

# NETWORK EMBEDDEDNESS IN HUAWEI TECHNOLOGIES

Case: Huawei, Shenzhen, China

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Yunyun Li

## Abstract

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Title of publication <b>Network embeddedness in Huawei Technologies</b> Case: Huawei, Shenzhen, China		
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<b>Abstract</b> <p>Companies enter the global market will interact with partners and customers. In China, Huawei is an eye-catching international technology company. Currently, Huawei Technologies ranks 61st in the Fortune 500. Thus, the author chose Huawei Technologies as case study, in order to analyse international networks established by Huawei from the perspective of social embeddedness.</p> <p>This theoretical basis of this thesis is the theory of network embeddedness and risk management from the perspective of process theory. The thesis explained the basic term of social embeddedness network including node, network, strong ties, and weak ties. The author did proper research of literature re-view which from many experts. One of them is Mark Granovetter who is an American sociologist and professor at Sandford University. As for the method, this thesis will take Huawei as a case to analyse its interactions with customers, suppliers, and other organizations. Huawei's development was divided into four stages to do an empirical research. The author also consulted public media like Fortune. com, Bloomberg. com and so on to get case-related data. The author interviewed employees and managers of Huawei and then analysed these data to reach conclusions.</p> <p>The results show that the development of internalization is the process of establishing a global network which has a deep influence on companies' reputation, performance and customer loyalty. In short, the quality of this network decides the development of internationalization. Further study is needed to see whether social embeddedness network also have a deep influence on small and micro companies, or enterprises of other industries.</p>		
<b>Keywords</b> Network embeddedness, long-term relationship, risk management, international information, international reputation		

## CONTENTS

1	INTRODUCTION.....	1
1.1	Background.....	1
1.2	Thesis objectives, questions, case study and limitations.....	3
1.3	Theoretical framework .....	4
1.4	Research methodology and data collection.....	5
1.5	Thesis structure .....	5
2	LITERATURE REVIEW.....	7
2.1	Network embeddedness .....	7
2.2	The birth of network embeddedness in internationalization of enterprises.....	10
2.3	Risk management of enterprises .....	12
3	EMPIRICAL RESEARCH AND DATA ANALYSIS .....	15
3.1	Current situation of Huawei internalization .....	15
3.2	Research object selection and data collection.....	18
3.3	Phases of the study .....	19
4	RESULTS.....	23
4.1	Long-term relationship and risk management based on relational network .....	23
4.2	International information acquisition based on relational network .....	24
4.3	International reputation acquisition based on relational network .....	25
5	CONCLUSION .....	29
5.1	Discussion of results.....	29
5.2	Answers to research questions.....	31
5.3	Validity and Reliability .....	33
5.4	Suggestions for further research .....	34
6	SUMMARY .....	35
	REFERENCES.....	37
	APPENDICES .....	40

# 1 INTRODUCTION

## 1.1 Background

Accompanying with the development of globalization, the world's businesses are increasingly closely linked; the environment in which enterprises are located in are becoming more dynamic and complex. This is also true in China as more and more Chinese enterprises have implemented the internationalization strategy. According to the latest Fortune Global 500 list, China is home to 129 of the world's largest companies by revenue. For the first time since 1990, China surpasses the U.S. and tops the charts of global business. Major Chinese companies like Alibaba, and Tencent are moving up in the list. Many international companies entering the global market hope to optimize resources. Many competitive companies in China venture into the global market. (He 2019.) Companies entering the world market will step on a new stage and will gain more momentum to develop. Many experts pointed out that the first priority for companies in a new market is to build a new social network to collaborate with new business partners. (Drucker 1999.) Scholars pay more and more attention to social network, and the process of enterprise internationalization is a good case in point for the embedding of social network (Johanson & Mattsson 2015, 111-132).

