

Huawei's strategic efficiency

How does an efficient and effective strategic management system relate to Huawei's successful story?



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ABSTRACT

In today's business world, it is undeniable that possessing an unique and sustainable strategy is the key to a successful story. However, there is still a big gap between setting up a right strategy and applying it into the whole business. Joining the market later than many other players, Huawei has showed that its efficient strategic management system relates strongly to its huge success. The aim of this thesis is to find out how strategic planning can lead to higher business performance as well as long-term competitive advantages. The thesis's background is mainly based on basic strategic analysis concepts including Value chain model, SWOT analysis and Benchmarking process along with the contextual emerging economies in which Huawei is operating in. Due to the lack of real data collection, the analysis section of the thesis is conducted depending upon gathered data from the company case studies, annual reports and other secondary sources (journal articles, academic books and business reviews).

In order to provide readers with basic background of strategic management, the thesis has explained the global strategic management framework, the concept of emerging economies and the definition of used strategic analysis tools very clearly and specifically. In addition, the thesis also gives insights into Huawei's overall business highlights and how strategic analysis concepts can be applied into Huawei case. Regarding every strategic tool mentioned above, the thesis has released possible solutions how Huawei can improve its strategic management even better. The conclusion not only emphasizes the link between company performance and strategic management but also summarizes how Huawei has maintained its strategy throughout the years of operation.

Keywords Strategic Analysis, Huawei, Value Chain Model, SWOT, Benchmarking

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1 INTRODUCTION

It is claimed that the right strategy plays a very important role in compassing and directing a company towards its main goals or objectives. However, setting an appropriate strategy and sustaining the long-term plan can cause business directors and managers headaches for days if they don't attain enough know-how and knowledge. Therefore, the first thing that needs to be done for any company - to officially enter the marketplace or in other words to be in the game – is to ensure their strategic management is carefully and systematically created, improved and maintained.

According to Michael E. Porter who has published several strategy-related articles on Harvard Business Review, there are many misunderstandings about strategies; one of them is the replacement of strategy with operational efficiency. In addition, operational efficiency refers to performing more effectively than others by utilizing the least inputs to generate the most outputs. As more benchmarking can be applied, more and more companies aim to obtain the same operational method to cut down costs and increase productivity, which leads to unprotected competitive advantages regarding cost management or operational performance. Meanwhile, strategies move towards building a distinctive set of activities or conducting the same activities in different approaches. Strategic positioning is to obtain and preserve the competitive advantage away from other competitors. However, setting a suitable strategy is not enough, companies also need to learn to make trade-offs; some activities are fully completed only when eliminating others. Furthermore, good strategic management should create a 'fit' among core activities. When internal activities can support and reinforce each other towards the overall strategy, it is very hard for other 'players' to imitate the 'recipe'. (Porter, M. E., 1996)

Regarding the main topic and chosen areas, this thesis focuses on strategic management and strategic positioning. The analysed company is Huawei Investment and Holding, Co. Ltd, which is known as the global leader in telecommunication and high-tech emphasizing in mobile, software and cloud industry. The title of the thesis is "Strategic Management – The case of Huawei". The research question is "How does an efficient strategic management system relate to Huawei's successful story?". In order to answer the question thoroughly, strategic analyses theories including Value Chain Model, Benchmarking and SWOT are used in the literature review. Moreover, to research deeply into Huawei's strategic management, relevant business data is collected and analysed carefully to drive the final lessons, valuable results as well as recommendations for the following researchers. In particular, after main theories are mentioned, analysis of Huawei's value chain model along with its SWOT application will

be showed to provide deeper insights into the company's strategies. The aim of the thesis is to provide readers with valuable finding outs about a worldwide telecommunication leader's strategies and how the company can sustain its strategy to stay competitive within the industry.

2 LITERATURE REVIEW

2.1 Emerging economies and their history

In terms of definitions and concepts, emerging economies consist of rapid-growth and low-income countries which use and set the economic liberalization as their prior engine of growth. Historically, back in the 1980s, the term "emerging economies" has the origin from the term "newly industrializing countries" applied for a few liberalizing and fast-growing Latin American and Asian countries. When it comes to the accurate definition of an emerging country, there are two main criterion that needs to be satisfied: the fast pace of economic evolution and the government policies in favour with the economic liberalization and market-based system adoption. According to the International Finance Corporation, up to 51 rapid-growth developing nations in Africa, Latin America, Asia, and Middle East are listed as emerging economies members. Later than 13 transition economies are added based on the European bank for Reconstruction and Development (EBRD)'s categorizations. (Chung Minh Lau, M. W., 2000)

Due to the collapse of Communism, there has seen a new segment of rapid-growth countries in Eastern and Central Europe with the commitment to strengthen their market through stabilization, support of private enterprises and liberalization. Those transition economies countries accounting for 64 nations are also considered as emerging economies members. Those 64 countries are then divided into two main groups including 13 transition economies and other 51 high-growth developing countries located in Africa, the Middle East, Latin America, and Asia as already mentioned above. (Chung Minh Lau, M. W., 2000)

However, emerging economies undoubtedly have faced lots of political, social and economic difficulties. In the 64 emerging economies countries, the size of economic gains and the rapid speed of political change are not identical. In addition, the legal infrastructure and market institution development are even more difficult and slower. Furthermore, missing institutional features including thin capital markets, lack of skilled staff and infrastructure issues along with economic and political instabilities have damaged the FDI (Foreign Direct Investment). In addition, the lack of intellectual property rights guarantee, as well as strong legal frameworks,

has also led to corruption, bribery, and opportunism. As a result, those tackles have strongly affected the enforce property rights capability. (Chung Minh Lau, M. W., 2000)

Therefore, there has seen a vital need for enterprises and businesses to adopt efficient and effective strategies in the emerging economies in order to cope with those difficulties mentioned above. (Chung Minh Lau, M. W., 2000)

2.2 Different perspectives on emerging economies and markets

2.2.1 The Institutional theory

According to Scott, 1995, Institutional theory can have a considerable impact on shaping human and organizational behaviours with the implications of systems. In addition, those institutions can both affect firms and enterprises economically and sociologically. North (1990) used to claim that institutions establish the rules that shape behaviours so that businesses are seen as players that are bounded by those informal and formal regulations. Institutions play an important role in emerging economies as they help to diminish the information and transaction costs by decreasing the uncertainty and setting up a stable structure that encourages the interactions. (Chung Minh Lau, M. W., 2000)

In emerging markets and economies, institutions can have a negative impact on emerging firms due to governmental and political limitations. In particular, according to Lau (1998), many Chinese enterprises have encountered with several severe troubles regarding governmental policies and market pressures which were caused by institutional constraints. In addition, similar to Chinese emerging companies, some Russian firms are also endangered by government institutions. Therefore, those existing institutional realities including cultural and sociological factors can affect emerging companies dramatically. (Chung Minh Lau, M. W., 2000)

However, apart from those negative sociological influences of institutions, institutional factors can have a positive impact on facilitating strategies. In other words, if firms figure out to adapt and cope up with those institutional challenges, they can play a more active role and react respectively. Furthermore, there is a strong link between organizational culture development and institutional change. In particular, according to Lee and Miller (1996), Korean companies can gain more benefits from attaining government help when following legitimate technological norms. Regarding Czech Republic industry, Clark and Soulsby (1996) showed that fundamental institutional changes can lead to acquisition of managerial

knowledge, better decision-making process as well as the reinstitutionalization of management. (Chung Minh Lau, M. W., 2000)

Furthermore, the number of valid studies and theories about institutional influences on firms in emerging economies is still limited. However, this perspective is considered to be the most applicable method to explain the businesses' behaviors, strategies, and reactions to the environmental, legal and political influences. It is recommended that firms should build sustainable competitive advantages and prepare for institutional effects actively instead of adapting the regulations. In other words, companies should take institutional changes into deep consideration, therefore, they can figure out the potential responses to the external implications as soon as possible. (Chung Minh Lau, M. W., 2000)

2.2.2 Resource-based theory

Thanks to the resource-based view/ theory, the industrial analysts can have a look into firms' resources ownership, strategic management, and competitive advantages sustainability. Penrose (1959) believed that every firm possesses its own characteristic or uniqueness or the so-called competitive advantage. In addition, analysing companies based on their resources and capabilities can provide the evaluators valuable insights (Wernerfelt, 1984). Unlike Penrose and Wernerfelt, Barney claimed that a firm's resource-based analysis can divide into four main factors including Value, Rareness, Inimitability, and Substitutability. (Chung Minh Lau, M. W., 2000)

As resources are quite contextual and varied across firms and industries, too much focus on resource-based analysis can lead to strategic inflexibility as well as core rigidities which cause the companies to suffer from negative returns. According to Oliver (1997), companies are capable of gathering institutional capitals to utilize its resources strengths. Moreover, resources regarding competitive advantages are intangible in emerging economies. Besides some common advantages when it comes to competition in emerging economies, there are some prominent factors including good relationships with home governments or effective marketing strategies. Furthermore, in emerging countries such as India, China, and Russia, many MNEs (Multinational Enterprises) have to encounter many marketing challenges consisting of capturing and creating huge value chain. Hence, usually, firms in emerging economies try to make the most out of first-mover advantages such as being the first entrant to the market, reputation effect, benefits of economies of scales and distribution domination. However, those advantages are obtained only when sustainable and strong relationships with home governments are built. (Chung Minh Lau, M. W., 2000)

In order to stay competitive to foreign players in an emerging economy, a domestic firm should develop its distribution mechanisms. Additionally, it is very important for firms to fully understand the link between its resources, capabilities and the futuristic changes of institutional infrastructure along with the industry's characteristics. Mastering and practicing this relationship effectively can lead a domestic firm to a global player by using its assets as sources of competitive advantage. (Chung Minh Lau, M. W., 2000)

In emerging economies in which institutional changes can have considerable effects on firm performance and development, companies need to upgrade their resources and capabilities in order to cope up with new challenges and to take advantage of opportunities. In other words, firm orientation and asset structures need adjusting. For instance, in the past, most of MNEs rely on Foreign Direct Investment of network relationships as their main resources and assets. However, due to globalization and institutional influences, nowadays enterprises should also take product innovation and organizational learning enhancement into account. (Chung Minh Lau, M. W., 2000)

2.2.3 Transaction Cost Economics theory

According to Williamson, 1975, Transactional Cost Economics concept looks into a firm-environment interface depending upon the exchange-based approach. In other words, in emerging economies in which the uncertainty level is high and the transaction costs within the markets are dramatically huge, it is suggested that firms take hierarchical governance models into consideration. Additionally, there is a trade-off between governance costs and transaction economic costs in the markets. In this case, organizations will operate as a governance structure in terms of high uncertainty, fluctuating transactions with another small number of agents and tremendous asset-specific investment. (Chung Minh Lau, M. W., 2000)

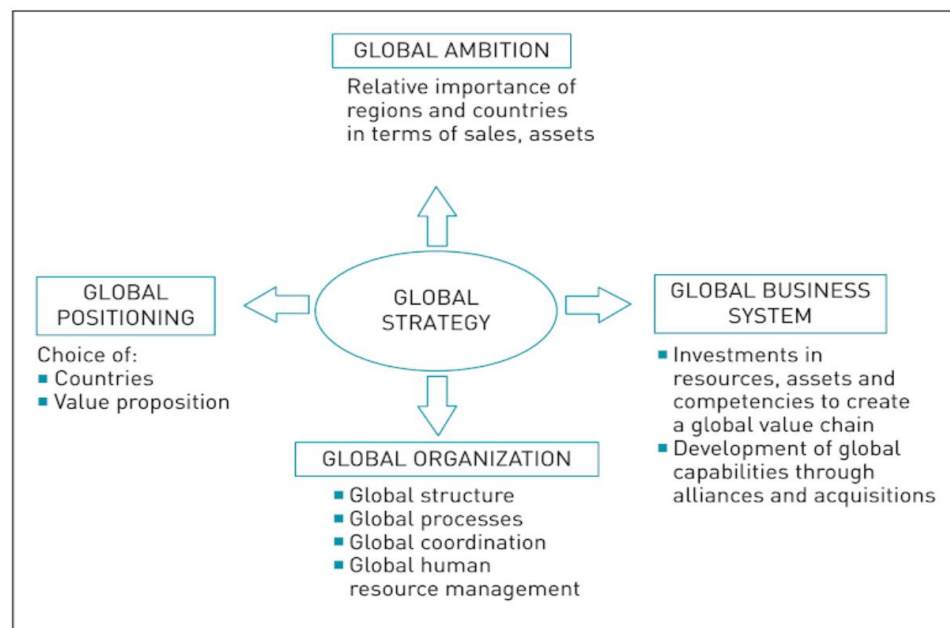
Due to high transaction economic costs in emerging countries specifically, there are several multidimensional structures built in order to save the costs and enhance the efficiency of companies. Those emerging structures include joint ventures, M&A, strategic alliances or vertical integration. Some other studies even mentioned the combination of institutional changes and transaction cost economics regarding the introduction of bargaining power, risk management, and trust. According to Lee, Choi, and Kim (1999), enforcement and measurement are two key transaction costs in emerging economies. In particular, as it is very troublesome for companies to allocate their resources efficiently due to ineffective price system, measurement costs are estimated to be high. In addition, in an emerging country in which the property rights are defined by the official

discretion instead of the rule of law, the enforcement costs are high as well. Therefore, in order to diminish the transaction economic costs, firms in emerging economies are recommended to follow hierarchical governance structures rather than private market. (Chung Minh Lau, M. W., 2000)

Apart from high transaction economic costs incurred, firms in emerging economies also have to face with political instability and the short of property rights. Therefore, according to Peng and Health (1996), it is very hard for emerging market companies to grow domestically or through the form of merge and acquisition, instead, they should utilize its networking circle and resources pool to achieve larger economies of scales and improve their organizational learning. In addition, personal relations and network contacts can be used to lower down the uncertainty. (Chung Minh Lau, M. W., 2000)

Furthermore, in emerging economies, sometimes unrelated diversification or countertrade can be attributed to the high transaction economic costs. According to Palepu and Khanna (1997), due to the emerging markets' underdeveloped labour markets and capital, large business groups usually conduct unrelated diversification. Moreover, Kim, Lee, and Choi (1999) supposed that countertrade is an efficient governance structure because it generates mutual commitments via hostage exchange that deter opportunistic behaviour. (Chung Minh Lau, M. W., 2000)

2.3 The global strategy framework



(Lasserre, P., 2018)

Building a global strategy can be divided into four main elements including global ambition, global strategic positioning, global business system, and global organization. Global ambition refers to the extent of globalization as well as the rationale of globalization regarding three main purposes (market-seeking, resource-seeking, and capability seeking). The second stage of building a global strategy is to determine global position, especially the selection of countries along with their roles in the company's global portfolio, and the value propositions of multiple products/ services in the international marketplace. (Lasserre, P., 2018)

Another essential element for an appropriate global strategy is an effective global business system which integrates company internal resources (the value chain) into different countries. In addition, companies should work on allocating its capabilities and skills thorough the set of provided values based on the diversity of markets in which it operates. The final part of a suitable global strategy is to create a global organization which fully and efficiently supports above three main elements (global ambition, global strategic positioning, and global business system). (Lasserre, P., 2018)

2.4 Value Chain Model

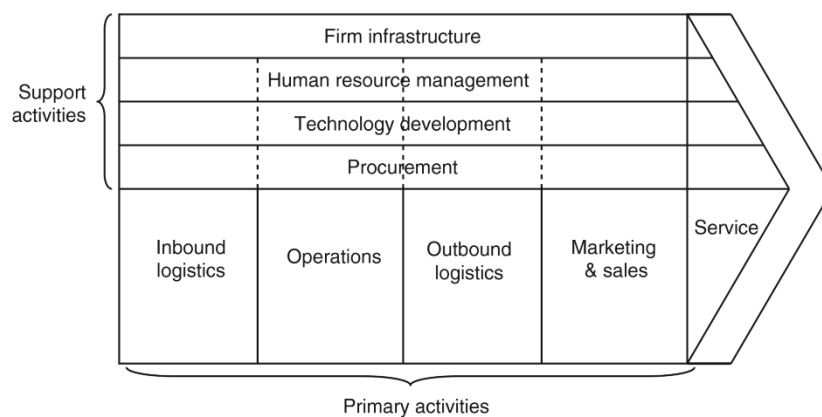


Figure 1 The generic value chain. *Source:* Porter (1985).

