

# *Feng Chia University*

## *Industry Competition Analysis Paper by Students*

ASUS Strategic Business Analysis

華碩策略分析

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## **Abstract**

The purpose of this essay is to analyze a company, we picked Asus. Asus has been one of the leading computer hardware company. It is located in Taiwan and is well know for it's in house manufacturing and conduct, an aspect that will be thoroughly discussed in this paper.

In this essay, external analysis and internal analysis based on this company will be conducted, based on which professional advice will be provided. The PEST, Porter's Five Forces, SWOT analysis and value chain analysis are all tools used in gaining insight in ASUS. Moreover, knowing their strategic implementation from eco-friendly to differentiation, Green Asus was generated. They successfully developed the gaming industry with their laptop, furthermore widely expand to their target countries and had taken mostly whole the market. ASUS has managed to gain a strong position in the market largely through its differentiation and price-quality.

Keywords: Asus strategic analysis, Asus external and internal analysis, Asus PEST, Asus Five Forces, Asus SWOT, value chain, strategic implementation

## 摘要

本報告的目的是分析一家公司，我們選擇了華碩。華碩一直是領先的計算機硬件公司之一。它位於台灣，並且以自己公司製造與實行為聞名，這一方面將在本文中進行詳細討論。

在本文中，將進行基於該公司的外部分析和內部分析，並在此基礎上提供專業建議。PEST 分析，波特的五力分析，SWOT 分析和價值鏈分析都是我們能獲得華碩洞察力的工具。此外，了解了他們從環保到差異化的戰略實施後，綠色華碩誕生了。他們用筆記本電腦成功地發展了遊戲產業，並進一步擴展到了目標國家，並佔領了整個市場。華碩在很大程度上已經通過其差異化和價格品質獲得了市場上的強勢地位。

關鍵字：華碩戰略分析、華碩外部和內部分析、華碩 PEST、華碩五力分析、華碩 SWOT 分析、價值鏈、戰略實施

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## Chapter I Introduction

Asus is a Taiwan-based, multinational computer hardware and consumer electronics company that was established in 1989. Dedicated to creating products for today's and tomorrow's smart life, Asus is the world's No. 1 motherboard and gaming brand as well as a top-three consumer notebook vendor. Their NAICS code is 334111 (Electronic Computer Manufacturing).

What is Asus? The name of the company Asus comes from the word Pegasus (Pegasus) - that was the name of the winged horse from ancient Greek mythology, symbolizing wisdom and knowledge, so the Asus brand embodies the strength, spirit of creativity and purity of this creature. With each new Asus product, new heights are being conquered.

Over the past decades, the Taiwanese information technology industry has experienced tremendous growth, putting this country among the leaders of the global market. One of the growth drivers was Asus, which was established as a manufacturer of motherboards with a minimum number of employees, and now employs more than 17 thousand people around the world. Asus launches products in almost all sectors of the IT category: computer components and peripherals, laptops, tablets, servers and smartphones.

The secret to Asus success is the pursuit of innovation. Among the company's revolutionary products, we can mention the PadFone smartphone, which conquered the public at Computex 2011, as well as the TAICHI and Transformer Book hybrid mobile solutions that followed.

Asus TAICHI is a unique Ultrabook with a two-way multi-touch display, which can be used both as a laptop and as a tablet, depending on the position of the display. The Transformer Book offers the same two operating modes, but switching between them is done by disconnecting its display from the keyboard module.

The Asus line of innovative solutions is complemented by a series of tablets with the Windows RT and 8 operating system, which offer all the functionality that users need in the upcoming era of cloud computing.

Innovation is the secret of the company's success among consumers, as well as among specialists who noted Asus products with many enthusiastic reviews (4368 awards from specialized media and organizations in 2015 alone). The numbers are talking about the continued development of the brand: every year, Asus increases the supply of laptops, and the company's revenue in 2015 amounted to 14 billion US dollars.

