

# Report

# **Group Assignment 2**

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# **Present to**

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## **EXECUTIVE SUMMARY**

This report provides the definition, explanation, and examples of Porter's Competitive Force Model and The Value Chain model. Method of analysis includes the analysis of 4 businesses using Porter's Competitive Model for each competitive force, and using the Value Chain Model to analyze 3 businesses. The definition and methods for analyzing the business can be found in various sources including business websites and Management Information System books. The report finds the components of Porter's Competitive Model, which consists of New Market Entrants, Supplier, Substitute Products, and Customers, and The Value Chain Model has 2 activities including Primary Activities and Support Activities. In addition, The Value Chain Model can guide the business to gain competitive advantage while Porter's Competitive Model will help the business to find its competency in the industry.

The report finds that the Porter's Competitive Model is a great tool for analyzing the competitive advantages. However, it lacks the guidance to implement, so the Value Chain Model will play an important role in this part.

### Recommendation

The recommendations discussed includes:

- 1. Any firm should use this model to analyze the business to gain competitive advantages in the industry.
- 2. Business Entrepreneurs should understand these 2 models because they are a great tool for analyzing a business.

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## THE PORTER'S COMPETITIVE FORCES MODEL

## **Explanation of the Porter's Competitive Forces Model**

The Porter's Competitive Forces Model is a strategic model by Michael Porter. This model is a simple model but necessary in industry. The main concept of the model is to help us to analyze the attractiveness and competitiveness of industry, evaluate investment, and compare the competitive environment in the business. The model is used to identify an industry's structure to determine corporate strategy. [1][2]

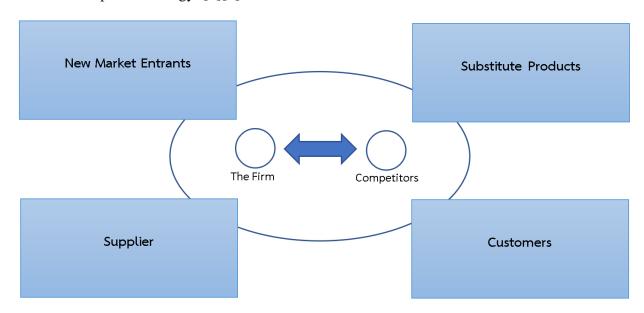


Figure 1 Porter's Competitive Forces Model

## **Definition of Competitive Forces**

Competitive Forces are the factors that threaten and impacts the firm growth, it consisted of two categories: [5]

1) **Direct forces**, the changes of the factor will directly impact the firm. They include the number of competitors, customer expectations and product quality [5]. For instance, most customers would like their thoughts to be appreciated and valued, therefore in 2018, 52% of global companies offered a customer self-service (e.g., interactive voice response (IVR), chat bots) [4] as their problems will be solved quicker without waiting for a support agent. This method is proven to be a significant factor that could improve customer satisfaction and retention.

2) **Indirect forces**, the factor that places a ceiling or range on a market's prices and profits. They include the supplier pressure, similar products/services, new market entrants, and regulatory pressure [5]. For instance, on June 1, 2022, the Personal Data Protection or known as "*PDPA*" came into effect. For this reason, the entrepreneurs are required to understand and establish the policies according to the regulations before doing activities on customers' personal information. [6]

### **Example of Competitive Forces**

### 1. New market entrants

Netflix, U.S.-based subscription streaming service, allows subscribers to access TV shows and movies without any ads through an internet connection [12], which is associated with the media and entertainment sectors. The threat of the new entrance of Netflix is moderate since the firm could adjust to the trend and the evolution of the technology in the media industry by transforming the form of DVD rentals into internet streaming in order to maximize customer gain. Even though this business model is simple to replicate, a thing that makes Netflix different and got an advantage over others is that Netflix has a variety of content that could satisfy the customer needs. So, the new entrant may find it challenging to keep up with the extensive investments, supplier relationships, partnerships, and networking necessary to improve this competitive advantage. [13]

# 2. Suppliers

In the current situation, the gas prices are drastically increasing, and expected to hit \$5 a gallon within the next few weeks. One of the main factors of the changed gas price is Russia's invasion of Ukraine. Russia is one of the largest oil exporters to many continents, therefore it would undoubtedly led to the increasing gas price. CNN cited that another possible reason is a strong demand from the customers [11]. According to Law of Demand, when the demand is high, they can limit supply output to make the resource more scarce and valuable called "*Profit-maximizing monopolies*"[10]. Therefore, the higher price is possibly caused by many factors in the supply management (e.g., current impact, strong demand from customers).

