

Development of the Investment Strategy of Huawei Company

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Keywords: Huawei; Investment strategy; Strategic competitive; PEST; SWOT

Abstract: This paper takes Huawei's investment development strategy as a breakthrough point to provide theoretical guidance and reference for enterprises to gain a strategic competitive advantage. First, the theory related to an investment strategy is described. Then, the investment structure of Huawei Technologies Co. Then, based on the previous research results and questionnaires, we analyze the financial and environmental factors in the development of Huawei's investment strategy and draw the PEST matrix and SWOT matrix accordingly. In addition, the investment strategy of Huawei is compared with that of the giant companies in the industry, and the characteristics of Huawei's investment strategy are derived. Finally, based on the previous analysis and research, propose corresponding countermeasures to optimize Huawei's investment strategy from internal and external perspectives.

1. Introduction

With the development of the market economy and the steady improvement of social productivity, many excellent enterprises, especially information and communication, have emerged in China. Since the outbreak in 2020, the epidemic has brought a series of uncertainties to the world economy-the ensuing rise in global protectionism and restrictive actions taken by many countries against developing countries. In order to adapt to the changes in the internal and external environment, the enterprise adjusts the overall long-term strategy locally so as to help the enterprise expand or maintain its scale. Strategic investment plays a vital role in the survival and development of enterprises. This paper takes Huawei's investment development strategy as a breakthrough point to analyze the financial and environmental factors in the development of Huawei's investment strategy and draw the PEST matrix and SWOT matrix accordingly. In addition, the investment strategy of Huawei is compared with that of the giant companies in the industry, and the characteristics of Huawei's investment strategy are derived.

2. Theory and methodology of development of an investment strategy

2.1 Theory of developing of an Investment Strategy

2.1.1 Innovation theory

Technological innovation is innovation through the creation of resources and high technology, or to create new technologies. Innovation can improve the core competitiveness of enterprises on the one hand and promote sustainable development on the other. In the face of homogeneous competition in invincibility, not overnight can be developed, which requires the joint efforts of the state and Huawei. First, the government should strengthen the guidance of technological change and adjust the industrial development structure. Secondly, the financial allocation will support Huawei's capital investment in R&D. Finally, Huawei is committed to building investment and driving the platform of user payment through a person's innovation way, the win-win for employees to become an entrepreneurial innovation and open platform, at the same time, to create value for users to realize their value [1].

2.1.2 Factors influencing investment decisions

First, demand is a certain period, at a given price level, the number of goods consumers are willing and able to buy, and the impact of commodity market demand. Second, the expected construction period of the project (project calculation period) directly determines the period factor. Combined with the time value factor, the evaluation indicators with value are screened out, and the dynamic evaluation of the project is carried out. The third one is cost factors. The sum of the input and output phases' costs is among the cost factors—the input phase. And business operating expenses, corporate income tax, and business taxes during the operation period constitute the cost of the output phase, which is the cost of enterprises to maintain average production and operation activities need to pay, also known as operating costs.

2.2 Methodology of developing of an investment strategy.

2.2.1 SWOT analysis methodology

SWOT analysis is commonly used in competitive advantage analysis. It provides a simple, intuitive, and comprehensive tool for analysis. It places the opportunities (O) and threats (T) presented by the external environment and the strengths (S) and weaknesses (W) of the internal conditions in a simple and straightforward framework [2].

2.2.2 PEST analysis methodology

PEST analysis is an effective method for diagnosing the macro environment, an acronym for the political/legal, economic, socio-cultural, and technological environment in which a company operates. By analyzing the stability of the government, the trade laws and regulations, other laws and welfare systems, GDP growth trend, inflation, energy supply, government investment in R&D, technology maturity, population structure, lifestyle and other aspects of the enterprise location are analyzed [2]. Help Huawei analyze and summarize the relatively key and important influencing factors to establish the final strategic objectives.

3. Developing of the Investment Strategy of Huawei Company

3.1 Huawei company profile

Huawei is a high-tech enterprise specializing in producing, developing, and selling a series of program-controlled walkie-talkies and their supporting products. Huawei has made such a steady and long-term development in the world market, mainly because it attaches great importance to technology research and development. Huawei will invest 10% of its annual R & D budget to absorb the world's high-end talents, technical equipment, and technology R & D updates. This new technical workflow is based on the market demand research in the early stage of R & D. Huawei's product indicators are systematically developed based on market research. Therefore, it is customer-oriented product development, with customer needs as the R & D goal, and runs through the whole product development process. Today, the Shenzhen-based company is one of the world's largest smartphone manufacturers after Apple and Samsung [3].