As one of the most respected companies in the world according to Fortune magazine, Asus offers a wide range of p and in the future, including Zenbo robots,

ZenFone smartphones, ZenBook, Ultrabooks, high-quality computer components and peripherals, as well as innovative Internet solutions things, virtual and augmented reality. In 2017, Asus products won 4,511 awards, and the turnover of the company, with more than 16 thousand employees and more than 5 thousand high-quality developers around the world, amounted to 13 billion US dollars. Products for a comfortable digital life today

## **Why do we choose this industry?**

- **Designed and manufactured by ASUS only**

Asus has been producing high-quality computer components for more than 12 years, and laptops for more than 4, and during that time has gained enormous experience and reputation as one of the best manufacturers in the world. Such world famous brands as Sony more than once placed orders for the production of laptops under its trademark in Asus. What distinguishes ASUSTeK mobile computers from the products of many competing companies is the fact that almost the entire production cycle of creating any of the models takes place exclusively within the Asus company itself. This means that everything: from designing the design of the case, motherboard, proprietary interfaces, technical innovations - everything is developed by Asus engineers and designers, and is produced at the company's facilities. The advantages of this integrated approach are obvious: Asus is responsive to new trends in technological progress, quickly updating the product line of laptops, making them more productive, easier and more convenient to use. This work is carried out in close cooperation with Intel, the manufacturer of the most advanced processors for mobile application.

- **Upgradable Processor**

The ability to quickly and easily upgrade the processor is one of the hallmarks of all Asus laptops - this helps protect investments and prevent the rapid obsolescence of such an expensive device as a mobile computer. An easy upgrade of the processor is facilitated by the fact that Asus laptops use mPGA2 form factor processors, not all manufacturers use this type of processor in their models.

- **Using lithium-ion batteries only**

Today, there are various types of batteries, all of which have their advantages and disadvantages. So, common on many laptops, especially with extremely low prices, outdated NiMH batteries are used, which have an unfortunate "memory effect" leading to a gradual decrease in the effective battery capacity. Asus uses only advanced lithium-ion batteries in its machines, which have significantly higher capacity and do not have a negative memory effect.

- A wide range of branded accessories at affordable prices

A laptop itself without the ability to supplement its basic capabilities with additional devices and accessories would have insufficient self-sufficiency, so to speak. A mobile computer could not serve as a complete replacement for a desktop computer for most people. However, Asus proved to be the best here as well: the range of Asus accessories is very wide, they are almost always available for sale, and the prices are very affordable.



## Chapter II External Analysis- PEST

External Analysis includes PEST and Five Forces. Starting from PEST, political, economic, social and technological, these four external factors can help us understand how external environments may influence computer industry. There are several points in each factors. By looking through these four external factors and then further to next analysis which is Five Forces.

### Political:

There are three points for political listed below.

1. Due to e-waste and non-degradable disposals increase, the regulations related to e-waste might be strict in future.
2. Political environment stability may affect PC industry.
3. Laws and regulations.

Speak of electronic products, it includes cellphone, computer, laptop, iPad and so on. In 21<sup>st</sup> century, nearly everyone have a cellphone and laptop in hand. By following the new trends, people purchase the new version products when it is launched. Therefore, they will abandon the old one for new. Then it will create e-waste. E-waste is computers, phones and other electronic products that are thrown away because they are old, broken. For now, Asia is the largest generator of e-waste, as you can see figure 1, only 15% of collection rate. Figure 2 shows the country that already set up the regulations and the country which is still proposing.

Second, the political environments stability which will related to the third one, laws and regulations. For example, tariffs will affect the imports if the suppliers are from foreign country or manufactures in foreign country. Take the U.S.- China Trade War for example, Asus has been shifting their manufacturing from China to Taiwan and Vietnam since the tariffs were changing and increasing.