Western academics on international business pay attention to the theory of enterprises internationalization, in which the theory of internalization and Uppsala process theory are representative. Since the mid of the 1980s, the mainstream research of enterprise internationalization theory has studied the internationalization behavior of enterprises from the perspective of the utilization and construction of the relationship network, such as theory of the internationalization of enterprises. International new ventures and theory of internationalization of the internationalized relationship network theory derived from the idea of relationship marketing, the new economic and social "Embeddedness". The theory emphasizes that corporate economic behavior, like other social behaviors, does not exist in isolation, but is deeply embedded in the social network in which it operates. This view boils down to social economic behaviour in enterprise. Through a network of relationships, businesses can get the resources and information they need. (Granovetter 1985, 481-510.) Experts pioneered the application of this idea to the theoretical study of international cooperation. They point out that the market and industrial itself are in the form of networks and that the enterprise internationalization should be developed from the perspective of the inter-enterprise networks rather than the enterprise as a single who has no contact with the outside world. The internationalization of an enterprise is the process whereby a

company is constantly involved in the international business network. (Johanson & Vahlne 1990, 11-24.)

After the mid-1980s, the researchers of the theory of internationalization of western enterprises used the thought of economic and social science to study the internationalization behaviour of enterprises from the perspective of the relationship network. Experts pointed out that the enterprise internationalization should be enhanced from the perspective of the inter-enterprise relationship network rather than from the perspective of individual enterprises. (Johanson & Mattsson 2015, 111-132.) Thus, enterprise internationalization is the process of establishing relationships between enterprises and enterprises in other countries (Johanson & Vahlne 1990, 11-24). Under the new market conditions, the cooperation and contact between enterprises in different countries is more and more frequent. Thus, the process of enterprise internationalization will be faster and faster. (Eriksson, Johanson, Majkgard & Sharma 1997, 337-360.) The content of the enterprise international relations network includes the relationship between enterprise and supplier, enterprise and customer, enterprise and competitor, enterprise and internal and external stakeholders, and has an important influence in the process of internationalization (Blankenburg, Eriksson & Johanson 1996, 1033-1053). Some studies believe that the "network position" of enterprises in the external network determines the speed and performance of enterprise internationalization (Lee 1993).

Huawei Technologies Co. Ltd is an information and communication technology enterprise which plays a leading role at home and abroad. From its contribution to the cutting-edge technology like 5G to new operating system harmony, Huawei lives up to its reputation as the most promising company in China. (Huawei 2018, 15.) To some degree, Chinese take pride in this company. However, it seems that its path has become rocky last year when Meng Wanzhou, CFO of Huawei's Business group, faces charges related to Iran sanctions violations. In May 23, Bloomberg reported that U. S. top technologies including Intel Corp., Qualcomm Inc, Xilinx Inc. and Broadcom Inc. start to decrease vital supplies of hardware for Huawei. The Trump's administration blacklisted Huawei. However, even facing heavy political pressure, Huawei did not stop any of its production lines. (King, Bergen & Brody 2019.) According to the business report regarding the first half of 2019, Huawei produced CNY401.3 billion revenue with 23% increase comparing with same period last year. Its net profit margin for first season of 2019 was 8.7%. (Huawei 2019a.) The crisis management and embeddedness network of Huawei why are worth studying.

Many competitive companies in China venture into the global market. Hardships come from cultural differences, political friction, and competition. Hence, there is a need for

start-ups and established organizations to better understand the embeddedness network to better prepare companies interested in globalization. Be that as it may, embedded network is not perfect and sometimes can be negative. Close relation between companies may bring inertia to members within the network. In order to maintain harmony, they may value habits and rules over innovation, which lead to a homogenous competition. Finally, companies may avoid taking risks and lose vitality. (Uzzi 1997, 35-67.) More and more academics agree that value produced by companies not only come from companies' own competitive advantage but also benefit from the successful social network embedded by companies. Now the nature of competition has changed from single competition to group competition. Lots of studies focus on business connection, strategic network, supply chain network and value network. (Blankenburg et al. 1996, 1033-1053.)

This thesis will cover the following: the mechanism of network embedment as a way to influence the internationalization of enterprises, how to make use of this network, how to create a more solid and broader international network and what are the risks encountered in the international community. This study will also explore the international enterprise risk control from the perspective of network embedding.