3.2 Analysis of the importance of investment strategy for Huawei Company

3.2.1 Huawei's investment decision - analysis of sensitive factors

Table 1: Major long-term interest-bearing financial instruments. Unit: RMB million [3]

Tools \ Year	2019	2018	2017
Long-term borrowings	37,338	30,762	29,251
Accounts receivable	-1,692	-2,316	-2,465
Long-term borrowings	67,193	35,408	9,087
Accounts receivable	-1,259	-1,737	-1,968
Total	101,580	62,117	33,905

An interest rate financial instrument is a financial instrument in which an interest rate or interest rate carrier is the subject of a transaction. It mainly includes forward interest rate agreements, interest rate swaps, and other. According to Table 1, Huawei's long-term borrowings under a combination of fixed and floating interest rates have increased for three consecutive years, the growth rate was at 5.2% and 21.4%, respectively, and the number of accounts receivable kept decreasing. The large size of long-term borrowings and funds receivable increases Huawei's interest rate risk; indisputable that it has too much debt. Under the impact of the financial wave, it seems that "deleveraging" is becoming a "headache" for companies. As the traditional business sector is frequently selling off less profitable assets in 2019 to pay off bank debts, Huawei should also learn from the experience of related companies and take precautions. Huawei should also learn from the experience of these companies and take precautions. It should also strengthen its cooperation with sister companies to save money and related costs, and the significant reduction in owner's equity will also affect the long-term sustainability and health of the company to a certain extent.

3.2.2 Huawei's investment decision - risk analysis

(1) Strategic risk

With the application and promotion of digital technology, an intelligent society is bound to come, and various new technologies are gradually applied to different industries and fields, including blockchain technology and cloud computing technology, etc. The external environment is unpredictable, the market economy is slowing down, the United States continues to suppress leading technology, will further compress Huawei's living space, Huawei as a typical representative of China's communications equipment manufacturing industry is must have the ability to face these risks and pressures, only to face different pressures and challenges, in order to make its footsteps more stable, occupy an important position in the international market, for China's other SMEs to showcase the industry as a role model [4].

(2) Trade Risks

Trade barriers have always been a major obstacle for importers and exporters: firstly, many countries and regions adhere to trade protectionism. This has led to many risks in global competitive trade activities and the implementation of a wide range of trade restrictions by various countries. This can further increase the competitive pressure on global trade. Secondly, the application of advanced technology changes the way people produce and live, and can bring unimaginable changes to people's lives. It can also disregard some trade rules. With the development of global economic integration, it is necessary to constantly sign new regional FTAs, change and adjust the original trade cooperation relations [4].

(3) Operational risks

1) Business continuity

With the development of world economic integration, the international division of labor and cooperation trend is becoming more obvious. Huawei conducts various types of business in the global market, all of which require establishing long-term partnerships with relevant professional organizations and third-party vendors. This includes raw material procurement, logistics and transportation, and after-sales services. The cessation or disruption of business from these cooperation partners will affect Huawei's business operation status and operational results.

2) Information security and intellectual property

High investment inevitably requires high profitability in return. In today's competitive market, information is often insecure. Huawei's scientific research is rapidly updated. Although it uses various measures to protect its intellectual property and maintain information security, these do not completely prevent other companies from doing so [4].

3.2.3 Analysis of Huawei's strategic for outward direct investment

According to the traditional investment strategy motivation theory, the strategic motivation of enterprises can be divided into seeking markets, natural resources, creative assets, and efficiency.

Develop the market

The information age is an unstoppable trend. The top Internet providers have entered the Chinese

market to achieve a leading position in China. And with their advantages, they all have a place in the country. As a result, the domestic market has become very crowded, and Huawei lacks room for development. This makes it necessary to open up overseas markets.

Seek strategic resources

First, OFDI can promote Huawei's access to the resources and infrastructure it needs. To make up for Huawei's lack of resources in China. Secondly, since China's relatively low-end local brands, OFDI is conducive to promoting in-depth cooperation with well-known foreign brands. To learn from foreign advanced management experience and strategies [5].

3.2.4 Huawei's strategy for OFDI

(1) Location choice

The different investment motives and investment subjects of enterprises will lead to different locations for investment. According to the theory of comparative advantage, multinational companies will choose a location in the downstream gradient relative to the national industry for OFDI. Some developing countries in Asia, Africa, and Latin America are the best choice for Huawei's OFDI location. As many developing countries are not fully mature in network communication technology and their markets are not fully developed, they have great attraction and potential.