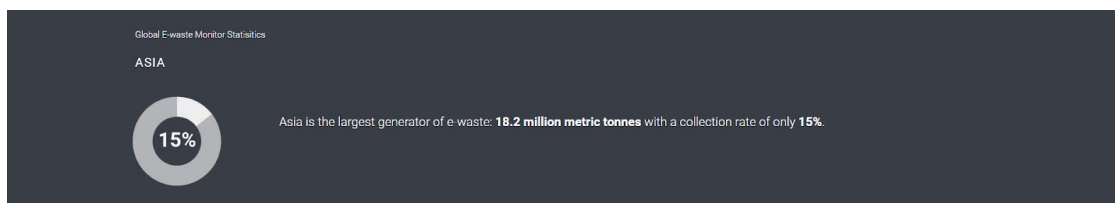


Figure 1 Largest E-waste Generator- Asia



The dark green is the country which already set up the regulations and the country which colored with light green is still proposing, other have not set up yet.

Figure 2 National Legislation

**Economic:**

For economic, this factor is the one directly influenced the industry. First, the production cost. It includes raw materials, labor and manufacturing process. A computer is made by glass, silica sand, iron ore, gold, bauxite, steel and others. These raw materials come from different places. If the cost of raw material rises, the prices will be affected. Second, depending on the degree of development country. Like China, it has the market advantages, and their PC markets has grown these years. Third, unemployment rate and low wages may affect buyers' willingness. Because they will not be affordable for such a price. Last, young generation has greater spending power. Generation Z has their own unique purchasing habits, which mostly influenced by peers, social media and different channels. As you can see from figure 3, generation z which is under 25 years old, has the highest total transaction. And figure 4 and 5 show the overall spending power and electronics are the highest.

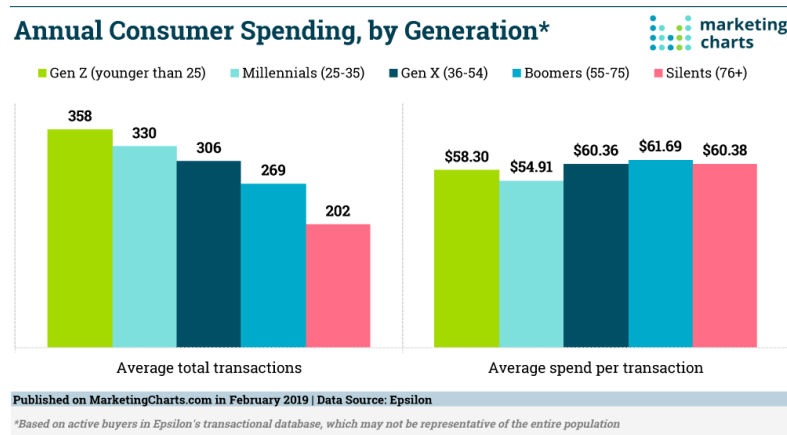


Figure 3 Annual Consumer Spending, by Generation

Average annual dollars spent by generation

|                                  | Gen Z   | Millennials | Gen X   | Boomers | Silents |
|----------------------------------|---------|-------------|---------|---------|---------|
| Automotive                       | \$1,176 | \$978       | \$1,034 | \$950   | \$735   |
| Communications service providers | \$1,963 | \$1,681     | \$1,795 | \$1,642 | \$1,377 |
| Education                        | \$124   | \$174       | \$169   | \$183   | \$248   |
| Entertainment                    | \$939   | \$840       | \$887   | \$761   | \$624   |
| Financial services               | \$1,940 | \$1,431     | \$1,555 | \$1,578 | \$1,500 |
| Food/convenience/drug store      | \$3,431 | \$3,017     | \$3,133 | \$2,978 | \$2,645 |
| Other retail                     | \$3,215 | \$2,989     | \$3,006 | \$2,700 | \$1,969 |
| Restaurant                       | \$2,765 | \$2,529     | \$2,460 | \$2,090 | \$1,651 |
| Retail                           | \$6,768 | \$5,928     | \$6,137 | \$5,562 | \$4,137 |
| Services                         | \$245   | \$218       | \$234   | \$245   | \$214   |
| Travel                           | \$3,827 | \$3,112     | \$3,414 | \$3,431 | \$3,000 |