## 1.2 Thesis objectives, questions, case study and limitations

The objectives of this thesis will figure out the role social embeddedness network play in international companies and provide some reflections from this perspective. The author set three research questions. The first research question relates to long-term relationship and risk management based on relational network. The second research question relates to international information acquisition based on relational network. The third research question relates to international reputation acquisition based on relational network.

Hence, the three research questions are follows:

1. Why does a company establish a long-term relationship with their customers in the international market? Is it a way to control risk management?
2. How does a company acquire international information? Does relational network support a company to obtain international information?
3. How does a company improve reputation in the international market based on relational network? Do products and customer satisfaction influence reputation?

The case study is Huawei Technologies Co. Ltd. which is located in Shenzhen, China. It is the headquarter of Huawei Technologies Co. Ltd. The author will use Huawei to stand for Huawei Technologies Co. Ltd. This work will focus on doing proper analyses and research about Huawei which was founded in 1987, in China, and is a global provider of smart devices and information and communications technology (ICT) infrastructure. They focus on four important areas, including telecom networks IT, cloud services and smart devices. Huawei's objective is to bring the digital world to individuals, homes and organizations. They concentrate on meeting customers' needs and investing in basic research in order to focus on technological innovation. Furthermore, Huawei is a private company owned by over 180000 employees. Nowadays, they have business and connection in over 170 countries and regions. (Huawei 2019b.)

The first limitations of the study lie in the case the author has targeted Huawei is a reputable technology company. Unlike garage start-ups, they enjoy well-organized structure, rich capital, and talented employees. It is said that Huawei has the capital to purchase a small country. To some degree, Huawei is too big to fall immediately when facing obstacles big or small. The second limitation is that Huawei specializes in technology. Companies formed in other industries need to consider whether lessons drawn from Huawei is feasible. And the final limitation is that in this fast-changing world, there will be a time lag between research and current trends. Social context is dynamic and is forever changing. In that, other information and communication technology companies should take lessons drawn from Huawei with a grain of salt.

### 1.3 Theoretical framework

This thesis employs the theory of social embeddedness network. Chapter two presents a brief introduction of the theory including basic concepts such as nodes, relation network, strengths and weakness as well as the birth of embeddedness network of international enterprises. The origin, basic components, and features of network are introduced in sub-chapter 2.1. There are many types of networks, if the actor is for the enterprise, the corresponding network is called the enterprise network. Telford & Hakanson (1987, 234) think that the network consists of three basic components: the actor, the occurrence of activities and resources. There are strong relationships (strong ties) and weak relationships (weak relations). Small-scale relationship networks tend to form strong ties; Large-scale relationship networks tend to have weak ties. (Granovetter 1977, 347-367.)

Sub-chapter 2.2 introduces the birth of network embeddedness in the internationalization of enterprises. The American sociologist Harrison White pointed out that the market is developed from the social network, "social network is the basis for market transactions."

According to White's idea, in the process of enterprise internationalization, the internalization of the enterprise is seen as a kind of interaction including suppliers, customers, government, competitors, intermediary organizations and so on.

Sub-chapter 2.3 talks about the risk management of enterprises. The process theory of enterprise internationalization regards the dynamic and uncertainty of the enterprise international market as key obstacles to the internationalization of an enterprise.

#### 1.4 Research methodology and data collection

This study combines inductive and deductive methods together. Induction is a generalized principle of reasoning that is summarized by a series of specific facts. Deduction is a method of reasoning that leads to conclusions in specific situations by general principles. Inductive and deductive reasoning are complementary and not antagonistic. (Gabriel 2013.) In the research of the interaction mechanism between network, network resources and enterprise internationalization, this study studies the influence mechanism of enterprise relationship network on the internationalization of enterprises. After reading the literature, the author uses induction method to obtain the influence of enterprise network on the internationalization of enterprises. The deductive method is applied in study of the internationalization growth path of enterprises from the perspective of relational networks.

In the international academic community in the study of the international growth of enterprises, many experts often use the case study method (Johanson & Vahlne 2006, 165-178). In case study, the author will conduct face-to-face interviews with the their employees selected by the case. The author will listen to their work experience, will ask professional questions, and testify theory with practice.