(McGee, J., 2014)

According to Michael Porter (1985), the value chain varied across different companies within various industries. In other words, the subset of a supply chain is created uniquely and differently in order to generate values for the companies. As shown above, the value chain consists of two main parts: primary activities and support activities. Regarding primary activities, there are five key categories including inbound logistics, operations, outbound logistics, marketing/sales, and service. With regards to support activities, it is claimed that each enterprise should be provided by value-created activities such as firm infrastructure, human resource

management, technology development, and procurement. (McGee, J., 2014)

In particular, as value creation is one of the most essential business goals in any industry, companies should invest and develop its own supply chain or the so-called value chain with strong and efficient primary activities. The first primary activity is inbound logistics which refer to activities related to storing, disseminating rights and receiving. Those activities could be stock management, warehousing, and material handling. Following inbound logistic are placed the operations in the chain. Operations include all the activities transforming inputs into outputs comprising service, assembly, packaging, and machining. This value-created activity plays an important role in accelerating a company's operational efficiency. Most companies nowadays try to maximize its operational performance by applying the circular supply chain in which least inputs are utilized to create maximum outputs with the lowest costs. Another primary activity according to the value chain is the outbound logistics which consist all the activities related to storing, collecting and physically distributing the output. As controlling over distribution channels and strategies is dramatically competitive in some industries, this activity can play as a competitive advantage for a certain business. It is stated that up to 50% of the value generated in several industry chains implies close to the end consumer, therefore, focusing on outbound logistics efficiency is very important to any company. (McGee, J., 2014)

Regarding marketing and sales, a product/ service needs to be known and heard by customers via different channels and marketing strategies. According to the Marketing Mix, 4Ps (product, price, placement, and promotion) should be included in order to inform customers about the product/ service. Last but not least, service consists of installation, after-sales service, repair, etc. (McGee, J., 2014)

Regarding support activities, the first one is procurement which means the acquisition of inputs or the purchasing process. Basically, everyone of a company needs to buy something in order to support the company tasks and performance so procurement is an essential activity. Another support activity mentioned in the chain is the human resource management which relates to recruiting, hiring, developing, compensating, motivating and training the people for current operation as well as the company future. (McGee, J., 2014)

Additionally, so as to provide other activities with high tech, the company should focus on its technology development including hardware, software or technical skills. However, this support activity varied across different kinds of companies, depending upon various industries. For instance, in food and beverages industry, food preparation is considered as a technology-related part while in management consulting companies,

accounting system or CRM development are technological components. Lastly, firm infrastructure activities including legal, accounting, policies or external affairs are created and controlled to support other activities. (McGee, J., 2014)

From the strategic management point of view, the value chain model is widely used and applied not only to generate values but also maximize the operational success for companies. The beauty of the model lies at how the activities within the chain are connected and allocated with resources so as to form the so-called competitive advantage. The strong and efficient linkages, as well as the interrelationships between primary and support activities, allow one company to stand out with its very own uniqueness. Furthermore, every main activity in the value chain can be broken down into more detailed activities or tasks; for instance, marketing and sales can be redefined into marketing research or marketing automation, technology development can be transferred into product innovation or process improvement. Regarding typical success stories, two famous airlines (Ryan Air and Easy Jet) have achieved the value chain models properly regarding operational efficiency and resource allocation. (McGee, J., 2014)

2.5 Benchmarking

Strongly recommended in strategic management academic studies, benchmarking plays a very important role in helping the companies to learn from their competitors. “Why re-invent the wheel if I can learn from someone who has already done it?” – said by Jackson Grayson Jr. who shows strong interest in benchmarking in his report. Benchmarking was first brought up by Xerox Corporation, which used to struggle with its strategies compared to the competitors within the industry. However, after benchmarking (searching for “best practices” and implementing them), Xerox not only comes back to the game but also becomes the greatest trend in the business world nowadays. (Dean E., 1997)

In terms of definition, benchmarking is more than just collecting data of best practices and highest standards from competitors. In addition, the application of benchmarking is broadly used across industries including services and manufacturing. Moreover, as the main goal of any business is to meet the customer expectations, the key of benchmarking is to improve the process and to implement the new ideas or new approaches which are gathered after a thorough analysis of the whole industry. Hence, benchmarking is just the very first step so that the company itself needs to ensure that the improvement of the process and continuous learning progress should be satisfied by the customers. Therefore, there is a so-called cost of quality that needs monitoring and upgrading. (Dean E., 1997)

2.5.1 Benefits of benchmarking and its types

There is no doubt that benchmarking is becoming more and more popular in the business world since it brings to companies several advantages. In other words, by applying benchmarking in innovative development and competitive advantage creation, companies have lots of chances of opening up to new ways, new methods, new ideas, and new partnering opportunities. Additionally, there are four different sorts of benchmarking including internal benchmarking, competitive benchmarking, functional or industry benchmarking and generic/process benchmarking. However, as the objective of the thesis aims at giving insights into Huawei's strategies within the telecommunication and mobile phone market in comparison to other players, only competitive benchmarking will be mentioned and analysed. (Dean E., 1997)

Regarding benchmarking benefits, accelerating productivity and individual design can be regarded as huge gains for the company. In details, benchmarking boosts the company to determine the breakthroughs; in particular, the same idea or the same method is applied in a very different way in a certain context, which can lead to unexpected opportunities of gaining more market share or product/ service innovation and development. Apart from productivity, benchmarking also has a positive effect on strategic planning, budget controlling and growth potential of the company. For further details, from the strategic tool viewpoint, benchmarking allows businesses to "leapfrog" over its competitors within the same industry who also get stuck with the same issue. (Dean E., 1997)

In addition, with benchmarking, companies can compare their operational efficiency to that of others so they can control the number of inputs and the outcome of outputs more effectively, leading to cost-effective process improvement. For instance, back the early 1980s, facing operational performance problems, Ford Motor Company decided to begin benchmarking from its competitor's process – Mazda's account payable operations. After a while of carefully learning and comparing, finally, Ford succeeded in cutting down its costs by 5 percent. With regards to grow strategies, companies can find out more grow potentials by analysing the competitors' success, operational application, and practices. Furthermore, partnering with and learning from each other can lead businesses to huge mass of growing opportunities. (Dean E., 1997)

Another benefit of benchmarking is to encourage organizational learning; in details by observing how other companies operate and apply new practices/ ideas, employees will be more motivated to adapt into a rapidly

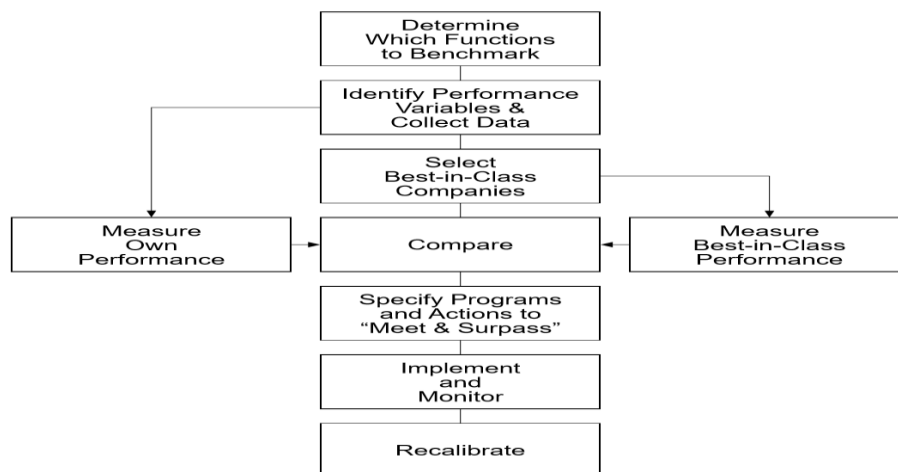
changing competitive environment, believing that there is always a way to go. (Dean E., 1997)

2.5.2 The process of benchmarking

The practice of benchmarking is a structured and typical process including five main steps: (1) planning the exercise, (2) forming the team, (3) collecting data, (4) analysing the collected data and (5) taking actions. Although the process can be varied across industries under different contexts, the general model is widely applied and adjusted. In addition, the main purpose of benchmarking process is to allow the companies to identify its own successful factors, look into its own current status and internal performance, study into better practices of competitors and finally come up with possible solutions regarding process improvement or competitive advantage formation. (Dean E., 1997)

As mentioned above, the first step of the benchmarking process is to plan the exercise, which can be conducted by looking back into company mission statement and business objectives. The next step which needs to be done is to select a set of functions or departments/ processes to be benchmarked. Also, a number of critical success factors should be identified to form a base of benchmarked criterion, which will affect the business results later after the benchmarking process. Moreover, in this step, the company needs to determine its customer expectations. The second step of the benchmarking process should be to create the teams including the leading team (ensuring the commitment to the process), the preparation team (conducting the detailed analysis) and the visiting team (responsible for benchmarking visits). (Dean E., 1997)

Additionally, after the teams are formed, collecting data should be done. In particular, in this step, companies have to collect internal data in order to better understand their own performance, operations, and processes. Besides that, data of best practices and higher standards from competitors are also needed to be gathered during this stage. Site visiting plays an important role in collecting practical data from competitors. Following the data gathering step, the fourth step – analysing data is conducted to fulfil the gaps between the company and the benchmarked ones within the industry. Moreover, via this step, companies can realize the roots of problems and potential solutions. At last, taking actions – the fifth step inquires the company not only determine the changes that need to be made but also actually implement the changes within the organization. (Dean E., 1997)



Source: Adapted from Bateman (1989, p. 6)

(Dean E., 1997)

2.6 SWOT Analysis

SWOT analysis is a strategic tool widely and effectively used in organizational strategic planning and strategic management. The tool is also known as the TOWS Matrix. In general, SWOT is a simple but powerful approach which a company can apply for researching its internal environment as well as external factors that can affect the company performance and productivity. SWOT analysis includes four main components: Strengths, Weaknesses, Opportunities, and Threats. The tool has two main dimensions: internal and external perspectives. With the usage and application of SWOT, the company can access into its own resources, capabilities, and deficiencies, realize its disadvantages, foresee potential threats from the external environment and exploit chances for growing the business. (Prof. Dr., E. Ö., 2017)

Additionally, a company's strengths can be identified as its product innovation, technology development, company reputation or customer loyalty. Meanwhile, the weaknesses could be operational inefficiency, unstable growth, small market share or lack of skilled staff. With regards to potential threats coming from the outside environment and industry competition, the company needs to pay attention to political, environmental, sociological, legal and technological forces based on PESTLE analysis. Sometimes, the threats can be attributed to harsh competition or volatile market in which the company is operating. (Prof. Dr., E. Ö., 2017)

2.6.1 Strengths

Generally speaking, strengths are value-added characteristics that make something more competitive, special and unique than others. At the organizational level, strengths lay at a variety of factors ranging from financial status to relative market share. Facing unexpected risks, harsh competition, and commercial issues, companies use its *strengths (special characteristics)* in order to not only survive but also expand in the business world. According to Thompson and Strickland (1989), “a strength is something an organization is good at doing or a characteristic the organization has that gives it an important capability. According to Pearce and Robinson (1991), a company strength can relate to company image, market leadership, financial resources, and buyer/ supplier relations. (Prof. Dr., E. Ö., 2017)

2.6.2 Weaknesses

Contrary to strengths, weaknesses are considered to be disadvantageous, unfavourable and negative characteristics in which a company should figure out as soon as possible to improve. In other terms, weaknesses are abilities and capabilities that are less effective and efficient compared to other competitors. In particular, weaknesses can be a deficiency or limitation in resource or capabilities that can deter a company’s effective performance. In addition, marketing strategies, brand recognition, facilities, management capabilities or financial resources can also be sources of weaknesses. There is no doubt that a successful strategic plan cannot be built upon weaknesses; hence a company should look into its own disadvantages and transfer them to strengths. It is obligatory for a business to resolve those problems which can lead to futuristic loss or obstacles for long-term plans/ strategies. (Prof. Dr., E. Ö., 2017)

As mentioned above, a company’s strengths and weaknesses checklist can be varied across several functions or departments including marketing, research, and development, finance, human resource management, operations, management team or management information system. Regarding marketing, the company should study into its product quality, customer service or pricing policies to identify them as either strengths or weaknesses. With regards to management information system, speed or responsiveness or user-oriented system can be sources of strengths. For operations, ineffective cost management or low quality control can become potential weaknesses of a business. (Prof. Dr., E. Ö., 2017)

2.6.3 Opportunities

Simply saying, opportunities are chances that companies can take advantage of to utilize their own strengths, minimize its weaknesses and avoid environmental threats in order to achieve their own goals or objectives. In addition, competition and intense work can lead to many opportunities for a company. For instance, the Body Shop opts to take chances by applying blue ocean strategies instead of fighting back to other famous cosmetics providers such as Lush, Weleda, L'Occitane and Yves Rocher. In other terms, the company chooses to serve a unique customer segment who are environmental-aware females at the age range of 25 – 40 and build a strong brand known as anti-animal testing campaign. To sum up, opportunities are beneficial situations or the driving force for a specific activity to take place. Opportunities that come at the right time can yield big positive results which can level up a company over other players in the marketplace. (Prof. Dr., E. Ö., 2017)

2.6.4 Threats

Opposite to opportunities, threats are external and uncontrollable elements that prevent companies from obtaining their objectives and slowing down a company's development or growing rate. A threat can make a business lose its own position in the marketplace and struggle to stay competitive. In other terms, threats are those that can jeopardize a company's activity or capability. All environmental factors that have negative effects on organization efficiency and productivity can be considered threats. Due to the rise of globalization bringing both potential opportunities and threats, businesses should be more careful and prepare for long-term strategic plans both for in and outside its environment. (Prof. Dr., E. Ö., 2017)