Figure 4 Average annual dollars spent by generation

Average annual retail spend

|                   | Gen Z   | Millennials | Gen X   | Boomers | Silents |
|-------------------|---------|-------------|---------|---------|---------|
| Apparel           | \$1,267 | \$1,051     | \$1,103 | \$934   | \$722   |
| Department stores | \$1,237 | \$1,061     | \$1,149 | \$1,106 | \$876   |
| Discount stores   | \$206   | \$189       | \$200   | \$198   | \$181   |
| Electronics       | \$1,032 | \$884       | \$967   | \$845   | \$697   |
| Home improvement  | \$1,996 | \$1,849     | \$1,853 | \$1,841 | \$1,334 |
| Mass merchandiser | \$1,883 | \$1,787     | \$1,762 | \$1,557 | \$1,316 |
| Plus size         | \$349   | \$339       | \$359   | \$331   | \$299   |
| Warehouse clubs   | \$2,133 | \$1,895     | \$2,145 | \$2,039 | \$1,804 |

Figure 5 Average annual retail spend

**Social:**

For social aspects, first, people’s preferences changes because of different lifestyle. We need kinds of stuff to support our daily lives. Second, the age of users rises. More elderlies start to use electronic products like smart phone and they even start to learn how to use computers to manage their Facebook. Third, entertainments changed. More and more children own their cell phone and computer and they can spend more time online. Fourth, working environment requires computer technician in different fields. We need to know how to use computers in many ways or we will be eliminated and falls behind.

**Technological:**

Everything is changing rapidly, also technology. Technology symbolized humans’ progress and adaptation. Computer is one of the products that under innovation of technology. In a narrow sense, the diversity of products’ function and design will attract customers. However, broadly speaking, we do not need computers and smart phone in the future based on the future life we build up. Technology is the factor that the most unpredictable and diversify.

### **Chapter III External Analysis- Five Forces**

In order to evaluate the external environment of the company Asus, the Porter's five forces analysis method will be utilized. The Porter's five forces are a powerful tool used to gain a better understanding of a competitive business environment and opportunities for profit. This will be useful because advantage can be taken from strong business practices and weak business practices will be identified in order to improve those areas. Asus operates in the so-called electronic computer manufacturing industry. This industry faces harsh competitive conditions, with a small group of companies controlling almost the whole market. At a market share of roughly 5.6%, Asus together with five other companies enjoy a combined market share of roughly 80 percent<sup>11</sup>. Because of the low profit margins and the fierce competition, it is especially paramount to adequately understand the conditions that Asus faces in its business environment. In the next section a thorough analysis of the Porter's five forces will be conducted.

First up is the bargaining power of the buyer. The buyer in this industry enjoys a moderate-strong influence and bargaining power, due various reasons which will be expanded upon hereafter. Starting, the low switching cost combined with the hundreds of different options available for the buyer create an environment in which the buyer has power over the supplier. The buyer can search the internet to get a gleam of what kind of computer he or she wants to buy, then the buyer can go to any electronics store and get consulted on in depth nuanced details regarding different models. This means that the buyer can look for a different product until completely satisfied concerning both product and price. Brand loyalty will be relatively low, which in turn means that both product and price differentiation are key components of the computer electronics industry. However, it should be noted that Asus also engages in business to business sales, as they control over 40% of the motherboard market, and therefore faces less competition in this particular sector. Another important point to add is that even though many different options are easily available to consumers, most of these computers belong to the same six brands. This makes the competition between brands particularly fierce.

Next the bargaining power of suppliers is considered low. This is because contrary to the computer manufacturing industry, the suppliers to these mega corporations are rather small and fragmented. Therefore, they are often reliant on the partnership between only one brand and therefore completely depended on these brands. Furthermore, the aforementioned reasons also cause the switching costs to be low, this shifts the balance of power heavily in favour of Asus.

Thirdly, the threat of new entrants is thought to be very low for Asus. This is

mainly caused by two things, the first of which is that the start-up capital required to compete in the computer industry are very high. For starters, the equip needed to actually manufacture computers is highly nuanced and very expensive. Another source of costs is due to the importance of brand reputation for computer brands. This entails that substantial investments are required in brand building and advertisement. Moreover, competition will mostly consist of the few that make up over 90% of the market. This means that they competition enjoys an advantage, through the creation of an economy of scope they can reduce the costs per product and increase the profit margin. The second reason why the threat of new entrants is low is because of the high amount of specific knowledge that is needed to actually produce computer products. This knowledge is hard to gain and expensive to acquire.