# 3. Substitute products and services

Amazon Web Services (AWS) is providing the cloud computing service, which is similar to Microsoft Azure, which is the second most used cloud computing service [14]. Based on the Stack Overflow 2022 survey, there are around 25% more professional users prefer AWS than Azure although most of its services are more expensive than Azure [15], [16].

AWS is the leading provider of cloud computing because AWS covers more area than Azure and other providers, so there are more people that can access the service. As a consequence, AWS has more customer data than other providers, which allow the developers to analyst the customer data, and be able to identify what satisfy the customers In addition, AWS has an Amazon Partner Network (APN) program to share ideas and creating solutions and new products with the partners through the forum platform provided by Ideas [17].

### 4. Customers

Shopee is the leading E-commerce platform in Thailand. They have similar products because many shops open their shops on both platforms, so customers usually buy the products based on their satisfaction on the platform. In addition, they also have similar strategies to attract the customers. For example, customers can earn coins and vouchers or coupons, which can be used as a discount when purchasing products, from playing games, daily login, and purchasing products with promotions. However, Shopee invests in Payment technology called ShopeePay, and Logistic (ShopeeExpress), creating an ecosystem for e-commerce. As a result, Shopee became a one-stop service e-commerce platform and the most used platform in Southeast Asia [18]. However, Shopee has never made any profit since 2015 while other e-commerce companies have gained some profits. It might be the long-term strategy of Shopee to make a profit in the future like Amazon that started to make a profit after 14 years of operation [19][20].

## THE VALUE CHAIN MODEL

## **Explanation of the Value Chain Model**

Even though the Porter Model is very useful to help the business find competitive power and guide common strategies, but it does not tell exactly what the business should do and does not give an approach or methodology to come up with operational excellence, this is why the value chain business model comes into play.

Value Chain Model is a business model that examines specific activities in the business where competitive strategies can best be applied and where Information Systems are most likely to have a strategic impact. Value Chain Model covers the inadequacy of Porter model because the Porter Model does not provide a specific method to guide a firm to achieve competitive advantages.

Concisely, the value chain model spotlights particular activities in the company or business where competitive strategies can be implemented appropriately and where information systems have an impact. This model also informs specific, vital leverage points where a company uses the information system highest effectively to improve its competitive position. [27]

# **Steps in Value Chain Model analysis**

Value chain analysis may analyze each stage to identify flaws and sections that also need to be improved. By comparing all of these phases, we might be able to compare these procedures with the organization's management, which includes a comparison of other competitors in the market. [21]

This model consists of the 2 following activities:

**Primary activities** are associated with the production and distribution of the company's products and services, which create value for the client. These activities include:

- 1. Inbound logistics receiving and storing materials for production
- 2. Operations transforming inputs into finished goods
- 3. Outbound logistics storing and distributing finished goods
- 4. Sales and marketing promoting and selling goods the firm's products
- 5. Service maintenance and repair of the firm's goods and services

**Support activities** make the delivery of the primary activities possible and consist of:

- 1. Procurement purchasing input
- 2. Technology improving products and the production process
- 3. Human resources for employee recruiting, hiring, and training
- 4. Organization infrastructure administrator and management

# Porter's Value Chain Model

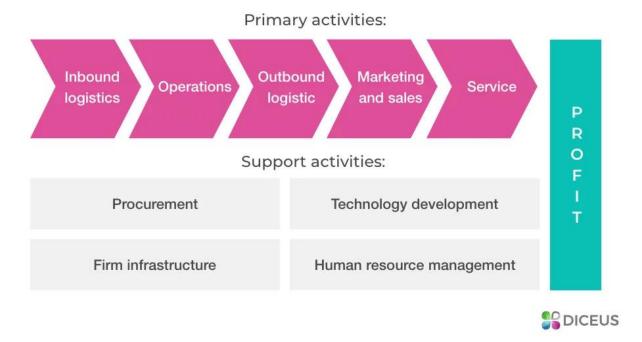


Figure 2 Value Chain Model

### Three examples with explanation

### 1. Starbuck

Starbuck, the world's largest US corporation, has a long history and a reputation as a coffeehouse chain that delivers high-quality coffee while providing excellent customer service. So, the value chain model concept might come in and assist Starbucks in illustrating and identifying their business operations that can produce value and competitive advantage for the company. [23]

### **Primary activities**

**Inbound logistics:** Relating to company-appointed coffee buyers choosing the highest-grade coffee beans. Because of Starbucks' unique roasting and packaging processes, the beans gain value, which raises their market worth.