Regarding opportunities and threats, companies can look into six main environmental variables consisting of societal changes, governmental changes, economic changes, competitive changes, supplier changes and market changes. In contrast to strengths and weaknesses which are easily controllable and identifiable within the business, opportunities and threats are external factors which require companies more effort in finding out. (Prof. Dr., E. Ö., 2017)

It is very important for a business to fully understand its own strengths and weaknesses, aware of hidden threats and keep up with coming opportunities; hence businesses can match the SWOT analysis with its overall strategy, available resources/skills, current market opportunities, and back-up options or exit plans in future. SWOT is actually more than creating four lists of strengths, weaknesses, opportunities, and threats; the meaning of the analysis is the alignment between companies current resources (internal elements identified weaknesses and strengths) and

external factors (opportunities and threats). Furthermore, based on SWOT analysis, businesses can come up with possible solutions to current situations and take actions to diminish its disadvantages or enhance their strengths into competitive advantages. (Prof. Dr., E. Ö., 2017)

3 OVERVIEW OF HUAWEI INVESTMENT & HOLDING CO., LTD

Founded in 1988, Huawei Investment & Holding Co., LTD has become one of the global leaders in providing equipment and telecommunications network solution. According to the WIPO Patent Cooperation Treaty, the company is recorded as the largest patent applicant all over the world. Compared to other big players in the industry including Motorola, Ericsson, Nortel Networks and Cisco, Huawei has a higher rate of revenue increase which is up to 36% generating for \$17 billion. In January 2008, the company also became the first global equipment supplier for the fourth-generation in Oslo, Norway. In addition, Huawei is also listed in the “World’s most influential companies” in Business Week Magazine. As 75% of total sales is obtained from overseas, Huawei has successfully applied the emerging economies’ international strategies which makes the status of “late bloomer” a competitive advantage. Moreover, the company has nurtured its domestic position and market strengths and perceived the global competition as profit potentials and opportunities. (Sun, 2009)

3.1 Huawei’s vision and mission statement

It is undeniable that the rise in technological development and digital transformation have been changing the world dramatically. In other words, nowadays, literally, all things can be connected electrically and digitally thanks to the smart and innovative digital inventions and discoveries. Not only businesses or corporations but also citizens now have the chance of utilizing these technological and digital developments and breakthroughs in order to make their lives smarter, easier and faster. Additionally, the rapid growth of digitalization and communication technology has untapped several market opportunities and profit potentials for many small and medium-sized enterprises, especially in the emerging economies. (HUAWEI INVESTMENT & HOLDING CO., 2018)

Huawei is one of the most out-standing examples that has efficiently and successfully unlocked the transformation opportunities and brought them into life. Their mission statement is known as “Bring digital to every person, home and organization for a fully connected, intelligent world”. (HUAWEI INVESTMENT & HOLDING CO., 2018)

3.2 Company background

Established in Shenzhen in 1987, Huawei is a private business which is wholly owned by its employees. At the moment, the company is serving up to three billion people all over the world with the support of 188,000 employees in 170 different countries and regions. In 2018, Huawei's revenue is estimated to be up to US\$ 108.5 billion. The company quickly became a market leader in China and several nations across Asia, Africa, and Europe. Supported with up to 21,000 RMB start-up capital, Huawei gradually becomes the world's largest provider of telecommunications equipment as well as the second-largest smartphone manufacturer. (Huawei Technologies Co., Ltd, 2019)

Regarding its corporate governance system, Huawei focused on the quality, fairness, flexibility, and objectivity of its staff management. In particular, the Representatives' Commission is formed from 115 representatives elected by the shareholding employees. The representative commission has the responsibility of electing the chairman of the board and other 16 board directors. Later, three executive directors and four deputy chairs are selected by the chairman of the board. Furthermore, the three deputy chairs are supposed to take turns to take over the role of company's rotating chairman who will lead and manage the board of directors and Executive Committee. In order to drive technological advances and expand the shared success, Huawei has been working and collaborating with a variety of stakeholders including its customers, suppliers, partners, universities, open organizations, institutions, etc. Additionally, the company also helps to create local employment opportunities by providing digital and telecommuting solutions to companies or authorities in the countries where Huawei is operating. (HUAWEI INVESTMENT & HOLDING CO., 2018)

3.3 Huawei's core values and offerings

Regarding valuable and diverse offerings, Huawei puts an emphasis on creating high customer values, maintaining sustainability development, enhancing industry development and ensuring stable and secure network operations. In addition, the company aims at providing its users and partners with most efficient and safe Information Communication Technology infrastructure, trustworthy network operation, reliable cloud service. Utilizing the use of smart phones and smart devices, Huawei has the intention of bettering customers' digital experience in life, work, and entertainment. At Huawei, privacy protection and cyber security are set as top priorities. In addition, with regards to industry development, openness shared success, joint innovation and collaboration are highly promoted

within the company. In other words, Huawei is known to be a member of more than 400 organizations, open source communities, and industry alliances. With a view to staying sustainable and eco-friendly, Huawei makes great effort to boost its low-carbon footprint and promote environmental protection. (HUAWEI INVESTMENT & HOLDING CO., 2018)

The total global customers of Huawei is divided into three main segments: (1) telecom operators that provide wireless, internet and mobile phone services, (2) organizations, institutions, enterprises, government and public utilities and industries (transportation, finance, energy, manufacturing), (3) consumers who purchase their smart watches, smart phones, laptop computers. Over the past 30 years, Huawei has successfully maintained easy opportunities, rejecting shortcuts and unwavering focus. The main strategy is developed towards to four core values comprising persevering, customer-centric, growing by reflection and inspiring dedication. (Huawei Technologies Co., Ltd, 2019)

3.4 Huawei's business highlights

In 2018, Huawei aims at achieving four main objectives including driving ubiquitous connectivity, improving and customization user experience, enabling pervasive intelligence and developing the digital platform. (HUAWEI INVESTMENT & HOLDING CO., 2018)

In order to upgrade the possibility of worldwide connectivity, the company has successfully launched the first full range of 5G commercial solutions and products which are compatible with 3GPP standards. More than 40,000 5G base stations have been shipped all over the world with up to 30 commercial contracts signed. Regarding the Internet of things section, Huawei rolled out 16 eMTC networks and 53 NB – IOT networks, which provides millions of connections. In addition, the company made lots of effort to sustain the role of market leader in multiple areas comprising high-quality private lines, intelligent campuses, intelligent data centers, and premium home broadband. Moreover, the company also collaborated with 25 leading customers via the NetCity joint innovation program with a complete upgrade on the Intent-Driven Network Solution. (HUAWEI INVESTMENT & HOLDING CO., 2018)

With a view to creating several breakthroughs and innovative quantum leaps that boost the customer experience in general, Huawei puts an emphasis on AI, communication capabilities, device performance, and design. In addition, a more robust and efficient ecosystem delivering a more intelligent experience for all scenarios have also been created. In particular, in the smart home area, the company also cooperated with more than 150 brands engaging more than 500 product models. In

addition, the company builds up a huge network of more than 560,000 developers worldwide so as to implement an application service ecosystem. (HUAWEI INVESTMENT & HOLDING CO., 2018)

Regarding actualizing pervasive intelligence, the company has built an intensive AI system as well as all-scenario AI portfolio which is known as the world's first AI IP along with other cloud services and products created upon the Ascend chip capabilities. The company's users are also supplied with the SoftCOM AI solution; enterprises and government customers are introduced into EI (Huawei Cloud Enterprise Intelligence) platform. In addition, the Atlas intelligent computing platform is also built and powered for the integration of diverse types of products including boards, cards, appliances, and edge stations. (HUAWEI INVESTMENT & HOLDING CO., 2018)

With the vision and mission to "bring digital experience to every home and every person", Huawei is becoming the most trustworthy, qualified and efficient digital transformation partner to more than 211 Fortune Global 500 Companies. An open, secure and intelligent digital platform has been built to make customers' digital experience faster. Moreover, a full-stack and industry-leading cloud solutions are also released for full-range support in several angles such as hardware, chipsets and software solutions. (HUAWEI INVESTMENT & HOLDING CO., 2018)

4. A LOOK INTO HUAWEI'S STRATEGIC MANAGEMENT

4.1 Huawei's value chain analysis

4.1.1 Analysis of the case study "Making Connections with smart logistics"

With regards to supply chain management and outbound logistics, Huawei has successfully built up several partnerships and collaborations in order to maintain its competitive advantage as well as achieve its objectives. For instance, back to 2005, the company started to cooperate with i2 in order to create a global supply chain known as GSC, which helped to enhance the delivery capacity to customers dramatically. Additionally, the company's global resources allocation is also strongly supported by the advance in Information Technology systems comprising ASP (Advanced Planning Scheduling) and ERP (Enterprise Resource Planning). (Ni, Y., 2018)

Regarding the application of technology and technical tools, Huawei was known to apply MRP system in 1994 and to start using MRP II in 1997. In 2002, so as to better the low-cost and effective development of rapid-growing production activities as well as to accelerate the effectiveness and the correction of the warehouse management, Huawei commissioned

Siemens Dematic to construct a world-class warehouse located near to its production center. (Ni, Y., 2018)

According to the case study “Making Connections with smart logistics”, Huawei has saved up to 10 of millions of yuan thanks to the application of a wide range of advanced technologies consisting of goods to person pickup (GTP), radio frequency (RF) and picking to light (PTL). In details, Huawei Songshan Lake Supply and Logistics Center which is situated over 25,000 square meters has been responsible for several functions ranging from material acceptance to distribution. The whole system is always improved and maintained in order to meet customers’ needs and a huge mass of coming orders. Various tasks including online circulation inventory, automatic replenishment, expiration management or damp-sensitivity management are all combined and conducted in the central warehouse. With regards to low and mid-frequency materials, the technology of goods to a person is effectively used; meanwhile, for high-frequency materials, rolling racks and small stackers are widely applied. (Huawei Technologies Co, Ltd, 2019)

Aiming at providing the customers with good services and products, Huawei has thrived to be innovative through all the years since 1999, when the company first integrated its supply chain transformation. Moreover, in the period of 1999-2004, so as to offer low-cost and high quality services, Huawei started the integrated supply chain project as well as the integrated processes for sales, R&D and service delivery. In 2004-2014, when going global, the company began to launch out its global supply networks along with global logistics ecosystems in order to improve customer experience and responsiveness. (Huawei Technologies Co, Ltd, 2019)

During the stage of 2015-2020, Huawei aims at emphasizing in core values and customer satisfaction by enhancing ISC+ so as to catch up with the trend of digital innovation. In addition, the company also applied smart logistics which has a considerable impact on process optimization and matching. As a result, work efficiency, as well as hour-based performance, are dramatically enhanced. Furthermore, the company warehouses put the narrow-band eLTE or the so-called wireless communication technologies into practices. (Huawei Technologies Co, Ltd, 2019)

There is no doubt that building an accurate, responsive and effective supply chain and logistics system has brought Huawei lots of business benefits. The first advantage is the ability to deal with more than 10,000 order lines every single day as well as 16,000 LPN average stock-removal every day. Additionally, thousands of storing costs and operating expenses have been cut down thanks to the application of intensive logistics system with the development of technologies. In addition, the multilevel and

multidimensional material management model has improved the credibility in complicated scenarios. (Huawei Technologies Co, Ltd, 2019)

By integrating and digitalizing the supply chain system with the application of AI and IoT, the company has made the communication flow between people and materials become more transparent and easier than ever. Therefore, a more accurate calculation is created, which leads to a significant decrease in transition costs. Moreover, the system has also intelligently provided real-time connections so that data security and data precision has been improved a lot. (Huawei Technologies Co, Ltd, 2019)

AI technology also helps Huawei to achieve distribution efficiency and asset optimization. The process of automation makes great contribution to diminishing costs and promoting cross-enterprise management and operations. Not only does the smart logistics system improve the company supply chain effectiveness but it also has a positive effect on customer solutions. For example, thanks to the integrated data integration services, Huawei's customers now can receive much quicker and better smart logistics services. Hence, the company's customer loyalty has also been accelerated. (Huawei Technologies Co, Ltd, 2019)

Based on the value chain analysis, Huawei has invested significantly into its inbound logistics, operations and outbound logistics systems. Therefore, the company position in the marketplace has been strengthened. Thanks to the strong and wide network circle with hundreds of contacts, partners, operators, and customers, Huawei has successfully sustained its competitive advantage as the global leader in technology and the leading cloud service provider. More importantly, lots of operating costs including storing costs and delivering costs have been reduced significantly by the integration system. Additionally, with the efficient supply chain and logistics system, Huawei's customers have been offered fast, accurate and expected services, which increases the company sale revenues up to billions of dollars. As a result, it could be said that having a responsive and productive supply chain model with AI and IoT applications is one of the key elements for Huawei's today success.