The next force to be discussed is the threat of substitutes. This threat can be considered moderate. The quick emergence of smartphones and tablets have penetrated the computer market and created a smaller mobile version of a computer. These products have essentially captured a huge part of the electronics market, and a strong competitor to the computer industry. With roughly two thirds of Asus's revenue being generated in the pc market, Asus is depended on sustaining sales in PC's<sup>12</sup>. However, Asus already branched out to these products with its Zen phone and tablet and therefore it can be stated that Asus mostly faces competition between product lines and therefore faces less competition overall.

Lastly, the rivalry between existing players is thought to be high. As stated before, 80 percent of the market is dominated by Asus and five other companies<sup>13</sup>. This means that those six companies continuously struggle to gain a bigger market share will drive the rivalry up and will mean lower margins for failure. Due to the exceptionally large number of different products available, marketing and differentiation are key to achieving success. With the upcoming emerging markets in Africa and Asia, the struggle to dominate these markets will likely drive up future rivalry.

## Chapter IV Internal Analysis- SWOT Analysis

In this paper a SWOT analysis will be conducted in order to gain a better understanding of the company's capabilities and future outlook. This analysis consists of four parts, according to the acronym: Strength, Weaknesses, Opportunities and Threats. First Asus's strengths will be discussed.

Asus has built a reputation surrounding their quality and brand image. This means that Asus is known to have credibility and reliability in the eyes of consumers. This is a very important advantage to poses in the computer industry. Moreover, a solid brand reputation will increase customer retention rate and creates opportunities for sustainable growth. Asus is widely known for its video game hardware, and experiences sustainable success. Asus already has a strong market presence at 6%, which means they have been able to achieve an economy of scope. Asus additionally also has a vertically integrated supply chain which ensures product quality and speeds up manufacturing times. Lastly, Asus focuses heavily on green production and CSR, in order to improve company image. Initiatives such as green Asus has helped ASUS gain numerous awards and in turn status for the company, which has contributed to the strong brand image ASUS enjoys today<sup>14</sup>.

Next the weaknesses will be discussed. Although Asus does indeed have a strong market presence, its revenue its much smaller than that of similar competitors such as IBM, Apple or Sony. This translates to the spending capabilities and investment options for Asus, considering Asus spends significantly less on R&D then competitors<sup>15</sup>. Moreover, Asus has weak advertisement capabilities, which results in a weaker brand recognition. This means it is more difficult to reach the target audience. Asus has dealt with some brand image problems in 2016, when it was revealed that its software had vulnerabilities, adversely affecting the security of its hardware and thereby putting people's privacy at risk.

Thirdly, the opportunities will be investigated. Asus has a weaker market presence in the smartphone and tablet industry. However, the Asus Zen phone is wildly successful, and by further investing in this sector, Asus has opportunities to branch out further and be less reliant on PC sales. Also, Asus could bank on its popularity amongst video gamers, success could be found in the niche market domination of video games. Considering that the video game industry has outgrown the music and movie industry, plenty of opportunities for growth exist<sup>16</sup>.

Finally, the threats that Asus faces will be discussed. For starters, the demand for computer is declining<sup>17</sup>. Secondly, profit margins are razor thin due to high costs which leaves the business relatively vulnerable. Due to the reliance on heavy metals, Asus can expect further increased costs when those heavy metals increase in price due

to scarcity.

## Chapter V Internal Analysis- Value Chain Analysis

By doing value chain analysis, it is a tool to help us look into Asus and know how it makes profit for customers. We organized each of the activities to know the internal function efficiently.

### Primary activities

**Inbound logistics:** Asus encompasses an inspirational global strategy to promote sustainability as they strive to be a green high-tech company. It is the most valuable brand in Taiwan and Fortune and Magazine again ranked them among the world's most admired company. Asus company is helping to improve lives through establishing data centers. In recent years, Asus has dedicated to develop green products and expand its' green competitiveness. For example by using halogen-free components and other alternative technology, it does not decrease the products efficiency, quality, and will not affect health and environment. And they gain the green certificate for their products. Also increased their revenue comparing to 2016. They reached their growth rate of eco products by nearly 20%.