**Operation:** Operating in over 80 markets, either through direct business storefronts or through other licensed shops.

**Outbound logistics:** Most of their goods are exclusively available in their own or licensed shops.

**Sales and marketing:** Investing on higher quality items and excellent customer service rather than aggressive marketing.

**Services:** Using in-store customer care to develop customer relationships. Giving consumers an exclusive Starbucks Experience has become one of Starbucks' defining retail objectives. [24]

# **Support activities**

**Procurement:** Starbucks conducts 100% of its own coffee bean procurement, which it regards as one of its competitive advantages.

**Technology:** Starbucks has created various platforms for the customers to ask questions, give feedback, view, and share experiences.

**Human resources:** Starbucks offers considerable benefits and rewards to keep their staff members. The organization is also recognized for taking care of its employees, which is one of the reasons for the low employee turnover rate.

**Organization infrastructure:** Starbucks conducts with multiple divisions, which requires several business managers in the firm to ensure that the business would run smoothly. [24]

### 2. Apple

Apple is one of the leading information technology companies, a company that brings its idea to physical products. This makes a firm have to engage itself in various activities. One of the weapons Apple used to achieve today's position can be said to be its value chain model analysis. Apple marks all primary and support activities which add value to the final product of the company so that they can either reduce the cost or can add differentiation.

## **Primary activities**

**Inbound logistics:** Receives and arranges the raw materials to manufacture the products of the company. The quality of the product is controlled by these activities.

**Operation:** Most of the sale of this company is gained by this sector.

**Outbound logistics:** Sending a manufactured product to a warehouse and then distributing them.

**Sales and marketing:** Highly responsible for the revenue of Apple.

**Services:** In the pre-purchase stage, sales assistants show the customer about their products. After the purchase, the clients can upgrade to newer models of Apple products for some additional money.

# **Support activities**

**Procurement:** Maintenance a good relationship with its suppliers.

**Technology:** Investing in technological advancement in the products to provide better best services to its clients.

**Human resources:** Selecting and controlling the roles of the employees of a firm. **Organization infrastructure:** Legislative works, administrative function, management, accounting all is under the infrastructure. [22]

#### 3. Adidas

This corporation has evolved into a worldwide sneaker company with a greater prevalence in all geographics. Adidas became the most popular sports shoe brand in the United States in the 1970s. In addition, the organization was selected as the official supplier for the Olympic Games in Munich in 1972. [25]

# **Primary activities**

**Inbound logistics:** The company relies heavily on third-party producers for shoe manufacturing. Also, the firm has also made a solid dealer connection in a lot of areas worldwide.

**Operation:** The firm has been building a vital presence around the world.

**Outbound logistics:** Warehouses and e-commerce marketplaces are important in manipulating all the brand logistics. Products from suppliers are stocks at these sites before being distributed to retailers or clients.

**Sales and marketing:** Adidas attract customers via plenty of persuasive promotions and campaigns in their physical outlets.

**Services:** The company has been serving its value on corporate social responsibility, sustainability, and their customer satisfaction to increase their image and value proposition. [25]

# **Support activities**

**Procurement:** In order to keep a stable flow of raw materials, Adidas believes in building long-term partnerships with its suppliers.

**Technology:** In recent years, the firm has seen steady growth in net revenues from e-commerce. Investing in digital technology has assisted the organization in increasing operational efficiency, marketing, overall brand productivity, and performance.

**Human resources:** The corporation makes significant investments in its human resources, including reimbursements and incentives. Additionally, Adidas has developed many training and educational initiatives for assisting workers in achieving advanced career opportunities.

**Organization infrastructure:** To support its international operations, Adidas uses a hybrid divisional and functional organizational structure. [26]

## **Discussion and Conclusion**

### **Discussion**

After we have studied and researched Porter Competitive Forces and Value Chain Model. We found that both models can help organizations survive in the industry strategically. Porter Competitive Forces Model helps the company to find the attractiveness and competitiveness of the industry, evaluate funding, and compare the competitive environment in the business. All of those can be used to specify an industry's structure to set corporate plans and strategies. [1][2] But that strategy does not provide the firm's activities to reach the goals, this is why the Value Chain Model comes to help the business. The Value Chain Model helps the business to find activities to achieve the firm's target and also compare the advantages and disadvantages of competitors to see what processes the company must improve.