4.1.2 Analysis of Huawei's marketing strategies in European markets

It is highly remarkable that it only takes Huawei corporation 14 years to become a high-tech giant in the worldwide telecommunication industry. As up to 70% of the sales revenues are obtained from international markets, Huawei has successfully applied its own globalization and marketing strategies. Choosing Europe after other Asian and Latin America markets has brought the companies lots of difficulties including low brand recognition, harsh competition from other telecommunication providers

or the negative effect of country of origin. However, as time went by, Huawei not only survives but also efficiently sustains and reinforces its position in the telecommunication as well as mobile industry. (Ke Fu, D. F., 2013)

The marketing strategies of Huawei varied across different stages comprising initial stage, intermediate stage, and mature stage. From the beginning of the European market entry process, the company has faced lots of brand-related issues coming from other dominant players such as Vodafone (TOP 6), Spanish Telecommunication Telefonica (TOP 5) or German Telecommunication DT (TOP 3). Even though the company has invested billions of money into European market from the beginning but there seem to be no returns. The fact that Huawei has been dramatically successful in the domestic market doesn't bear any relation to the same achievement in Europe. The main reason is that compared to China, European markets are much more different in product quality, customer awareness and the speed of technology advance. However, thanks to the well-prepared financial status which is attributed to other more profitable markets, the company has managed to survive in the first period. (Ke Fu, D. F., 2013)

According to the marketing mix (4P), in the beginning, Huawei has focused mainly on providing low-priced products and services as well as customized services for its customers. Based on the radar model below, even though the company has surpassed other suppliers in price and service, there are still big gaps in technology and brand awareness. There is no doubt that Chinese products especially mobile and technical ones are unreliable and low quality to European customers. In addition, once the operators in Europe have found suitable suppliers, it is very rare for them to switch to new entrants (Huawei is one of them) due to low cost investment or low transition costs. In addition, high-tech industry, as well as telecommunication, has been popular in Europe so the competition is also very dense and harsh for new players. Moreover, European customers are already familiar with big brands such as Vodafone or Swedish Ericson so they seem to ignore the new brand which they have no clues about its product quality as well as data security. (Ke Fu, D. F., 2013)

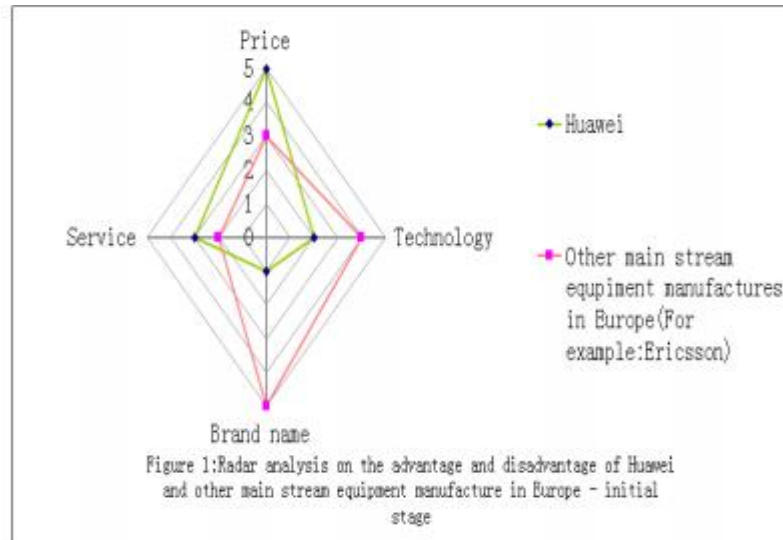


FIGURE 1. The strategy of channel construction

The first marketing strategy that has been applied while Huawei first entered Europe is to provide the users with low-priced products with performance stability. Even though the company aim is to bring the customers high-tech technologies, from the beginning, in order to gain trust and build brand recognition, Huawei only offered the customers low-tech but good quality of performance. Compared to other European telecommunication providers, Huawei has a lower product price by 30%. However, the lowering price technique is not enough for the first successful step. Except for impressing the customers with low prices, Huawei also strictly follows the customer-centric principle; therefore, the company has made great efforts into customizing the services at the lowest costs for its users. It is claimed that Huawei's products may not be the best performers but firmly the most suitable performers. (Ke Fu, D. F., 2013)

Another marketing strategy of Huawei in the first period in Europe is the priority on customers. The company is famous for its one-stop nanny service. After the purchasing step, Huawei supports its customers with free 24/7 after-sale service including maintenance, installation, and warranty; meanwhile other providers only offer 5*8 hours with extra charges. Additionally, in order to reduce the delivery time and to improve the responsiveness, the company has set up HUB in the Netherlands. This system has significantly mitigated the delivery time from 45 days to only 1 week. Moreover, Huawei was always willing to invest into complex projects which require up to 2-3 years to be completed; hence the company has received lots of valuable high-tech prizes, leading to the growing reputation not only between industry experts but also customers. (Ke Fu, D. F., 2013)

It can be said that the key element to Huawei's initial success in European markets is the price sensitivity focus as well as the quality of offered

services. In particular, in the smart phone industry, Huawei's prices are much cheaper than these of Apple or Samsung; therefore a number of price-sensitive customers are willing to switch to another less expensive brand. In addition, as Huawei always tries to provide users with performance stability, there has been mutual trust built between the telecommunication provider and customers. Furthermore, compared to other competitors such as Vodafone or Swedish Ericson, Huawei invested more into customization, which makes a huge impression on Europeans. Additionally, the company also offers free after-sales support, which lives up to most customers' expectation. The company brand has also been spread and known about thanks to worldwide projects and awards. (Ke Fu, D. F., 2013)

Regarding marketing strategies, low-priced techniques, stable performance as well as customized services cannot help Huawei stay competitive and sustainable for a long time. In other words, that kind of motto is already known to European customers so that it is time for the company to change its strategy. Culturally, Europeans usually keep in mind that Chinese products are often low value-added and unreliable ones; therefore when it comes to technical devices such as phones and tablets, they become even more sensitive about their qualities. Hence, in order to survive in the European markets, Huawei ought to change that perception and strengthen their brand as trustworthy and durable. During their intermediate stage operating in Europe, Huawei did focus on brand promotion and technology development. (Ke Fu, D. F., 2013)

With regards to brand recognition, the company spent up to 100 million dollars to show up in summits and European Telecommunication equipment exhibitions including ITU summit in Switzerland and the famous Barcelona exhibition. In addition, the company made great efforts in advertising and communicating constantly to their customers so that the brand gradually sneaks into users' minds. Apart from attending summits and worldwide exhibitions, Huawei also encourages its employees to invites as many customers as possible for company visits. The company even designed a traveling route from Beijing to Shanghai then to Shenzhen; therefore, the customers not only know the brand but also learn more about Chinese culture. The main purpose is that Huawei aims at changing customers' perception of China from old and ancient culture into rapidly changing, modern and innovative culture. Additionally, through the company headquarter visiting, customers have the chances of observing manufacturing process, advanced technology as well as the efficient logistics centers, which will shorten the gap between users with the brand. (Ke Fu, D. F., 2013)

In order to weaken the bias of Chinese products and origins, Huawei turned to emphasize on stable product offers. Even when the customers show strong interest in other high-tech HW products, the company still

resists on offering ones that have the best and the most stable performance. In addition, as the brand popularity is quite unnoticeable, the company established many partnerships and collaborations with other operators and suppliers such as Ericson, Siemens, Nokia or 3COM which are undoubtedly familiar and reliable to the European customers. It takes the company up to 10 years to build up valuable and beneficial relationships with other suppliers, attend thousands of summits and exhibitions and to invite thousands of customers; hence the HW brand nowadays presents in the worldwide top telecommunication providers. Another marketing strategy used in the second stage is that the possession with consistent technology development and capacity. In particular, from the beginning, in order to save costs and follow the customer-centric slogan, Huawei applied the adaption technology which relates to design the products based on customers' needs and requirements. Nevertheless, when the level of competition gets harsher and more and more breakthroughs are invented, Huawei had to switch to leading technology, which requires more researching work, workforce and expenses. (Ke Fu, D. F., 2013)

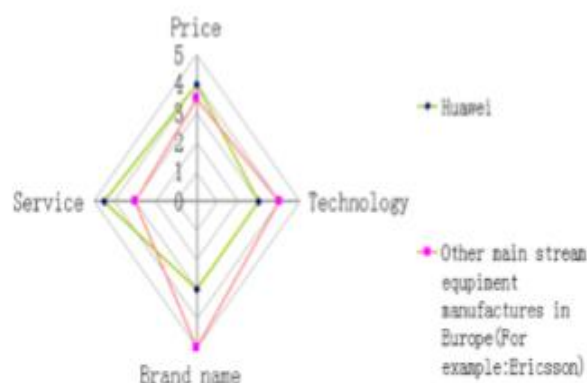


FIGURE 2. Radar analysis on the advantage and disadvantage of HW and other main stream equipment manufacture in Europe intermediate stage

According to the radar analysis above, Huawei's position in the European markets has changed dramatically thanks to the successful application of the marketing strategies. Basically, the company still holds the advantages of the cost leadership in the market as well as the best service provider. Even though there is still a gap in technology development compared to other European manufacturers, the company has made huge progress in comparison to the earlier stage. Regarding the brand recognition, Huawei still cannot stand out completely in the market but it is undeniable that more and more Europeans become more familiar with the brand thanks to the big brand-related collaborations. (Ke Fu, D. F., 2013)

During the maturation stage in the European markets, Huawei changed its strategic planning from just a vendor that got luck in project bidding into a profitable supplier of other operators. In particular, the company has successfully signed the contracts with two big operators including Vodafone and British Telecom. Moreover, the company even formed a task oriented team to deal with strict requirements coming from the British Telecom's side; after two years with more than one hundred money consumed, the company finally made its way to British Telecom's shortlist. (Ke Fu, D. F., 2013)

However, collaborating with the operators as a supplier is not enough for the market sustainability of Huawei. Therefore, the company tries its best to fulfill the dream of becoming a partner. It is common knowledge that operators have the rights to set the rules when it comes to looking for a partner for a long-term business relationship. The first condition is that partner needs to be a large and sustainable company with advantages in R&D and strong competitive advantage in the market. The second condition is that the partner's products should be familiar with the operator's network. Another condition is both sides should share the same business strategic planning and benefits gained from the collaboration. In order to meet those strict requirements, Huawei worked hard to maintain its own advantages, establish joint laboratory with clients, reform the rule and procedure and provide the customers with end-to-end solutions. In particular, the company started working with Hay Group, PWC, IBM, and KTFR to receive valuable consultancy from them. Additionally, Huawei also rebuilt its own IT-based system applied for R&D and supply chain processes. In order to accelerate the rate of matching with customers, HW and other operators such as Vodafone and Norway Telenor have collaborated to build joint innovation centers. Compared to other competitors (Ericsson, Cisco, and Alcatel-Lucent) which only focus on one product line, Huawei managed to provide its customers the whole range product line. (Ke Fu, D. F., 2013)

4.1.3 Digitalization of Huawei's workplace

As a global leader in ICT and telecommunications, Huawei aims at building the most secure, simple, fast and convenient communicative environment for its staff and employees. It is strongly believed that a transparent and efficient office working environment will boost employee performance, corporate development as well as sustain the strategic goals. In the next three to five years, this Chinese tech giant tends to create the ROADS experience within its organization: "real-time, on-demand, all-online, DIY and social". (Huawei Technologies Co., Ltd., 2019)

In order to easily control company growth, organizational information and employee contribution, in January 2017, Huawei released WeLink – an integrated project management tool in which employees can freely discuss and exchange information. In addition, all kinds of organizational communication including calls, texts, documents or emails are included in the system, which makes the flow of communication smoother and easier. Thanks to WeLink, now all Huawei’s global clients and customers can have a conversation with the company staff at any time in any device just by one click. Additionally, the system WeLink also applied the public cloud translation engine so as to translate up to 60 different languages for faster and real-time communication. (Huawei Technologies Co., Ltd., 2019)

Moreover, with regards to organizational learning, Welink also consists of the knowledge platform providing live video, text or video on demand to support the employees with technical knowhow as well as needed language. Welink also intelligently recommends the users to access to business cases or corporate documents to boost their performance in internal projects. (Huawei Technologies Co., Ltd., 2019)

In addition to connecting and sharing knowledge, Welink is also known to allow users to connect different equipment with different digital IDs. In other words, the connections between conference screens, employees and conference equipment are intelligently built to enhance efficiency and convenience. Additionally, the employees can use the QR codes to access to conference for remote conversation with their colleagues or customers. By using the Welink electronic whiteboard, the employees can quickly arrange the remote or local meetings in conference rooms or in open areas. (Huawei Technologies Co., Ltd., 2019)

As an IT-based system, Welink uses WeApps and open API interface to present information and knowledge in sections and cards. It is said that Welink is the first step for the digital evolution and workplace transformation at Huawei. Thanks to Welink, Huawei’s human resource management has been improved dramatically, which makes a great contribution to company performance and strategic objectives fulfilment. Welink provides the most efficient and easiest for up to 120,000 daily users worldwide with only 3-second mobile access. (Huawei Technologies Co., Ltd., 2019)

The introduction of Welink into Huawei’s internal organizational environment has brought several benefits both for employees and clients all over the world. The first advantage is that a huge amount of transition costs and traveling costs has been cut down thanks to the global connectivity and remote conversation. Another benefit is that it is easier for project managers and company directors to supervise, monitor and give advice to their employees via the system. Furthermore, as all information is shared and exchanged transparently, more tasks will be

completed efficiently and the interpersonal relationships between employees, managers, and clients are strengthened. (Huawei Technologies Co., Ltd., 2019)

4.1.4 A study into Huawei's own digital transformation

There is no doubt that one of the main reasons why Huawei can still hold its position as a high-tech global leader as well as the world largest telecommunication provider is its continuous innovation and digital development. "It is difficult for a large 'elephant' to 'dance' flexibly". This metaphor refers to Huawei's tremendous internal system and a huge number of customers. In addition, the company used to struggle with several issues such as complex process, low R&D efficiency, and ineffective management. However, thanks to the infrastructure restructuring process with technological and digital applications, Huawei has successfully overcome those difficulties and sustained effectively. (Huawei Technologies Co., Ltd., 2019)

In order to increase the overall operational efficiency within the organization, the company has adopted the whole brand-new internal process called "Elite teams", which have changed completely the operation processes, management architectures and IT systems. Additionally, the company aims at making every business domain service-based and digital and obtaining the industry-leading operational. It is supposed that Huawei will quickly achieve its main business objective as "bringing digital to every person" by applying these team-centric operations. (Huawei Technologies Co., Ltd., 2019)

Recently, Huawei made a great effort into digitizing the whole business across various departments from R&D to logistics. In order to save thousands of R&D costs and hundreds of working days, the company built up new streamlined lab environments. Also, many cloud-based systems including desktop cloud, test cloud, emulation cloud, and design cloud are provided to R&D personnel, which dramatically improves the management efficiency and cut down to 50 percent of operating cycle times. Thanks to the cloud-based R&D platform, nowadays Huawei's engineers are capable of sharing a public platform much faster (the total duration has been mitigated from hours to minutes). (Huawei Technologies Co., Ltd., 2019)

Moreover, Huawei develops technological impacts not only on its R&D system but also on the sales operations. In particular, an integrated sales and operation system has been developed in order to support project managers, operation managers, and sales force. Hence, business operation efficiency, frontline user experience, and team collaboration have been significantly improved. (Huawei Technologies Co., Ltd., 2019)

Regarding data controlling and data security, Huawei has also built one integrated smart campus to improve the service experience, responsiveness, and security protection. Furthermore, the construction of the campus is backed up by Intelligent Operations Center (IOC), ICT infrastructure and the digital enablement platform. Thanks to the advance in the smart campus, big changes have been made; for instance, the average incident response time has been cut down from 7.5 to 2 minutes and the handling efficiency has demonstrated up to 50 percent of improvement. (Huawei Technologies Co., Ltd., 2019)