**Operation:** Asus shows a big opportunity mobility sector and create products that are truly amazing. Name Zenbook hosen to depict thin and light notebook that will bring each of its users to a new level. Asus notebooks the most prestigious with the best performance in its class. Also manufacturing greenly by using the green materials, such as lead and halogen-free. Of course, before manufacturing, the green design should be done. Easy to recycle, reuse.

**Outbound logistics:** For outbound, there is fast delivery due to its many production sites. Total quality management. Or in other words, it install and make permanent climate where employees continuously improve their ability to provide or demand products and services that customers will find of particular value. It Greatly emphasis on total quality management and fast delivery, which means just-in-time delivery. They also set up branches toward America, Asia, China and Europe.

**Marketing and sales:** Asus has a strong brand name and good reputation. So when people which is the customer facing the products, they will take Asus into considerations. However, their marketing is low. For example their green products, it is a good development, however lack of marketing. The price of the product is quite affordable. Low priced tablets of Asus are also sold so that some customers with low income can buy. So we suggest that put more money on marketing and do advertising on green products.

**Service:** Asus provides product information and technical support. It provides ASUS ROYAL CLUB to repair customers products. Asus offered a bundle of



customers services and product supports. It has supporting programs or services that help bridge the digital divide and form crucial partnership to developing recycling programs on several continents.

### Support activities

Infrastructure: Asus has a huge infrastructure, comprising with many departments. Figure 6 shows their infrastructure which includes R&D Center, Management Headquarters, HR Centers and so on.