In the global competitive market, every sort of business, every firm must research and apply strategies to achieve their goals and excellent operation to make as much benefit as possible. This is why those 2 out of numerous strategies must apply when doing business. We suggest that ICT students who want to do their own business must learn about this seriously.

#### Conclusion

Porter Competitive Force Model and Value Chain Model by Michael Porter are the strategies that come and assist the company to be able to analyze firm value and remain competitive in the market. In 1979, Michael E.Porter of Harvard Business School established five major forces that impacted the long-term fundamental attractiveness of a market by carefully evaluating competition intensity. When Porter used the term "attractive market," he meant that the overall of the company was profitable, which could be determined by considering the risks and possible prospects of the firm. The value chain concept is easily identified in the manufacturing industry, where a corporation obtains raw materials and executes a series of actions to provide a useful product to the clients. The purpose of this approach is to first determine the most valuable operations for the organization and take action on the activities that may be enhanced to gain a competitive advantage. [28]

## References

- [1] Mindtools.com. 2022. Porter's Five Forces The Framework Explained: A Guide to Analyzing Competitiveness Using Michael Porter's Strategic Model. [online] Available at: <a href="https://www.mindtools.com/pages/article/newTMC\_08.htm">https://www.mindtools.com/pages/article/newTMC\_08.htm</a> [Accessed 17 August 2022].
- [2] Investopedia. 2022. *Porter's 5 Forces Model: Analyzing Businesses*. [online] Available at: <a href="https://www.investopedia.com/terms/p/porter.asp#:~:text=Porter's%20Five%20Forces%20is%2">https://www.investopedia.com/terms/p/porter.asp#:~:text=Porter's%20Five%20Forces%20is%2</a> 0a,structure%20to%20determine%20corporate%20strategy.> [Accessed 17 August 2022].
- [3] Boyce, P., 2022. *Economies of Scale (Definition and 8 Examples) BoyceWire*. [online] BoyceWire. Available at: <a href="https://boycewire.com/economies-of-">https://boycewire.com/economies-of-</a>
- scale/#:~:text=Economies%20of%20scale%20refer%20to,the%20opposite%20%E2%80%93%2 Odiseconomies%20of%20scale.> [Accessed 19 August 2022].
- [4] A. Sellers, "The top customer service expectations and how to exceed them [new data]," *HubSpot Blog*, 08-Sep-2021. [Online]. Available: https://blog.hubspot.com/service/customer-service-
- expectations#:~:text=%20Customer%20Service%20Expectations%20Examples%20%201%20A bove,for%20my%20classic%20Polaroid%20camera%20on...%20More%20. [Accessed: 20-Aug-2022].
- [5] "What are competitive forces," *BDC.ca*. [Online]. Available: https://www.bdc.ca/en/articlestools/entrepreneur-toolkit/templates-business-guides/glossary/competitive-forces. [Accessed: 20-Aug-2022].
- [6] "7 things entrepreneurs must prepare to support PDPA," ฐนาคารไทยพาณิชย์ (SCB). [Online]. Available: https://www.scb.co.th/en/personal-banking/stories/business-maker/pdpa-with-agencies.html#:~:text=Or%20can%20be%20used%20in%20any%20way%20like,must%20always%20review%20and%20update%20the%20existing%20data. [Accessed: 20-Aug-2022]. [7] B2U Business-to-you.com. 2022. Porter's Five Forces EXPLAINED with EXAMPLES /
- B2U. [online] Available at: <a href="https://www.business-to-you.com/porters-five-forces/">https://www.business-to-you.com/porters-five-forces/</a> [Accessed 19 August 2022].
- [8] TechCXO. 2022. *Capital Requirements*. [online] Available at: <a href="https://www.techcxo.com/capital-requirements/#:~:text=What%20are%20Capital%20Requirements%3F,start%2Dup%20expenses%20and%20investments.">https://www.techcxo.com/capital-requirements/#:~:text=What%20are%20Capital%20Requirements%3F,start%2Dup%20expenses%20and%20investments.</a> [Accessed 19 August 2022].