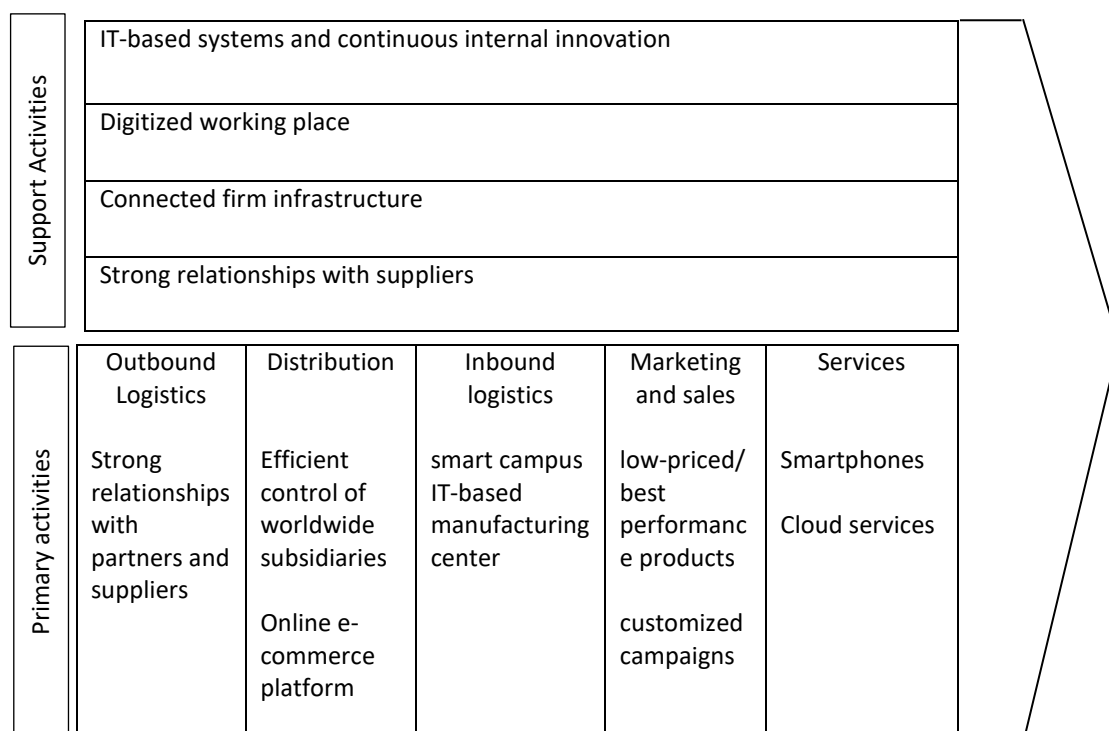
Having up to 200 subsidiaries operating in 130 remote offices all over the world, Huawei had many difficulties in dealing with legal compliance and accounting standards. However, after digitalizing the accounting system and automating the payment process, the company has successfully the historical billing data monitoring time down to only 5 minutes. There has seen a huge shift from the traditional and manual accounting system to integrated and automatic payment process within the organization. Therefore, the account payable department becomes more secure and efficient. Several new approaches including data quality monitoring, data-analysis-platform improvement and transaction accounting automation have been adopted to strengthen the financial system. (Huawei Technologies Co., Ltd., 2019)

In order to cope with a huge number of mobile phone orders, Huawei has built up an intelligent online platform consisting of the purchasing process and order handling backed up with talented front-end and back-end engineers. It comes as a surprise that the system has the ability to handle up to 1 million orders every single hour, generating 10 billion of sales revenue a day. In details, the front-end system of the e-commerce site is created to provide the customers with the ROADS experience as mentioned above. In addition, the iDeal technology helps to facilitate Huawei's internal capabilities including finance and supply as well as third-party ecosystem capabilities comprising payments and logistics. In addition to front-end and iDeal, the back-end system integrates auditing, accounting, and manufacturing. (Huawei Technologies Co., Ltd., 2019)

As one of the world largest manufacturer, Huawei's owners suppose that an inefficient manufacturing plan can lead to detrimental effects for the business development, growth and clients' performance. Therefore, in order to provide its partners and suppliers with real-time information on maintenance, inventory or material availability, the company has built an integrated command center and manufacturing operations. For instance, after connecting successfully with the Huawei's eLTE-U solution, ABB robots are able to receive the alarm data in real-time for preventive production-equipment maintenance. Moreover, to deal with increasingly complexity and diversity within the business, Huawei has created a multi-

cloud IT platform to secure business data and manage growth. Additionally, the company has rebuilt and integrated the ERP (Enterprise Resource Planning) system into the cloud. (Huawei Technologies Co., Ltd., 2019)

4.1.5 Summary of Huawei's value chain model and its impacts on the company growth and development



It can be easily seen that Huawei has reformed and evolved its whole organization both internally and externally in order to stay competitive in the relating industry and to hold the leading position in the telecommunication marketplace. The primary activities are strongly and digitally backed up by long-term and sustainable collaborations with suppliers, modern working environment and IT-based systems and breakthroughs.

The primary activities are linked closely to each other in order to offer the fastest, most accurate and appropriate service for the clients as well as customers. For instance, the distribution channel (Huawei's e-commerce site) is built based on the marketing orientation of customer-centric offers. In addition, thanks to the strong and efficient relationships with worldwide suppliers and partners, Huawei gains more control on distribution productivity and operational efficiency. Moreover, thanks to totally IT-based internal systems including quality management, human resource

management or financial management, Huawei is able to provide the customers with the highest core values regarding product quality and customer support.

4.2 Huawei's SWOT analysis

As mentioned above, it is very necessary for each business to look into its internal environment (strengths and weaknesses) and external environment (opportunities and threats) to be competitive in the marketplace. Moreover, one of the most important learning lessons from this strategic tool (SWOT) is that the company is able to build the links ("match and mix") between four components (strengths/opportunities or weaknesses/opportunities). And naturally, in spite of being the world telecommunication provider and a high-tech giant, Huawei - with several beneficial opportunities and remarkable strengths – still has some law-related weaknesses. However, in order to stay sustainable and to keep the leading position, it is time for the company to deeply understand where it is now, who it wants to be in the future and especially how to cope with unexpected challenges by utilizing the environmental chances.

4.2.1 Huawei's strengths

Continuous R&D capability and implementation

It is undeniable that Huawei owns various strengths ranging from the global market share to innovative internal environment. One of the first strength at Huawei is its R&D capability. In other words, the company has been always willing to spend millions of dollars on its Research and Development projects and collaborations with other suppliers.

Table 1: Total R&D spending (USD) and R&D in percentage of revenue (2006 – 2011)

Year	Alcatel-Lucent		Cisco		Ericsson		Huawei	
	Spending	Per cent	Spending	Per cent	Spending	Per cent	Spending	Per cent
2006	1929.82	11.9	4067	14.3	4028.71	15.3	850.39	10
2007	4314	16.5	4598	13.2	4466.92	15.4	1285.77	10
2008	3837	16	5325	13.5	4263.55	16.1	1534.48	8.4
2009	3622	15.3	5208	14.4	4621.01	16	1954.32	8.9
2010	3532	16.7	5273	13.2	4670.35	15.5	2674.70	9.7
2011	3200.44	16.1	5823	13.5	4853.81	14.4	3807.69	11.8

Source: Ahrens, 2013

(Huawei - Chinese Telecommunications Giant Huawei: Strategies to Success)

According to the table above, Huawei's R&D expenditure has been more than tripled during the period (2006 – 2011) from 850.39 USD to 3807.69 USD. In addition, the rate of R&D to total sales revenues has also risen up to 11.8 percent in 2011. Compared to its largest competitor, Ericsson, Huawei has a higher growing rate in the total R&D expenditure as well as higher increasing rate in R&D percentage. Additionally, in comparison to Alcate-Lucent's R&D expense, that of Huawei is much higher (3807.69 versus 3200.44 USD). Therefore, Huawei has applied its R&D ability effectively to generate more sales revenues as well as to hold the position as one of the leading telecommunication companies in the industry. (Huawei - Chinese Telecommunications Giant Huawei: Strategies to Success)

Effective and influential marketing strategies

In addition to Research and Development strength, Huawei's successful and inspiring marketing strategies have never been underestimated. In other words, it does not Huawei a long time to become a worldwide well-known and influential brand as a reliable, innovative and customer-centric telecommunication provider. Except for the USA market, Huawei has quickly gained a large market share and achieved big success in other regions of the world. In particular, the company now the world's second largest mobile phone manufacturer and distributor just after Samsung, holding up to 20 percent of market share. The worldwide famous business magazine – Forbes has ranked Huawei as one of the top 100 most valuable brands in the world with a value of 8 billion dollars. (Forbes Media LLC, 2019)

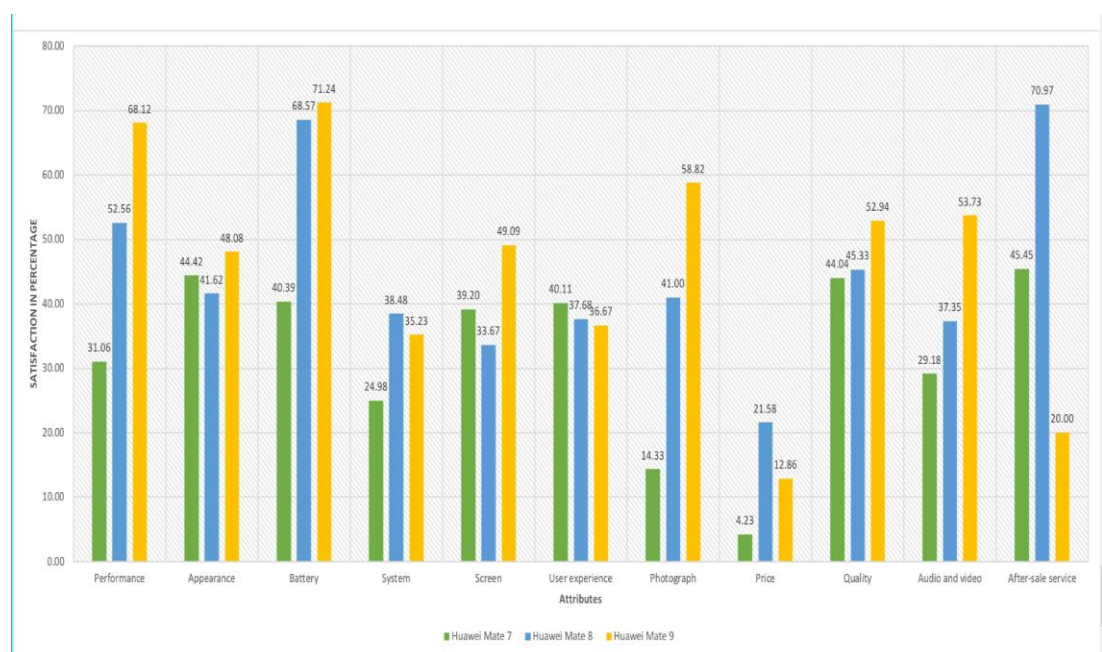
“Marketing is number one because we have to tell our story and help people discover our brand. It's widely recognised in Huawei that marketing is critical to our future success” – said by Huawei's CMO, Andrew Garrihy. As a young, dynamic and innovative, Huawei is open for new partnerships and collaborations aiming to deliver the best product at the most suitable market. In addition, thanks to large investment in product innovation, Huawei is now able to tell customer mind blowing stories about the upcoming smartphones. Thanks to the effective and creative marketing innovation, Huawei's global total sales have risen up to 13.3% while both two large competitors Apple and Samsung show a deep drop of 11.9% and 19.3% respectively. (Vizard, 2018)

Employee-owned, customer-oriented and innovation-driven organization

There is no doubt that people element is the key to most of business success, especially when it comes to technology and innovation. At Huawei, employees are always encouraged and motivated to perform at their best so that they can both create values not only for the company clients but also themselves. Back to 1990s, Huawei conducted a stock-

based salary and contribution calculating program for its employees, which had a positive effect on employee overall performance. In addition, Huawei's worker is also motivated to become his or her own entrepreneur; therefore, having an innovative, dynamic, talented and entrepreneurial team is the most important human-related factor for Huawei's success. (Jerome, 2018)

In addition to employee-focused organization, Huawei is also known as the best customer service provider as well as the careful listener. According to an online review website, Huawei has significantly upgraded its third generation Huawei Mate 9 compared to Huawei Mate 7. In particular, three product features including performance, battery, and photography have been developed much better when Huawei Mate 9 was released into the market. (Jerome, 2018)








(Jerome, 2018)

Sustainable success and accelerating growth in European markets

Thanks to tremendous marketing investments into the European markets, Huawei has gained up to the third market player in the smartphone industry according to Canalis, Smartphone Analysis (Jerome, 2018). Based on the table above, in 2018, there has seen a growth of 38.6% with the total unit shipments of more than 7.4 million regarding Huawei's business figures. The rapid growth and increasing success lead Huawei to account for up to 16.1 % of total market share. (Jerome, 2018)

Top five smartphone vendors in Europe in Q1 2018

Rank	Vendor	Unit shipments	Growth	Share
#1	 SAMSUNG	15.2 million	-15.4%	33.1%
#2	 Apple	10.2 million	-5.1%	22.2%
#3	 HUAWEI	7.4 million	+38.6%	16.1%
#4	 Xiaomi	2.4 million	>+999%	5.3%
#5	 NOKIA	1.6 million	N/A	3.5%

Source: Canals estimates, Smartphone Analysis, May 2018

canalys

Collaborative strategic partnerships with global brands

Another critical success factor of Huawei's conquering the world is its strategic partnerships with other global and famous service suppliers and providers including Google, Leica Camera AG, and Porsche Design. Thanks to these strategic co-operations, Huawei can enter untapped markets serving various customer base, which has been a struggle for Apple. In addition, in order to provide customers with better and more efficient camera, Huawei collaborated with Leica Camera, which was considered a win-win contract. (Jerome, 2018)

Strong and sustainable financial status

	2018		2017	2016	2015	2014
	(USD Million)	(CNY Million)		(CNY Million)		
Revenue	105,191	721,202	603,621	521,574	395,009	288,197
Operating profit	10,689	73,287	56,384	47,515	45,786	34,205
Operating margin	10.2%	10.2%	9.3%	9.1%	11.6%	11.9%
Net profit	8,656	59,345	47,455	37,052	36,910	27,866
Cash flow from operating activities	10,889	74,659	96,336	49,218	52,300	41,755
Cash and short-term investments	38,777	265,857	199,943	145,653	125,208	106,036
Working capital	24,921	170,864	118,503	116,231	89,019	78,566
Total assets	97,109	665,792	505,225	443,634	372,155	309,773
Total borrowings	10,201	69,941	39,925	44,799	28,986	28,108
Equity	33,994	233,065	175,616	140,133	119,069	99,985
Liability ratio	65.0%	65.0%	65.2%	68.4%	68.0%	67.7%

(HUAWEI INVESTMENT & HOLDING CO., 2018)

In the period of 5 years (2014-2018), Huawei's total sales revenues have risen up dramatically from 288,197 to 721,202 CNY Million (nearly tripled). In addition, there is an increase of up to 114% of the total operating profit. Moreover, the figures in the table show that Huawei has been profitable sustainably through the time. In 2018, its net profit reached up to 59,345 CNY million compared to only 27,866 CNY million in 2014. Regarding cash flow from operating activities, the numbers are always positive, which is a good sign for business development and sustainability. (HUAWEI INVESTMENT & HOLDING CO., 2018)

Additionally, Huawei's total assets have doubled in only 5 operating years, which is considered to be highly remarkable and impressive for such a late bloomer in the mobile phone industry. More importantly, the liability ratio decreases from 67.7% (2014) to 65% (2018), which means that Huawei becomes better at controlling debts and ensuring its liability ability. In addition, the business working capital has also increased by 117.5 % (from 78,566 to 170,864 CNY million). It is clearly seen that Huawei has a very strong and impressive financial status, which roles as an important strength regarding its internal analysis. (HUAWEI INVESTMENT & HOLDING CO., 2018)

4.2.2 Huawei's weaknesses

Modest tenure and harsh competition in North America

Apart from its efficient internal working environment and strategic advantages, there are still some downsides that Huawei needs to pay more attention to and look into in order to mitigate the weaknesses' impacts on the company performance. The first weakness of Huawei is its modest tenure compared to other competitors such as Ericsson or Cisco. In other words, Huawei is still a young entrant to the telecommunication field so that its tenure in the industry is not widely noticeable and popular. Regarding market extension, there seems to be a difficulty for Huawei to set its foot on the North American market. In addition, with the establishment of the LTE technology in North American market, it is undoubted hard for Huawei to compete with its brand-new technology. (Chua, 2010)

Tainted company and the increasing number of controversies

In the US market, Huawei is facing lots of political-related obstacles regarding its brand and company image. The company also lost the support from AT&T, which leads to further loss in strategic partnerships with key suppliers in the US market. In addition, the fact that Huawei's CFO has just been arrested in Canada is also a weak point of the company during such

a sensitive period. There are many times that Huawei has been accused of utilizing its resources for the aim of espionage. Furthermore, new banning laws introduced from US governments have caused Huawei lots of obstacles to enter into US market and compete to other players in the US. Even though the US is known as the leading market for smartphones, Huawei still holds a very low position in this relative area. (Pratap, 2019)

Low efficiency in sales forecast and financial planning

Apart from market entry difficulties, Huawei also has some weaknesses in financial planning and sales forecast. In addition, the net contribution of Huawei and its profitability are demonstrated as below the industry average. Additionally, the liquid asset and current asset ratios have shown that the company could have utilized its resources more effectively. Furthermore, with regards to operational efficiency, Huawei's total days' inventory is quite high compared to that of other competitors. Another internal weakness of Huawei is its high attrition rate of the workforce, which means it takes Huawei more time and effort in developing and training its employees in comparison with another competitor. (Huawei SWOT Analysis / Matrix, n.d.)