#### 1.5 Thesis structure

This section part shows an overview of all the chapters in this thesis. The thesis starts with an introduction with background information on the chosen thesis topic, then continue with thesis objectives, questions, case study and limitations. Theoretical framework and research methodology are presented as well. Chapter 2 focuses on literature review which presents the theory of social embeddedness and Chinese enterprises in entrepreneurship. Chapter 3 pays attention to empirical research that will take Huawei as the main case to be analysed in detail. Chapter 4 presents results based on three research questions via data collection and theory. In Chapter 5, the author reaches the thesis conclusion. It includes discussion of results, answers to research questions, and evaluation of the study.

Suggestions for further research is provided as well. In Chapter 6, summary is presented. Eventually, references and related appendices are given.

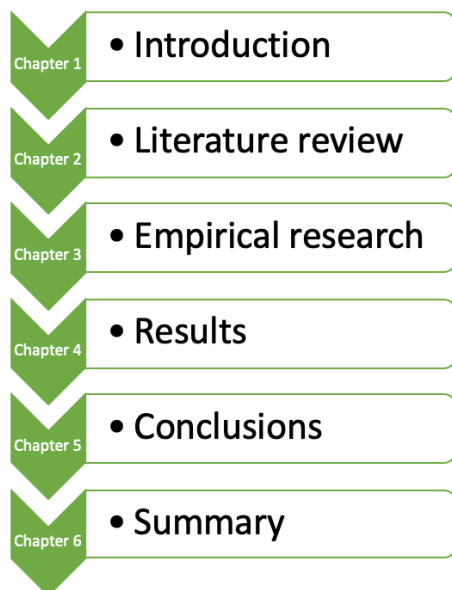


Figure1 Thesis structure

## 2 LITERATURE REVIEW

### 2.1 Network embeddedness

Harland (1995), pointed out that the original network concept was described as the structure of a "network" of fiber lines, metal lines and other similarities, and now, network refers to the connection between subjects of the behavior in different forms. According to Telford & Hakanson (1987, 234), the network is a subject of behavior with the ability to involve in activities affected by active and passive motivation, flow of resources, various formal or informal relationships among persons. It consists of three basic components: the actor, the occurrence of activities and resources.

There are many types of networks, if the actor is for the enterprise, the corresponding network is called the enterprise network. If the activities of the network are emphasized for the purpose of innovation, it is called the innovation network. If the emphasises on knowledge, technical resources, it can become a technology network. In fact, the concept of the network itself is broad in scope, sometimes the scope of the organizational structure and being a broad form of coordination. Social institutions are defined as a network system where members of society (including organizations) allocate scarce resources and institutions according to their point of contact. Social network is a collection of social relations formed by long-term emotional relationships and cultural identity in the process of transmitting and sharing resources among participants (including people and organizations) in a community, including the network of relationships inside and outside the enterprise. (Raine & Wellman 2012.) Through the network, businesses have access to the resources and information they need. In this network, network members will recognize the value of the network and the exchange of resources between members is not a simple sense of the transaction. (Snehota & Hakansson 1995.) The opportunistic behavior of members of this network will tend to weaken as shown in the Figure 2 is a basic relational network schematic (Sharma 1993).

