies that are not yet mature in Taiwan and that will, in the future, generate strategic products, services, or industries.
- Integrated R&D Plan(A+ Industrial Innovation R&D program)
 Subsidies are available for 40% to 50% of total project cost for the integration of key and cross-sector technologies.
- Encouragement of Domestic Enterprises to Set Up R&D Centers(A+ Industrial Innovation R&D program)
 Subsidies are available for up to NT\$2million or 50% of total spending by domestic enterprises on the establishment of R&D centers in Taiwan.
- Global Innovation and R&D Partnership Plan
 Subsidies are available for up to 50% of total spending by foreign enterprises on the establishment of R&D centers in Taiwan.
- Innovative R&D program for Small Enterprises
 Subsidies are available to cover up to 50% of the total cost of R&D for innovative technologies and services.

Figure 22. Government Subsidy

•OEM / ODM for global companies

Taiwanese companies are well known as manufacturing and assembly companies for global companies due to its low cost production but have high quality output. For example Asus (Pegatron) manufactured PC for Dell and HP. Foxconn manufacture and assembly for Apple.

- •Family-owned Enterprises
- •Seek to expand overseas

Taiwanese company started to expand internationally to gain world market share in IT sectors.

Government Intervention

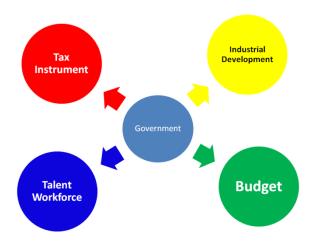


Figure 113. Government Intervention

Industrial Development

Industries will gain new growth momentum through intelligent, green, and cultural creative applications. Government already provided with dense industry cluster in Taiwan.

Tax Instruments

Reasonable Tax System can help enterprises gain capital for industrial upgrade.

Talent Workforce

Improving talent cultivation can reduce education-employment gap, increase labor force participation rate to increase labor supply.

Budget

Properly allocate industrial technology budgets for industrial transformation. In this case, government already provided companies with a lot of kind of R&D subsidies tht can help in their technology development.

Conclusion

ASUS's today is facing lots of difficulties in the market from the tight competition with other electronic companies or also from the economic condition itself. Although the economy is slowing everything seemed to be in a bad time, but there is still hope for the ASUS. Nowadays, electronic products is more and more important to the human life. And become something inseparable, since ASUS already in the business of the electronic products, thus they have upper hand in the fight. ASUS branding as an affordable and high quality product also help to build ASUS's

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