Impressive but still low total sales revenues

Even though the Chinese telecommunication market is dramatically increasing in popularity, this sector is still smaller compared to the trading blocs market in which big giants such as Nortel, Motorola or Siemens are operating. Through the years, Huawei's financial figures especially sales revenues have been rising up steeply; however, the total sales are still lower than that of other players. (Low, 2007)

Based on the table below, in 2004, Huawei's total sales was only \$5.58 billion; meanwhile, that of Motorola and Nokia were much higher (\$31.3 and \$39.1 billion respectively). In addition, the rate of R&D investment to the total sales at Huawei is also smaller than that of Nokia and Motorola. As continuous and large investment in R&D are the keys to competitive sustainability and future growth in telecommunication industry, Huawei will get itself into difficulties of competitive advantage uncertainty if the rate remains lower than other competitors. (Low, 2007)

Table II Huawei's R&D compared with competitors: 2001-2004

Telecom manufacturer	2001			2002			2003			2004		
	Sales ^a	R&D ^a	% of sales	Sales ^a	R&D ^a	% of sales	Sales ^a	R&D ^a	% of sales	Sales ^a	R&D ^a	% of sales
Huawei	3.08	0.34	11.0	2.67	0.36	13.5	3.83	0.39	10.2	5.58	0.48	8.6
Motorola	30.0	4.3	14.3	26.7	3.8	14.2	27.1	3.8	14.0	31.3	3.1	9.9
Nokia	27.8	2.7	9.7	30.8	3.1	10.1	36.2	4.6	12.7	39.1	5.0	12.8
Alcatel	22.6	2.9	12.8	17.4	2.2	12.6	14.3	1.8	12.6	15.3	2.0	13.1
Lucent	21.3	3.5	16.4	12.3	2.3	18.7	8.5	1.5	17.6	9.0	NA	NA

Note: ^a US\$ billion
Source: Company reports

(Low, 2007)

4.2.3 Huawei's opportunities

The trend of digitalization in international businesses

There has seen a rising trend in internal digitalization within international businesses in order to be more efficient, update and competitive. That means Huawei's customer base can become larger and larger as more and more businesses are willing to cooperate with the company to improve their digital ability as well as technological development. Additionally, as Huawei has successfully built its company image as a reliable technology provider along with trustworthy strategic partner in the high-tech sector, there is a high likelihood for more and more businesses especially SMEs (small and medium enterprises) to join global network of Huawei to better their digitalization. According to Mr. William Xu – the chief strategic marketing officer of Huawei, by 2025, there will be more than 2 billion people accessing to mobile connection along with up to 500 million broadband homes, which enables Huawei to significantly support its operators to catch up with that growth. (Huawei Technologies Co., Ltd, 2017)

The huge impact of 5G application

There is no doubt that the adaption and the use of 5G will open the whole new world and a bunch of valuable opportunities for businesses and individuals. Never has the real-time connectivity been evolving that much in our world. According to Huawei's R&D department, 5G will definitely unveil thousands of breakthroughs, innovations and growing opportunities for businesses and their operations in various sectors such as automobile, smart living, virtual/ augmented reality, etc. Owing to the most potential and promising technology (5G) will lead Huawei to several strategic partnerships as well as technological collaborating requests. Hence, with its advance in 5G invention, Huawei can have considerable effects on

different industries, which makes the company more globally and technologically dominant. (Wireless X Labs, 2017)

Governmental support in collaboration

Regarding positive and opportunistic governmental supports, China's Ministry of Information Industry keeps encouraging large national and local operators comprising China Mobile and China Telecom to purchase Huawei's telecommunication equipment. Not only does Huawei receives huge support from the government side but it is also significantly helped by the national banks and local insurance companies. For instance, the China Development Bank has sponsored for Huawei's oversea customers a huge amount of up to US\$ 10 billion to purchase products from Huawei. In addition to China Development Bank, Sinosure – a Chinese government insurance company used to help Huawei with export credit financing operations so that its partner Telemar Norte Leste SA known as Brazil's biggest telecommunication operator can have the capability of financing the purchase of Huawei's products. (Low, 2007)

The USA-China trade war's marketing effects

It is undeniable that the trade war between China and the USA has affected significantly both Chinese and American economic development. Back to August 2018, when the USA started to apply 25 percent tariff on \$34 billion Chinese goods, the Chinese government immediately replied back by setting up also 25 percent tariff on \$60 billion U.S imports. It can be seen that the trade war was becoming more and more intense and unstoppable while both governments kept attacking back each other economically. (Tao Liua, 2018)

There are several concerns regarding the causes of this trade war. One of them is that the Chinese's large trade surplus can have a negative impact on the USA's job creation. Another issue is that China can be using unfair and illegal approaches to acquire American technologies at surprisingly low prices (for example by "Joint Venture" and "Partnerships"). Additionally, by acquiring USA's technologies along with maintaining the trade surplus into the American market, China is targeted to weaken the USA's national security as well as international standing. (Tao Liua, 2018)

According to Canalys's data reports, in 2018 when the trade war occurred, Huawei still holds the dominant position (with up to 38 percent market share) in Chinese market regarding smartphone industry compared to other providers such as Apple, Xiaomi and Samsung. In addition, there has seen an increase in Huawei's revenues while there was an opposite situation for Apple – one of Huawei's largest competitors in China. The reason is that Huawei has successfully taken advantage of the political impacts suffered from the war. In other words, the company aimed at

patriotic customers who take nationalism into buying decisions and launched a marketing campaign encouraging those ones to purchase Huawei's smartphones – Chinese products in order to support the Chinese economy. Therefore, even during the war, Huawei was still very beneficial from its political and sociological marketing strategies. It can be said that a part of Chinese young people who is nationally supportive and sensitively affected can become a whole new opportunity for Huawei in China's market. (Hu, 2019)

Untapped market potentials

According to a recent survey conducted by HTW Market Intelligence report, several big players including Google, Huawei, Microsoft, and Apple have successfully entered the Public Cloud Container Service Market which brings them back millions of annual revenues. The survey's data was compiled systematically and categorically based on key performance indicators of a company such as yearly growth rate, bills per month, etc. In addition, the report was analyzed both quantitatively and qualitatively in order to release most valid outcomes. (Report, 2019)

Regarding the cloud service market, many case studies have shown that Huawei has been launching new projects as well as cooperative collaboration with other companies, states or governments with a view to bringing data to everyone and to everywhere. Additionally, bawaring the importance of information sharing and data security within China's governments, Huawei has successfully developed its own governmental cloud service platform which has responsibility to helping governments to control state data more efficiently. For more details, Mr. Xing Yihai, who is known as Guangzhou's city director was awarded by adopting Huawei's cloud platform for governmental purposes. It can be said that Guangzhou is the typical untapped customer segment to Huawei's business. (Donglan, 2018)

In fact, there are about 6.8 billion data points within the Huawei's governmental cloud platform and governmental departments are considered to exchange up to 17 millions pieces of data every single day. As a result, providing governments an effective data management tool – the so-called cloud platform is undoubtedly a profitably sustainable opportunity for Huawei. (Donglan, 2018)

4.2.4 Huawei's threats

Chinese economic reforms and governmental impact

Thanks to the Chinese's world trade organization agreement, greater liberalization will be allowed and promoted in the Chinese local market. Therefore, there has seen a decrease in local preferences for Huawei's services and products. In addition, due to the national economic reform, transparency and accountability are set as the top two priorities when it comes to telecommunication and data-related sector. In general, in spite of being the tech giant as well as a potential telecommunication giant, Huawei is still facing several legal, data security and institutional issues from both local authorities and Chinese government. In addition, after the economic reform, the level of competition in the domestic market is also increasing quickly so that being a local dominance becomes harder for Huawei to sustain and protect. (Low, 2007)

The increasing competition level of world leaders in telecommunication

Frankly speaking, at the time when Huawei puts all its efforts in expanding and seeking new overseas markets, the giants in the telecommunication sectors such as Siemens, Ericsson or Motorola have already and successfully introduced and established their brands and owned their global presence along with impact. Therefore, it is undoubtedly hard for Huawei to share the 'big cake' when joining the "game" late. Additionally, due to the long lasting market uncertainty, the giants have become more solid at fighting over the global market shares; hence not only is Huawei facing the domestic competition but it also has to fight against worldwide well-known telecommunication brands. (Low, 2007)

The pressure of innovating continuously

Even though Huawei is known as the world leader in telecommunication industry arising from emerging markets and countries with countless innovations and breakthroughs, a huge investment in R&D is never enough for firm sustainability. In addition, Nokia has been spending its revenues on R&D expenses for up to 10 years just for serving its unveiled customer base in spite of its strong market position; therefore, in future in order to survive in such competitive business world, it is a need for Huawei to keep looking for new customer segments with different demands. Hence, more and more disruptive innovations should be created and developed, which can be risky to Huawei's current investors. There is no doubt that game-changing quantumleaps are the key factors for a company to level up in the marketplace but they are also burdens to investors as more time, effort, and capital must be spent on those R&D projects without any guarantee. Therefore, as telecommunication industry's structures and competition level change rapidly and unpredictably, Huawei not only needs to make great efforts in product and service innovation but it also has to protect its IPO as well as its global brand. (Martin Roll Company, 2018)

Negative brand image in the USA market

It can be said that the only market which Huawei has not successfully conquered yet is the USA. No matter how hard the company tries out to set its foot into the market which holds up to 20% of global telecommunication spending, currently, the USA still prevents Huawei from entering the market. The main reason why American businesses are encouraged not to collaborate with Huawei is that there are some data security concerns as well as Chinese state policies. Back to 2007, the CEO of Huawei Ren Zhengfei was reported to work for the Chinese military as the role of civil engineering director; therefore, since then he becomes the political target of the states. (Martin Roll Company, 2018)

Dependence on the CEO rotating process

As one of the key successful factors for Huawei's development as well as the global expansion is its efficient and effective marketing methods applied suitably into different markets, Huawei always focuses on rotating its CEO roles with marketing-oriented personnel instead of operations or finance experts like other companies. However, as the whole company sustainability depends on only one field (marketing), Huawei is now facing the threat of choosing the right one for this ultimate position. In other words, in order to be competitive and brand-influenced, the company needs to ensure that its top management team including CEOs and directors should be ones possessing excellent global marketing expertise with the international and intercultural orientations. Hence, the company has to fight against other competitors for head-hunting or to spend more money on hiring and training the senior staff. (Martin Roll Company, 2018)

The uncertainty of joint ventures

In addition to its main focus on international marketing strategies, Huawei is also known to hold a strong interest in mutually beneficial co-operations or partnerships. However, sometimes, a joint venture can end up into loss or damage to the brand image if the company was not careful enough from the beginning. For example, Huawei and 3Com signed a joint venture contract in which 3Com is responsible for selling Huawei's products. Even though 3Com can be significantly beneficial from the outset, Huawei can become even more profitable in the long run. Nevertheless, as 3Com sells products and devices to American military along with rising security concerns from the US government regarding Chinese technological products especially those of Huawei, back in 2010, 3Com was eventually bought by HP – one of the largest American computer provider. Hence, the outcomes of a joint venture can be either promising or wasting. As the trend of Merger and Acquisitions are becoming more and more popular, Huawei needs to play safely in order not to lose its investment as well as resources. (Martin Roll Company, 2018)

Summary of Huawei's SWOT analysis

It can be clearly seen that in order to stay competitive and become a “giant” in telecommunication and smartphone industries, Huawei has utilized its core competences (high technology, innovations), human resources (digital workplace and tech-savvy workforce), strong market position (huge market share, remarkable brand recognition) and strong internal assets (IT centers and financial advantage) to cover its weaknesses and cope up with environmental challenges. However, as mentioned in the literature review section, the key to a business's SWOT analysis is to create the links and relationships between those four components (Strengths/Opportunities, Weaknesses/ Opportunities, Strengths/ Threats; Weaknesses/ Threats) and to come up with appropriate solutions and approaches for sustaining company competitive advantages.

Below is presented the table of SWOT analysis's outcomes or in other words the TOWS matrix regarding Huawei case. Furthermore, the following table not only summarizes all main points (four components) but also shows the possible solutions when those components encounter each other.