Specifically, Huawei did not choose a single location for OFDI like other companies. Rather, it takes a global perspective, combining its strengths and location characteristics to develop a differentiated location selection strategy. 2020 Huawei's global sales by region, as shown in Table 2. Huawei's critical regions for foreign sales are mainly in EMEA, Asia Pacific, and the Americas. Compared to 2019, Huawei's sales value in all other regions except China decreased in 2020.

Table 2: Huawei Global Sales by Region, 2020 (in RMB Million) [3]

Region	2020	2019	Year-on-year change (%)
China	584,910	506,733	15.4
Europe, Middle East, Africa	180,849	206,007	-12.2
Asia Pacific	64,396	70,533	-8.7
America	39,638	52,478	-24.5
Other	21,603	23,082	-6.4
Total	891,368	858,833	3.8

(2) Choice of method

1) Greenfield investment:

China's most original form of OFDI is greenfield investment. Huawei repeatedly adopted this investment model in the early stages of its investments. In order to continuously learn from foreign advanced technology, governance experience, and unique processes, Huawei opened branches and subsidiaries in Japan, Germany, the UK, and other regions with dense high-tech communications manufacturing technology. Huawei used them to develop and market its own communications products.

2) Overseas acquisitions:

Table 3: The M&A events and results in recent years [3]

Year	Acquired companies	M&A results
2002	OptiMight	Optical communication technology
2003	Cognigine	Network Processor Technology
2011	Huasai	Network Security and Storage Technology
2012	CIP Technologies	Integrated photonic technology
2013	Caliopa NV	Silicon photonic technology
2014	Neul Limited	Logistics network technology
2015	Amartus SDN	SDN Software
2017	Toga Networks	System and chip design

To gain access to advanced technology and governance experience in other countries more quickly,

Huawei began to increase its outbound direct investment in the form of overseas M&A. Huawei's M&A activities in several companies such as OptiMight and Cognigine in the US make Huawei become not only succeeded in acquiring developed technologies but also strengthened its overall strength and international competitiveness. Huawei's acquisition of Option subsidiary M4S in 2015 enabled it to avoid trade and technology barriers in the EU [3]. The M&A events and results in recent years are shown in Table 3.

3) Strategic alliances:

Huawei has entered into strategic alliances with several companies in various countries. 2012 saw an alliance with SAP in Germany for deeper cooperation. In 2015, Huawei allied with Accenture to complement each other's strengths. Huawei uses its innovative technology and Accenture's consulting services to create new solutions in cloud computing [3].

3.2.5 Huawei R&D investment strategy

Huawei's success in R&D investment cannot be achieved without its efficient organizational structure because it has a set of organizational structures that only apply to it. Other companies applying Huawei's model may be able to shape a similar organizational structure, but they cannot get the same operational management effect. This is because the management concept and model are appropriately chosen. The nature, scope, and degree of influence of the same management model in different organizations' internal and external environments can vary greatly, but what is the same is the replicable management concept behind the model.

3.3 Developing the Investment Strategy of Huawei Company

3.3.1 Analysis of the internal and external environment of Huawei Technologies Co.

(1) Analysis of the internal Investment Strategy environment

1) R&D capability

Huawei is the world's leading electronic communication equipment manufacturer and a far-leading communication industry leader. Advanced technology and high R&D capability are fundamental to ensuring the quality of their products. Huawei will allocate no less than 10% of its annual sales to scientific and technological research and development. Nearly 50% of its employees are engaged in R & D. In terms of human, material, financial, and time, Huawei's investment level is much higher than the international average [6].