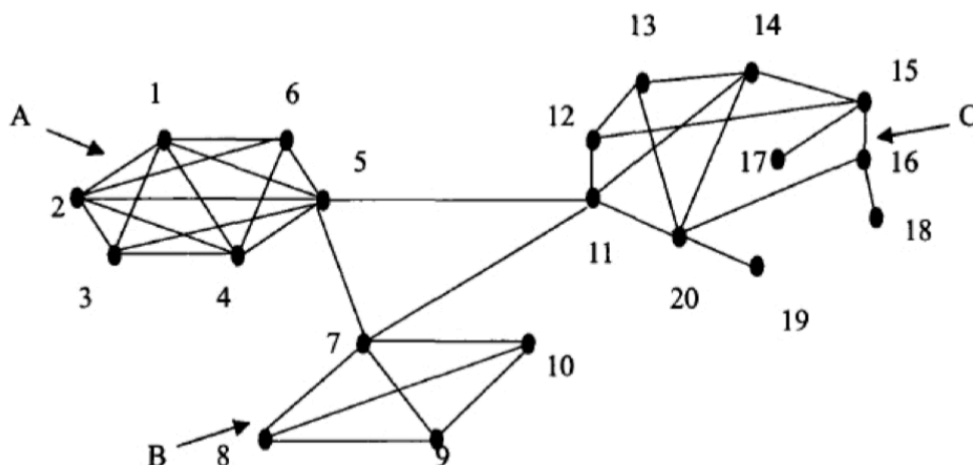


Figure 2 Diagram of relational network (Raine & Wellman 2012)

In social network analysis, the actors in the relational network are called nodes, as shown in 1, 2, 3, and so on. The relationship between nodes may be different in nature, and the object through the relationship is not the same, these objects may include information, material level, emotion and power, for example. If the object changes, the nature of the relationship will also change. The relationships are symmetry or asymmetry with the flow direction being one-way or two-way. Nodes, in the same location of the network or structure have equivalent status; different nodes have different roles in the network; nodes in different locations have relative fixed behavior norms. (Raine & Wellman 2012.)

This norm does not come directly from the internalization of culture and value, but directly from the interaction between network members. Depending on how many nodes a network has, relational networks can be divided into relatively large-scale relational networks and relatively small-scale network relationships. In the figure, A, C is a relatively large cabinet relationship network, B is a relatively small relationship network. (Raine & Wellman 2012.)

If the relationship between nodes is repetitive, relatively fixed, it is the strong relationship (strong ties); if the relationship between nodes are non-repeatable, non-fixed, non-persistent, then it is called the weak relationship (weak relations). In small-scale relationship networks, nodes or participant members are small and relationships tend to be strong; small-scale relationship networks tend to form strong ties; large-scale relationship networks tend to have weak ties. (Granovetter 1977, 347-367.)

Relations between stakeholders can be classified 'as strong ties or weak ties. According to Granovetter (1977, 347-367), the strength of connection is regarded as the overall time

spent, affection devoted, and service provided to maintain such ties. The strength of ties and weak ties lie in knowledge exchange and technology researches. Uzzi (1997, 35-67), Hansen (1999, 82-111), Reagans & McEvily (2003, 240-267) thought that knowledge is closely interlinked and implicit knowledge before decoding can hardly become explicit. And that only by close observation, clear demonstration, and plenty of interaction can knowledge be transferred to another entity. In other words, Hagedoorn & Duysters (2002, 525-548) believed that strong ties help turn implicit knowledge to explicit knowledge. Members sharing strong ties are more willing to stay in touch and which may then develop a unique heuristic way of speech to communicate complicated knowledge.

According to Granovetter (1977, 347-367) and Uzzi & Lancaster (2003, 383-399) weak ties between companies do good to innovation of information technologies. Uzzi & Lancaster (2003, 383-399), carried the idea that although that though strong ties foster influence and trust and make way for rich resources, strong ties serving as information spreading systems are likely to bring traffic to the path of information circulation, which cause waste of time and resources. On the other hand, weak ties help transfer new and heterogeneous knowledge and information which proves to be a more beneficial way to innovation and help companies gain an advantage in this highly competitive market.

Empirical studies conducted by Rhee (2004, 933-949), show that weak ties make a diverse network. Members will be less likely to have a role fixation and be more likely to venture in a new arena. He pointed out that strong ties will help entity gain explicit knowledge. Strong ties mean companies will follow previous regulations to fully exploit opportunities. Companies are not welcome to derail the usual road while making them miss new ventures. While an embedded network formed by weak ties benefits members to gain information due to the fact that entities from different societies usually have heterogeneous resources which may bring innovation.