HUAWEI's SWOT Analysis – TOWS Matrix

TOWS matrix	<u>Strengths</u>	<u>Weaknesses</u>
	S1. Continuous R&D capability S2. Effective marketing strategies S3. An innovative and customer-centric organization S4. Strong financial status S5. The impressive market advantage in Europe S6. Collaborations with global brands	W1. Harsh competition in North America markets W2. Low sales revenues W3. Ineffective sales forecast and financial planning W4. The increasing number of controversies

<p><u>Opportunities</u></p> <p>O1. The untapped cloud service market O2. Governmental support in collaborations O3. The USA-China trade war's political effects O4. The rise of digitalization in doing business O5. The huge impact of 5G invention</p>	<p>S1 + (O4, O1) Invest more in R&D to lead the digitalization trend and cloud service market within China S2 + O3 Target at Chinese youngsters who is politically sensitive and patriotic (S3,S4)+O2 Take advantage of governmental opportunities to utilize financial resources (S6, S5) + O5 Sell the 5G technology to global brands in Europe</p>	<p>W1 + O2 Target other markets eg Latin America utilizing governmental support (W2,W3) + (O1, O5) Register the IPR for the 5G and regard it as a new revenue source, also conquer the cloud market (W4, O3) Utilizing the political effects to drive customers towards nationalism in buying decisions</p>
<p><u>Threats</u></p> <p>T1. Negative brand image in the USA T2. Chinese governmental/economic reforms T3. Uncertainty of joint ventures T4. The pressure of being continuously innovative T5. Increasing competition from global leaders</p>	<p>S5 + T1 Focus more in already successful European markets to sustain the brand S1 + T2 Boost R&D capability more effectively to cope up with new entrants S3 + T3 Create the company own patterns and technologies to less suffer from ending cooperations S5 + T4 Benchmark and learn from others (S1+S2) + T5 Try to stand out as a customer-centric and high-quality brand</p>	<p>W1 + T1 Change Americans' perspectives by higher quality, cheap prices, and user friendliness W2 + T2 Collaborate with local distributors to set up long-term cooperations W3 + T4 Cut down operational costs, utilize revenue sources in R&D projects W4 + T3 Compromise with partners and create mutual benefits for joint ventures</p>

4.3 Benchmarking towards Huawei's strongest competitors

4.3.1 Arista Networks – Huawei's most competitive market player

Compared to Huawei technologies Co, Ltd., Arista Network has a larger market presence especially by delivering up to 20 million networking spots through its EOS and CloudVision worldwide. In other terms, Arista aims at campus environments and large-scale datacenters by working towards to cognitive cloud and software-driven cloud networking. It can be clearly seen that Arista has won several remarkable awards and has released a lot

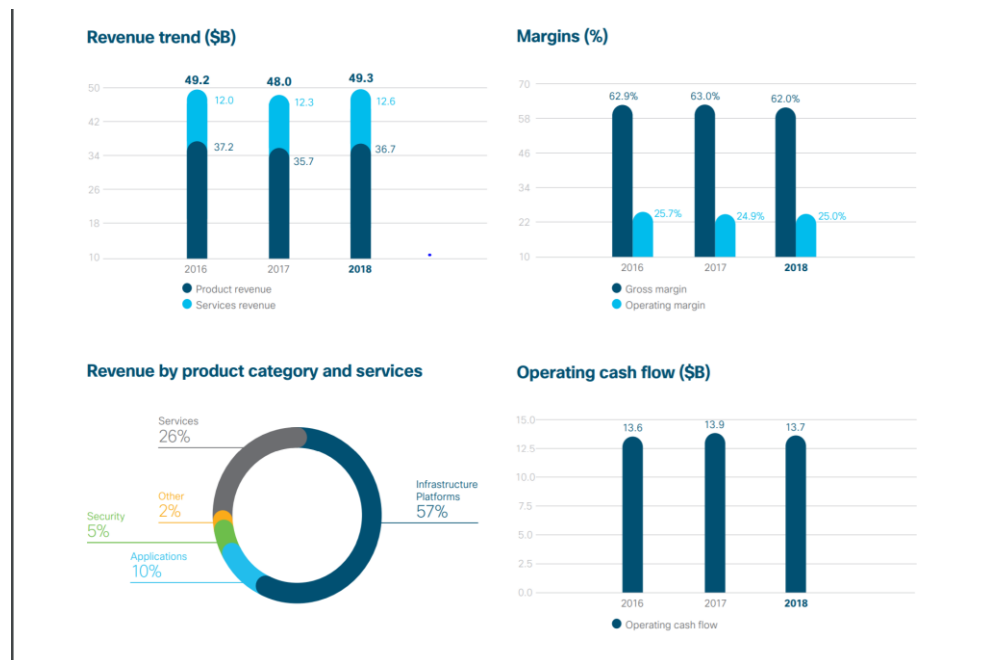
of innovations as well as breakthroughs. For instance, the company is known to establish the open cloud-scale platform and the ultra-low latency. Furthermore, Arista has also ranked as the most reliable and greatest employer according to Fortune and Great place to work. (Arista Networks, Inc, 2019)

From the financial perspective, Arista has launched successfully its share repurchase authorization which is worth up to \$1 billion. In other words, shares of the company's common stocks can be repurchased opportunistically, which has a positive effect on sustaining the financial status/ performance. Additionally, the company has planned its own financial goals as well as performances very carefully and systematically; for example, the revenues are expected to be between \$600 and \$610 million, the non-GAAP gross margin is estimated to be between 64% and 65% out of the revenues. (Arista Networks, Inc, 2019)

As a result, in comparison to Huawei's inefficient utilization of financial resources including financial planning, revenues using and budgeting, Arista Network has much better and more effective financial strategies. The solutions and lessons which can be taken from Arista's successful story would be that Huawei should pay more attention to its financial resources allocation. For instance, instead of mainly focusing on marketing expenses, Huawei can move more towards Research and Development concentration to stand out completely compared to its competitors. (Arista Networks, Inc, 2019)

In addition, as the revenues generated yearly is not high enough to cover the costs of goods, Huawei should spend more on bettering its operational efficiency to cut down the incurring costs. Furthermore, the company should release its own innovations and breakthroughs more frequently in order to create a strong innovative reputation instead of a marketing-driven brand. Last but not least, in order to cope up with the lack of investment and working capital, the company can call for a funding program from its own partners including VIP Clients/ operators instead of focusing on risky joint ventures. (Arista Networks, Inc, 2019)

4.3.2 Cisco – the worldwide technology leader/ Huawei's largest competitor in IoT and telecommunications in the US market



(Cisco, 2018)

From a financial point of view, Cisco is clearly performing more efficiently than Huawei. Huawei has sustained profitably since it was first founded, however, the company does have some difficulties in controlling and utilizing its financial resources. Meanwhile, Cisco not only generates much higher revenues but it also successfully optimizes its income sources. Based on the graph above, there has been a slight increase in service revenues (only 0.2%) from 2016 to 2018, however, the percentage of gross margins are impressively high (above 60% during the analysed period 2016-2019). (Cisco , 2018)

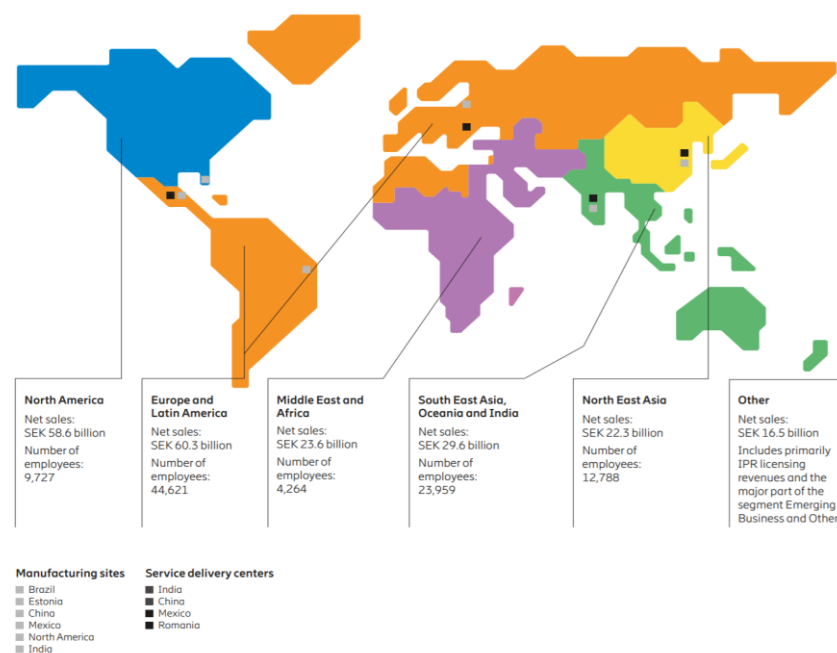
Given these figures regarding total gross margins and revenues, the total cost of goods in Cisco accounts only for only roughly 37% of the total revenues generated, which once again emphasizes the efficient financial performance at this worldwide technology leader. In addition, the operating margins remain positive in three years (2016 – 2019), which clearly means that Cisco has productively utilized its operating costs that are usually ignored by most businesses. Regarding operating cash flow, the recorded figures within the period from 2016 to 2019 are 13.6, 13.9 and 13.7 \$B respectively. As cash is “king” in business world (as cash and profit are separately different and generating a huge of profits is not as sustainable as owing values in cash), Cisco has preserved its cash flow well recently. (Cisco , 2018)

From the strategic viewpoint, Cisco has focused more on customer experience, continuous innovation pace, successful acquisitions, and security guarantee. Compared to Cisco’s overall goals and business

strategies, these of Huawei are moving towards more to affordable but low quality services/ products, global marketing management, joint ventures, M&A (Mergers and Acquisitions) and digitalization of global network. From the governmental control and data security perspectives, it can be clearly seen that Cisco has more advantages than Huawei in Northern American markets as the company is based in San Francisco, the USA following the American data security regulations and receiving support from the local authorities. Additionally, creating new sources of revenues by customizing offers and software services for the customers is considered to be one of the most important keys to Cisco's today success. (Cisco , 2018)

In short, there is no need for Huawei to completely change its own strategy to enter into the American market, however, the company needs to learn from its largest competitor which is based in the USA (Cisco) in how to utilize the financial resources (for example whether creating new revenue sources or cutting down its operational costs) and how to integrate high quality of data security into its own products and services. Even though Cisco has already owned a huge marketshare in the USA, there is still some likelihood for Huawei in the niche markets including the young Americans who are price-sensitive and tech-savvy. Hence, the company can try to switch its operating costs into more marketing-related costs to attract new US customers and users. (Cisco , 2018)

4.3.3 Ericsson – A Swedish network services and telecommunication provider



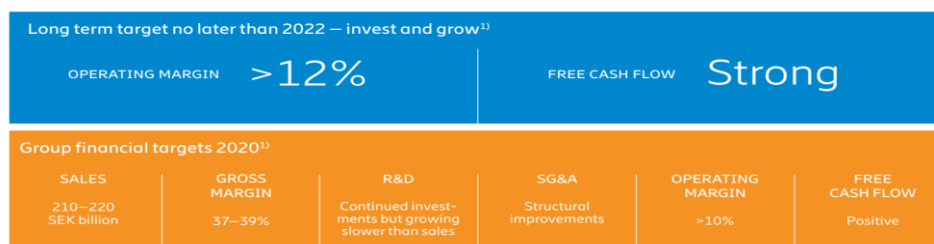
(Telefonaktiebolaget LM Ericsson, 2018)

Even though Huawei has clearly and successfully conquered the European markets with its effective marketing strategies focusing on customer needs and price sensitiveness, the company still faces a harsh competition coming from Ericsson known as the multinational telecommunication and network service provider based in Sweden. According to the geographic graph above, Ericsson has already set its own foot into the USA market with its strengths in innovation including 5G technology and mobility. In addition, the company and T-mobile have already signed the contract for providing American customers with 5G services, which has been desired by Huawei Corporation. As a result, it will undoubtedly be difficult for Huawei to enter into the North American markets regarding this cooperation. (Telefonaktiebolaget LM Ericsson, 2018)

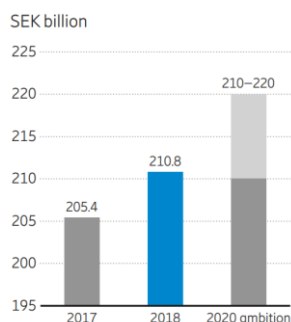
Additionally, compared to Huawei's main customer segments and market areas, Ericsson has expanded its business even more globally. For more details, the company has successfully entered the USA market with a very impressive net sales accounting for up to 58.6 billion SEK. In less attractive markets including the Middle East and Africa areas, Ericsson is still able to generate high amount of net sales of 29.6 billion SEK. While Huawei only focuses mainly on Asian and European markets, Ericsson has more market shares worldwide. (Telefonaktiebolaget LM Ericsson, 2018)

With regarding business strategies, Ericsson has set its customer experience, technological orientation, and efficient human resources as top priorities. The company has successfully developed its own focused business strategy concentrating on three main components including product-led solutions, global skills and scales, and technological advances. Compared to Ericsson, Huawei only builds its focused marketing strategy which serves as the most important business method as well as the most valuable competitive advantage. Meanwhile, Ericsson tends to set its customer solutions as top priorities, therefore through their innovative inventions and technological development, the company aims at helping its customers to minimize the operational costs, which also makes great contribution to Ericsson's operational efficiency. With regards to solutions for the users, Ericsson put software and hardware as its main product concentration. Additionally, having a competent team with deep know-how in technology and networks is the key to Ericsson's huge success. (Telefonaktiebolaget LM Ericsson, 2018)

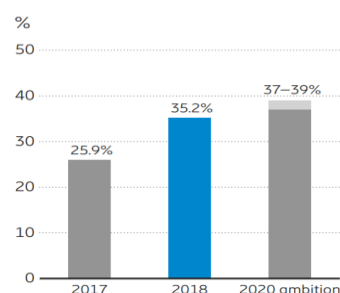
Financial ambition



Net sales



Gross margin excl. restructuring charges



(Telefonaktiebolaget LM Ericsson, 2018)

From a financial performance point of view, Ericsson has a very high amount of sales revenues within the two years from 2017 to 2018. There is a slight increase of 2.6% in total sales revenues from 205.4 to 210.8 SEK billion. In 2018, the company's gross margin percentage accounts for up to 35.2%, which is higher than other competitors within the industry. Therefore, Ericsson is ranked as the top two in the area of Radio Access reward. Not only Ericsson has strong financial status regarding its total sale revenues and its gross margin percentage, but the company has also set high financial ambition focusing on positive cash flow and higher operating margin. As a result, it can be clearly seen that Ericsson is trying its best to optimize the financial resources and move its corporate strategy towards to cost leadership strategy, which is expected to boost the operating margin up to 12%. In the next year 2020, in addition to from higher total net sales and higher gross margin, the company also aims at investing more in its Research and Development strengths and structural improvements. (Telefonaktiebolaget LM Ericsson, 2018)

Sales per market area and segment 2018 and percent change from 2017

SEK million	Networks		Digital Services		Managed Services		Emerging Business and Other		Total	
	2018	Change	2018	Change	2018	Change	2018	Change	2018	Change
South East Asia, Oceania and India	21,337	-9%	4,824	1%	3,388	5%	40	400%	29,589	-6%
North East Asia	15,915	-2%	4,849	-11%	1,465	-22%	80	471%	22,309	-5%
North America	46,452	14%	8,358	4%	3,680	15%	96	-16%	58,586	13%
Europe and Latin America	34,413	14%	12,339	2%	13,207	-7%	313	12%	60,272	6%
Middle East and Africa	13,300	-6%	6,284	-8%	4,030	-	15	-67%	23,629	-5%
Other ¹⁾	7,153	-7%	1,435	-8%	-	-	7,865	6%	16,453	-1%
Total	138,570	5%	38,089	-2%	25,770	-3%	8,409	7%	210,838	3%
Share of total	66%		18%		12%		4%		100%	

¹⁾ Market Area "Other" includes primarily licensing revenues and the major part of segment Emerging Business and Other.