2) Organizational Structure

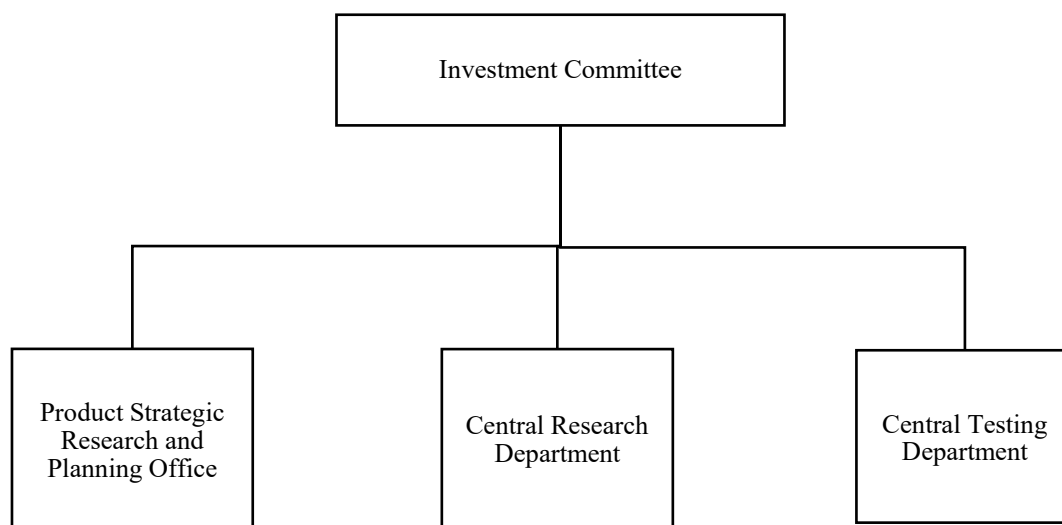


Figure 1: Huawei's organization structure [3]

At the beginning of Huawei, the company was small in scale, so it adopted a linear top-down management model. However, as the company grew larger and larger, the linear organizational structure was inefficient. It could not adapt to its rapid development, so the company began

implementing a modified "matrix structure."(Fig. 1) This structure has excellent flexibility and adaptability. It can focus on various professional knowledge and skills according to work needs and quickly complete tasks.

(3) Human Resources

Huawei's human resources are distributed in a dumbbell shape, with R&D and marketing staff accounting for 40% and administrative and production staff accounting for only 20%. Those with master's degrees and above occupy 70% of the R&D staff. This inverted pyramidal talent pool provides Huawei's innovation and development with solid human resource assurance [3].

(2) External Investment Environment Analysis

1) Political environment

China is in the primary stage of socialism and will remain a developing country for a long time. To achieve sustainable social and economic development, China encourages and supports the development of communication, science and technology, and other industries in policy and law.

2) Economic environment

The rapid global communications and Internet industry development has provided Huawei with more opportunities and challenges. With the continuous development of economic globalization, China's and the world's economies are more closely linked.

3) Social and cultural environment

There are about 7 billion people globally and 1.4 billion people in China. There is a tremendous demand for smartphones, especially in an information age. With the improvement of China's economic development, people's consumption level is also gradually improved. People also pay more attention to environmental protection and efficiency when buying electronic products.

4) Technology environment

With the popularity and use of Internet information technology and digital technology, the intelligence era set off a new generation. It reshaped the world landscape, showing the development trend of "intelligence, Internet." In 2025, it is expected that the global 5G users will exceed 60%; cloud technology, 5G technology, and AI technology are highly integrated and rapidly developing [7].

3.3.2 SWOT analysis on the formulation of Huawei's European development strategy

Table 4: SWOT matrix analysis of Huawei's European investment development strategy

	Opportunities	Threat
Strengths	SO (expansion investment strategy)	ST (diversification investment strategy)
	Huawei should give full play to the advantages of 5G technology. With the support of China's policies and the demand of the European market, continue to expand the market scale of 5g in Europe. It is conducive to further realize the strategic integration of its global production network and green space investment model.	5G's new scenario application will bring growth opportunities to all walks of life and make communication equipment manufacturers face a reshuffle. Huawei should not only pay attention to the current market opportunities but also actively explore new market opportunities. Huawei constantly updates and upgrades its products and technologies, opens new business directions, and achieves balanced development.
Weaknesses	WO (reverse investment strategy)	WT (contraction investment strategy)
	Suppose Huawei wants to re-plan the products and business scope of the four BG businesses. In that case, it is necessary to give up some market opportunities that are not particularly leading and keep the leading edge already obtained, such as 5G.	Huawei should re-examine its products and business scope and no longer expand its products and business scope. Huawei should focus on its existing products and markets, reduce costs, increase efficiency, and streamline its organization and management. Huawei should adjust its business model and shrink its enterprise scale.

4. Summary

In China, communication equipment manufacturers, represented by Huawei, are using investment decisions as a fulcrum to provide strategic support for their globalized business and ongoing integration into the international community. The results of their SWOT matrix analysis of the European investment development strategy are shown in Table 4. Precise investment decisions help Huawei optimize its resource allocation, expand its transaction share, and develop a more extensive economic scale. The future development prospect of the communication equipment manufacturing industry is up-and-coming. However, due to the authors' limited research ability and space, the research is far from deep enough and lacks many empirical studies and professional advice analysis. Making the communication equipment manufacturing industry more stable and healthy development to maintain ongoing core competitiveness is worth more industry in future work more in-depth, detailed analysis of the study.

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