The network of enterprises is a new type of network where organizations acquire knowledge, form networks and realize innovations. The relationship between organizations is non-complete market exchange. It is not a hierarchical relationship, but an equal and independent cooperative and coordinated relationship. (Jarillo 1988, 31-41.) Trust is a long-term interaction between nodes. In other words, repeat the results of the trading process repeatedly. Trust enable enterprises to cooperate in the long term and share benefits. (Gulati 1988; Gulati & Gargiulo 1999, 1439-1493.) Businesses to be "multi-relationship links", embedded in a network that is a vital part of social networks. Therefore, the network is embedded in the enterprise, and is a collection of social, professional, and exchange of relations of strategic significance to the enterprise, and the relationship

between the enterprise and the outside organization is formed by long-term accumulation. These ties help international companies to reduce risk. (Hagedoorn & Duysters 2002, 525-548.) According to structural embeddedness theory, enterprises conduct business by interacting into a network. Start-ups or reputable companies all need to embed into a social system structured by market, talents, capital, industrial and regional network, and international relations. To some degree, economic activities are at least partly decided by intricate networks where companies of home and abroad spot and utilize opportunities to generate revenues. (Granovetter 1985, 481-510; Jarillo 1988, 31-41.)

## 2.2 The birth of network embeddedness in internationalization of enterprises

The American sociologist Harrison White first proposed "market-as-networks" in his famous paper "Where the Market Comes from". He pointed out that the market is developed from the social network, "social network is the basis for market transactions." First, the production operators from the beginning in the consent social network, they contact each other, observe what the other is doing, especially pay attention to pricing, then, the production operators will exchange or imply information, thus establishing a relationship of trust. Under the constraints of this relationship of trust, companies all abide by the rules of consent and maintain consensus together, thus allowing business to continue. Third, the market order is in fact prosperous and the same network of wholly owned production operators, they do not act in accordance with the unified market law. In other words, market order reflects the hints, trusts and rules that arise from the interaction within the network of producers and operators. (White 1981, 517-547.) From the perspective of embedded network, as an economic actor, enterprises are also embedded in their market and social network, where enterprises survive (Granovetter 1985, 481-510).

According to White (1981, 517-547), in the process of enterprise internationalization, the internalization of the enterprise is actually seen as a kind of interaction with suppliers, customers, government, competitors, intermediary organizations and so on, if the participating members of the market subjects expand into the global market, then it can be said that the enterprise's network has achieved a certain degree of internationalization. Currently, the relationship between enterprises and these market subjects in the world is also a form of enterprise internationalization. In other words, the development of the enterprise international relations network and the internationalization of enterprises are essentially integrated and unified.