(Telefonaktiebolaget LM Ericsson, 2018)

According to the table of sales per region above, it can be clearly seen that similar to Huawei, Ericsson has also expanded and focused on emerging markets and businesses. However, compared to Huawei's performance, the company has generated much more sales, especially within two regions including North East Asia and South East Asia, India and Oceania which show the percentage of sales change of 471% and 400% respectively. Therefore, regarding emerging countries and markets, Huawei has faced a huge competition from its second largest competitor – Ericsson. Additionally, in the USA market which is more political-related and government-controlled to Huawei, Ericsson has already made a huge number of sales and maintain positive changes in two sections including digital and managed services. (Telefonaktiebolaget LM Ericsson, 2018)

Given both strategic analysis and financial look into Ericsson's current situation, in order to better compete in European markets or worldwide in general, Huawei should restructure its strategy more towards into operational optimization, continuous innovative development, customer-centric focus (instead of marketing-focused strategy) and positive cash flow consideration. (Telefonaktiebolaget LM Ericsson, 2018)

4.3.4 Nokia – The #1 in revenues of telecom product software

In the sector of software equipment and network services provider, Nokia is famous for its high-quality delivery, remarkable customer service, and partnering reliability. Similar to many other market players, Nokia also aims at utilizing the arising opportunities in the digital age (Internet of Things, 5G technology and AI) in order to provide its clients with worldwide constant connectivity. It can be said that in the telecommunication, network service, and software supply, Nokia is the largest competitor to Huawei. Not only the company has entered into the market earlier but it

also holds a strong brand recognition with trustworthy and performance-driven products/ services. (Nokia Corporation, 2019)

Regarding global megatrends, Nokia has aimed at being in the upfront of digital, technological and technical trends with a view to creating connectivity everywhere. The six global trends that have been developed at the company are (1) network, compute and storage, (2) Internet of things, (3) Augmented Intelligence, (4) Human and Machine interaction, (5) Social and trust economics and (6) Digitization and ecosystems. With regards to business strategies, Nokia has set its own organizational objectives of (1) leading, (2) expanding, (3) building and (4) creating. (Nokia Corporation, 2019)

2018 can be considered to be one of the most successful years for Nokia. In particular, the company has been awarded many innovative breakthroughs, successful collaborations, and efficiently partnerships. For further details, in July 2018, T-mobile and Nokia have come to the 5G network agreement with a value of 3.5 billion USD. In September, the company has opted as the supplier which accelerates seamlessly the transformation of AT&T network. Additionally, Nokia has also signed another 2 billion EUR contracts with three Chinese operators. In December, with the support of Nokia network technology, Helsinki airport was known as the world's first 5G airport. (Nokia Corporation, 2019)

Financial highlights

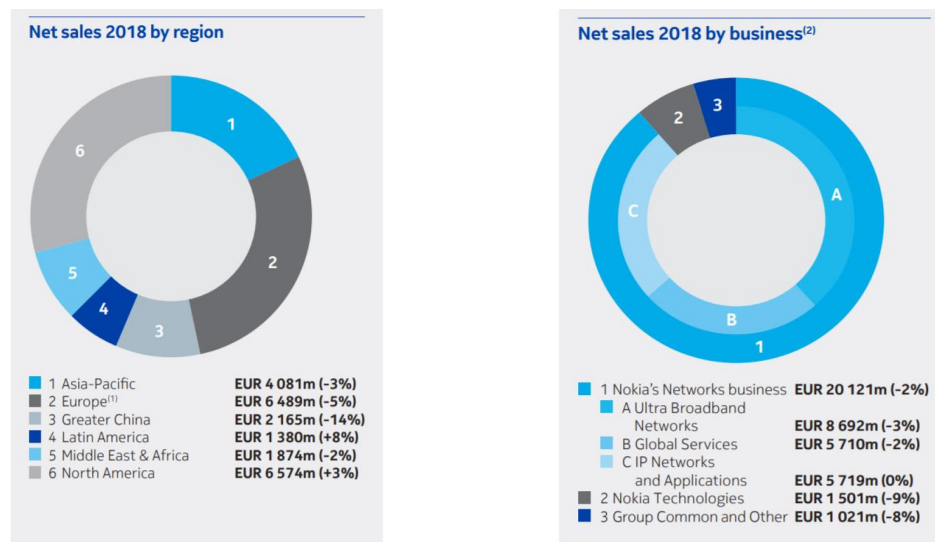
For the year ended December 31, Continuing operations	2018 EURm	2017 EURm	2016 EURm
Net sales	22 563	23 147	23 641
Gross profit	8 446	9 139	8 524
<i>Gross margin</i>	37.4%	39.5%	36.1%
Operating (loss)/profit	(59)	16	(1 100)
<i>Operating margin</i>	(0.3)%	0.1%	(4.7)%
Loss for the year	(549)	(1 437)	(912)
	EUR	EUR	EUR
Earnings per share, diluted	(0.10)	(0.26)	(0.13)
Dividend per share ⁽¹⁾	0.20	0.19	0.17
	EURm	EURm	EURm
As of December 31	2018	2017	2016
Net cash and current financial investments	3 051	4 514	5 299

(1) Planned maximum annual distribution for 2018 is EUR 0.20 per share to be paid quarterly subject to shareholders' and the Board of Directors' approval.

(Nokia Corporation, 2019)

According to the table above, the total net sales of Nokia in 2018 is 22,563 EUR million. During the three years from 2016 to 2018, there has seen a quite high gross margin which are 36.1%, 39.5%, and 37.4% respectively. Regarding cash flow management and financial investments, the company has effectively sustained the positive numbers which are 3,051 EURm in

2018 and 5,299 EURm in 2016. Therefore, Nokia's financial performance and cost efficiency have been improved dramatically throughout the years of operation. (Nokia Corporation, 2019)



(Nokia Corporation, 2019)

According to the net sales 2018 by region piechart above, it shows that Nokia has generated the total of up to 6,574 EURm with the increase of 3% in the North America market in which Huawei has several difficulties entering into. Moreover, just after the USA, another successful market for Nokia is Europe. Hence, Huawei faces the harsh competition from Nokia not only in European markets but also American ones. Based on the report of total net sales by business recorded in 2018, about 80% of total sales are attributed to the network business, which means Nokia has set providing network services for international clients as its top priority. Therefore, when it comes to Nokia, Huawei not only encounters geographical but also business-related competition. (Nokia Corporation, 2019)

4.3.5 Summary of Huawei's competitors regarding financial status, strategies, market position, and competitive advantage

Huawei's competitors	Arista Networks	Cisco	Ericsson	Nokia
Financial status	Positive	Positive	Positive	Positive

Overall Strategy	Cost leadership	Customer-focused strategy	Focused value strategy	Lead-Expand-Build- Create
Market positioning	Huawei's most competitive market player	The global leader in telecommunication and technology	Second largest telecommunication provider in Europe	#1 in telecom software product supplier
Competitive advantage	Cost efficiency	Large market shares worldwide Various services	Customer-centric services/ products	Strong and sustainable corporate partnerships

5. RESULTS

It can be clearly seen that Huawei has successfully built up an effective and global strategic management system, which undoubtedly makes huge impacts on company success. In other words, sustaining overall business strategy by efficiently allocating internal resources into different departments and maintaining corporate competitive advantages is the key to a business's strong market position and general success.

Regarding the analysis of Huawei's value chain model, the company has focused on building logistics system, investing in global marketing management, creating a customized customer experience and sustaining strong collaborations and partnerships with other worldwide operators. As a result, even though Huawei is the late bloomer in the telecommunication and smartphones industry, the company still succeeded in standing out of other giants and has its own brand including price sensitivity and personalized customer experience.

In addition, not only Huawei has allocated its financial and human resources throughout the value chain very effectively but it also links between different packages of value to generate even more profits and accomplishments for the organization in general. For instance, by collaborating with thousands of operators and clients in the world, the company can develop its R&D department more and create more innovations. As a result, it can better customize customer demand and client experience with the help of gained technology and partnerships.

Additionally, there is also a strong relation between the company's digital workplace/ infrastructure with its efficient marketing strategies. As every client can connect to Huawei virtually and constantly, the company can gain more insights about what its customers are actually looking for;

therefore the company can build its personalized marketing campaigns that perfectly fit into the clients' needs.

Regarding the SWOT analysis of Huawei, there are several approaches of boosting the company strengths (large market shares in China, strong brand recognition worldwide and long-term partnerships/ co-operations), reducing the influences of external factors (ban on market entry from the US, the emergence of new Chinese entrants and branding monopoly from big "giants") or utilizing the arising digital opportunities (5G technology, digitized businesses and networking services). In the summary table of TOWS, it has shown that Huawei can take advantage of its efficient marketing strategies to cope with difficulties of entering the USA market or allocate its human resources/ financial capital into technology and research development. In addition, the links built between those four components are not only feasible solutions for upcoming challenges in the future but also the valuable sources for Huawei's long-term competitive advantages.

With regards to the benchmarking process towards Huawei's competitors comprising Arista Networks, Cisco, Ericsson, and Nokia, there are many opportunistic lessons deserved to be taken from others' business strategies. For Arista Networks, Huawei can take the authorizing and fundraising program into consideration as a technology-driven company does need lots of capital for innovating and networking. In order to reinvent that idea, Huawei can utilize its relationships with other operators or clients in the world. Another strategic lesson that can be learned from the bests is Ericsson's focused strategy. It seems that Huawei mostly depends on its marketing advantage to completely stand out and gain market shares; meanwhile focusing on customer experience and high value generating is the key for long-term victory. Additionally, what all of Huawei's competitors have in common are their excellent operational efficiency and financial targeting/ planning. And that is what Huawei should learn from them also in order to better allocating and utilizing internal resources. Even though Huawei has maintained high sales revenues throughout the years, its gross margin and operating margin are quite higher than these of others, which means the lack of operational improvement. Therefore, based on the strategic and financial analysis of its competitors, Huawei is in need of accelerating its operational performance as well as customer-focused strategy.

6. RECOMMENDATION

In general, strategic management is a qualitative topic so that there are some difficulties in finding real data needed in this thesis. In other words, most of the collected data is taken from studies, annual reports, journal

articles, blogs, and business reviews. Therefore, no real and current data of Huawei has been found and analyzed. As strategic management relates to the company internal controlling system, it is quite hard to collect internal data including Huawei's customer data or Huawei's accounting data. Moreover, as Huawei is a Chinese-based company, there have been some troubles finding the company's published data as it will violate the data security regulations in China.

As there is no real data found as mentioned above, the thesis lacks real analytical analysis; however there are quantitative researches including financial performance charts, business case studies, annual reports and company's journal articles that are conducted during the whole process of data analysis in the thesis. With regards to outcomes and findings, the thesis has yielded several solutions as well as business insights that can be considered for Huawei's long-term strategic plans. In particular, at the end of every strategic analysis model (Value chain model, SWOT, and Benchmarking), there are summaries of feasible solutions, future orientations and overall conclusion regarding Huawei's strategic efficiency. As strategic decisions are dependent mostly upon the human and financial resources of a company, the thesis consists of both strategic and financial analysis of Huawei as well as its competitors within the industry. As a result, there can be seen a close relation between financial management and strategic planning.

In order to cope with collecting real and business-related data for future researches, researchers should have contacted Huawei's strategic directors or representatives. In other words, there would be more valuable insights and more reliable analysis if the researchers can arrange interviews with Huawei's strategic representative along with the CEO. As the directors and CEOs are known as the visionary leaders of a company, they can provide researchers with deeper strategic know-how, experience, and orientation.

Regarding the benchmarking process conducted in the thesis as a comparison between Huawei and other competitors within the same industry, in order to gain more deeper insights on how other companies are performing, it is strongly suggested that future followers should contact Huawei's competitors for more strategic data and competitive advantages. In addition, visiting sites in each company can also help with more accurate and relevant comparison. Another approach to figure out the strategic differences within those companies (Huawei, Nokia, Ericsson, Cisco, and Arista Networks), the future researchers can take consumer behavior surveys into account. For instance, the more people react to a feature or a service or a strength, the more possible it is the company's competitive advantage.

Last but not least, as conferences and business seminars are the most popular events to get updated in today's business world, followers can go to the most current strategic seminars and conferences of Huawei and other players in telecommunication industry to dive deeper into what these companies are actually doing at the moment and are going to do in the future. Additionally, following the world's innovative events or competitions is considered to be one of the most useful ways to update with companies' latest breakthroughs as well as most current strategic status. Based on the awards and prizes, it can be known what trends the company is following, the market it tends to enter or the customer segment it is serving. Hence, it can be seen which strategies the company is building and its next steps in future to stay competitive.

7. CONCLUSION

As mentioned above in the introduction, setting an appropriate strategy and ensuring the consistency between that strategy and other business functions ranging from outbound logistics to marketing activities plays a very essential role in controlling the business. In other words, in order to stay competitive and sustainable in the long-run, each company needs to pay attention to its strategic management or the so-called strategic planning. Metaphorically saying, a good strategy serves as a reliable compass setting the right directions or the next steps which the company should take. Entering the telecommunication and network services industry later than others, Huawei has proved that prominence and success are attributed to the efficient strategic management globally.

Based on the quantitative research and data analysis acquired from the company's most current annual reports and relevant case studies, it demonstrates that Huawei has allocated its resources along the value chain equally and suitably in order to ensure its own strategy to be always on the right track. The company's effective marketing campaigns and customized services have been backed up by strong back-end activities including technological development, digital human resources management system and agile organizational infrastructure. Additionally, the smart logistics system has been supported by tech-savvy staff and global-scale collaborations with other operators. As a result, creating and adjusting the value chain depending on the resources availability as well as the current megatrends are the most important factors leading to Huawei's successful story.

Not only Huawei has built an efficient value chain model with valuable resources packages but the company also has possessed its own competitive advantages (strengths) and utilized the industrial and

technological trends (opportunities). However, similar to many other telecommunication providers, Huawei has to face several politics-related and data securities issues (threats) along with internal incapacabilities (weaknesses). The table of TOWS described above in the SWOT analysis section generates useful insights on how Huawei can use its own strengths to minimize the influences of the threats and how the company can exploit the opportunities to narrow down the effects of weaknesses.

Based on the benchmarking process, Huawei can apply others' best practices in financial management, operational efficiency and R&D investment for future strategic plans. Another solution could be to collaborate with competitors to mutually learn and benefit each other. Additionally, looking into others' competitive advantages can help Huawei to reshape its own business strategies to stand out and sustain in the future. In other words, following how other competitors react to the global trends and customer demands can help Huawei to come up with different ideas and gain more market shares (blue ocean strategy).

In conclusion, the analysis of three strategic models (Value chain, SWOT and Benchmarking) has shown several insights how Huawei manages its strategic management system and copes up with external factors including environmental threats, competitors' affects, and market forces. In other terms, Huawei can be stated as the remarkable application of efficient strategic management to become the global leader in telecommunication services providing.

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