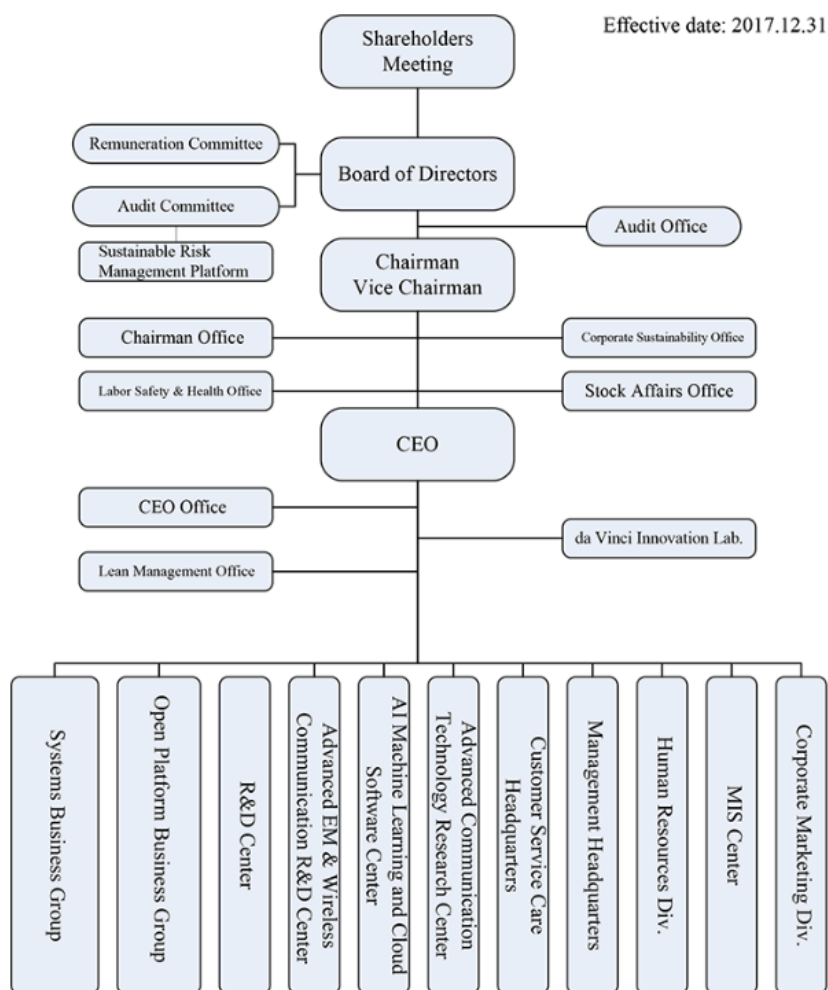


Figure 6 Asus infrastructure

Human Resource Management: Asus implements human rights policy and human rights related education, quality training is conducted for employees all around the world. The company imparts effective skills and motivations of employees. Moreover, by holding job fairs in campus from 2005, the plan of Campus Executive Officer, they can gain more talented people directly from campus and provide them internship. Also they set up a Facebook fan page “ASUS Campus” to deliver more

related information as you can see from figure 7.



Figure 7 ASUS Campus Facebook fan page

**Technology development:** Asus has splendid four one-click preset mode, normal mode, eye car mode, vivid mode and manual mode. Eye car mode reduces blue light levels for comfortable viewing and vivid mode clearly adjust the display settings to give images a vibrant and vivid appearance.

**Procurement:** For Asus, procurement has big negotiation power, low cost because of high volume purchasing. Asus mainly uses cost leadership strategy, in which the company deliver its products to its consumers at the lowest competitive price. Also, their green supply chain from abroad remains the data of green suppliers.

## Chapter VI ASUS Strategic Implementation-Business Level Strategy Differentiation

Asus has a series of products, including ZenBook, VivoBook, ChromeBook, StudioBook and so on. It is rank in top 10 notebook brand by global shipments, but still, falls behind HP, Lenovo and Apple.

Asus differentiated themselves by producing a series of gaming laptop and computers. A gaming computer is really different from a normal computer because the gaming computer needs higher levels of build-in system to support players to play game smoothly, needless to say laptop, but a normal computer just need the basic features. It is much more simple than a gaming laptop. Normally by using word processing is enough.

The features of Asus gaming laptop have good cooling and ergonomics system, key board detaching or wireless to provide players can change their places wherever they want while playing and be more comfortable. Also high screen refresh rate , and wide screen.

Asus create a good brand and players love the experiences and efficacy of laptop. Asus's ROG series is ranked No.1 in gaming laptop with 40% global market share, nearly half of the market share as you can see figure 8.

Asus market share stands top 1 for its gaming laptop in America, Canada, Asia including Taiwan. In recent years, they enter Indonesia successfully by 57% of market share in Indonesia for gaming laptop as you can see figure 9. Asus make them differentiate by gaming laptop and attract the gaming players to choose them. The gaming laptop market growth in China rises, and this will be another opportunities for Asus.

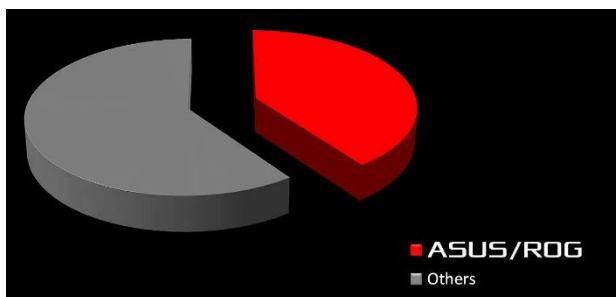


Figure 8 Gaming Laptop in global market share



Figure 9 Gaming Laptop in Indonesia market share

## **Conclusion**

As long as ASUS focuses and invests heavily in CSR compared to competitors, with initiatives such as GREEN ASUS. We want to highlight that Asus is getting rewards regarding its sustainability and CSR which attracts customer loyalty. Also, ASUS Zenphones fastest growing in sales, so ASUS can find significant opportunities for growth in these markets, especially since these markets are still growing in various markets. ASUS has dealt with some brand image problems in 2016 thereby putting people's privacy at risk, so we think ASUS has to urgently find the way to solve this problem to be aware decreasing customer loyalty. In gaming field, the opportunities and challenges that Asus might face in the future will become stronger, other potential country might be their next target market to enter.

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