- [9] Investopedia. 2022. How Distribution Channels Work. [online] Available at:
- <a href="https://www.investopedia.com/terms/d/distribution-channel.asp">https://www.investopedia.com/terms/d/distribution-channel.asp</a> [Accessed 19 August 2022].
- [10] Parlia, "Monopolies lead to higher prices," Parlia. [Online]. Available:
- https://www.parlia.com/a/monopolies-lead-higher-prices. [Accessed: 20-Aug-2022].
- [11] C. Isidore, "Why US gas prices are at a record, and why they'll stay high for a long time," *CNN*, 06-Jun-2022. [Online]. Available: https://edition.cnn.com/2022/06/06/energy/record-gas-prices-causes/index.html. [Accessed: 20-Aug-2022].
- [12] Help Center. 2022. *What is Netflix?*. [online] Available at: https://help.netflix.com/en/node/412 [Accessed 20 August 2022].
- [13]Porter Analysis. 2022. *Porter's Five Forces of Netflix-Porter Analysis*. [online] Available at: https://www.porteranalysis.com/porters-five-forces-of-netflix/ [Accessed 20 August 2022].
- [14] "What is AWS," *Amazon*, 1917. [Online]. Available: https://aws.amazon.com/what-is-aws/. [Accessed: 20-Aug-2022].
- [15] "Stack overflow developer survey 2022," *Stack Overflow*. [Online]. Available: https://survey.stackoverflow.co/2022/#technology. [Accessed: 20-Aug-2022].
- [16] P. M. L. Yifat Perry, "Azure vs AWS pricing: Comparing apples to Apples," *Azure vs AWS Pricing: Comparing Apples to Apples*, 10-Sep-2020. [Online]. Available:
- https://cloud.netapp.com/blog/azure-vs-aws-pricing-comparing-apples-to-apples-azure-aws-cvo-blg. [Accessed: 20-Aug-2022].
- [17] "APN Partner Central," Amazon, 2002. [Online]. Available:
- https://aws.amazon.com/th/partners/apn-partner-central/. [Accessed: 20-Aug-2022].
- [18] S. Leesa-nguansuk, "Lazada, Shopee, JD central rack up losses to gain users,"
- https://www.bangkokpost.com, 09-Jun-2022. [Online]. Available:
- https://www.bangkokpost.com/business/2322714/lazada-shopee-jd-central-rack-up-losses-to-gain-users. [Accessed: 20-Aug-2022].
- [19] T. Cambosa, "Shopee, Lazada retain Crown as top e-commerce sites in sea," *MARKETECH APAC*, 15-Mar-2021. [Online]. Available: https://marketech-apac.com/shopee-lazada-retain-crown-as-top-e-commerce-sites-in-sea/. [Accessed: 20-Aug-2022].
- [20] "It took Amazon 14 years to make as much in net profit as it did last quarter," *Quartz*. [Online]. Available: https://qz.com/1196256/it-took-amazon-amzn-14-years-to-make-as-much-net-profit-as-it-did-in-the-fourth-quarter-of-2017/. [Accessed: 20-Aug-2022].

- [21] (TH) Cogistics Co.,Ltd. 2022. *Value Chain* ตัวช่วยในการเพิ่มผลกำไรให้ธุรกิจ และเอาชนะคู่แข่งในอุตสาหกรรม. [online] Available at: https://www.cogistics.co.th/th/blog/knowledge/value-chain-increase-a-business-efficiency [Accessed 19 August 2022].
- [22] Edrawsoft. 2022. *Apple Value Chain Analysis | EdrawMax Online*. [online] Available at: https://www.edrawmax.com/article/apple-value-chain-analysis.html [Accessed 20 August 2022].
- [23] Supplychain247.com. 2022. *Starbucks as an Example of the Value Chain Model Supply Chain 24/7*. [online] Available at:
- https://www.supplychain247.com/article/starbucks\_as\_an\_example\_of\_the\_value\_chain\_model [Accessed 20 August 2022].
- [24] Investopedia. 2022. *Analyzing Starbucks' Value Chain*. [online] Available at: https://www.investopedia.com/articles/investing/103114/starbucks-example-value-chain-model.asp [Accessed 20 August 2022].
- [25] Sinra, K., 2022. *Adidas Value Chain Analysis in 2022 (Detail Analysis) WikiSME*. [online] WikiSME. Available at: https://www.wikisme.com/adidas-value-chain-analysis/ [Accessed 20 August 2022].
- [26] Pratap, A., 2022. *Adidas Value Chain Analysis*. [online] notesmatic. Available at: https://www.notesmatic.com/adidas-value-chain-analysis/ [Accessed 20 August 2022].
- [27] Laudon, K. C., & Laudon, J. P. (2019). *Management Information Systems: Managing the Digital Firm, Global Edition* (16th ed.) [E-book]. Pearson.
- [28] International Journal of Advanced Research. 2022. *Article Detail International Journal of Advanced Research*. [online] Available at: http://www.journalijar.com/article/17562/porters-industry-analysis-and-value-chain-model./ [Accessed 20 August 2022].