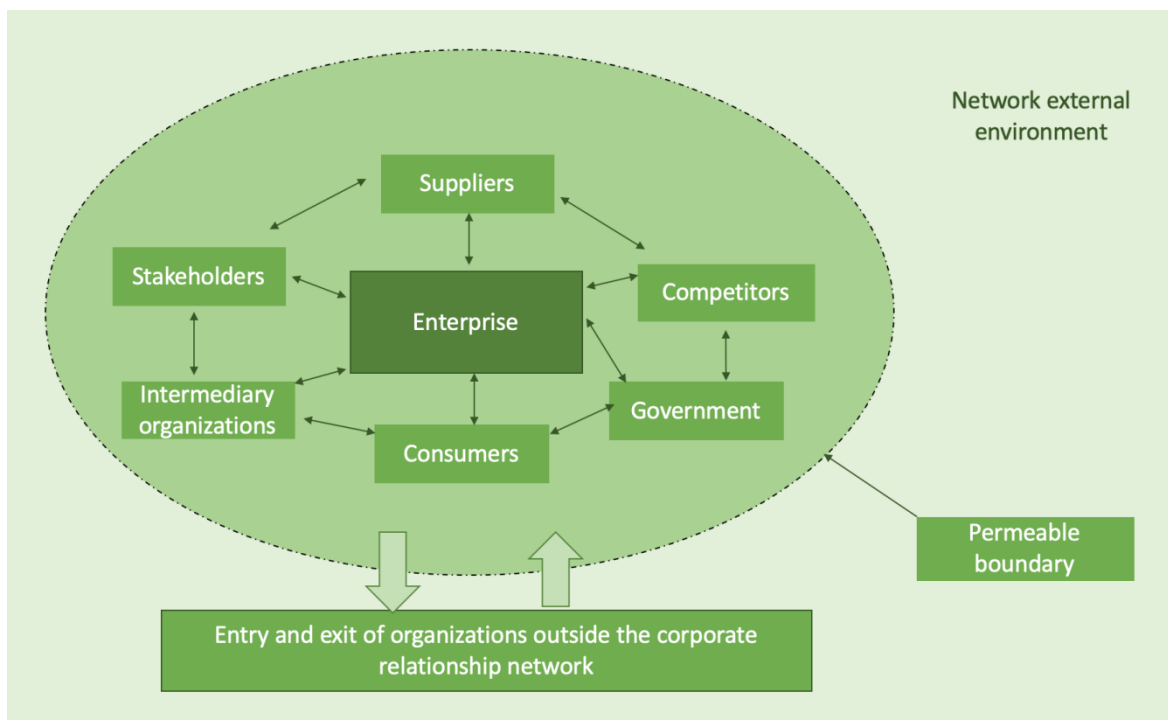


Figure 3 Enterprise network relationship structure (White 1981, 517-547)

The process of enterprise internationalization includes the vertical and horizontal division of labor across countries in the world, involving research and development, production, marketing, service and other value chains. As a result, enterprise production networks can be developed across different national market networks. In this way, the global market network can also be seen as a unified body in which different countries' markets converge based on global production linkages. (White 1981, 517-547.) The industrial system in which the enterprise located may be outside its national border, which facilitates the formation of the global industrial system. Experts believe this industrial system is based on a large number of productions, distribution, services, etc. The enterprises internationalization is the process of the interaction between enterprises and the various subjects of the international market, which includes not only the economic aspects that constitute the essential characteristics of the market network, the interaction with the price mechanism as the core, but also the institutional interaction of social relations based on the basic trust, reciprocity and cooperation of human society. (Johanson & Mattsson 2015, 111-132.)

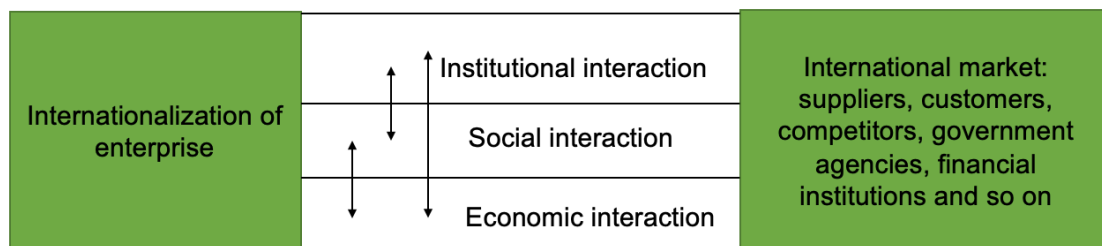


Figure 4 Enterprise internationalization network embeddedness (Johanson & Mattsson 2015, 111-132)

First, the internationalization of enterprises is an economic behavior, enterprises in the process of internationalization must sign a formal contract with the various subjects in the international market, with the price mechanism for resource exchange, transfer and integration which are also the essential characteristics of enterprise internationalization. Secondly, the internationalization of enterprises mainly depends on the market but also the society. To some extent, it is also the construction of the social character of the enterprise. (Johanson & Mattsson 2015, 111-132)

From the social network theory, the strength of this connection can be divided into strengths and weakness. Finally, in the process of internationalization, the macro level also includes the interaction at the institutional level, the institutional background, cultural background, political background, and the language are different to the host country market. the international market network of the enterprise is embedded in a broader institutional background. Therefore, the internationalization of enterprises interacted with different national and regional systems is the embedding of the system. The internationalization behavior of enterprises includes the economic interaction, social interaction and system interaction. In short, the network has become an inseparable part of the enterprise living environment. The network established by enterprises have a great impact on the process of enterprise internationalization. (Johanson & Mattsson 2015, 111-132)

### 2.3 Risk management of enterprises

Classical theory of enterprise internationalization holds that the internationalization growth of enterprises is a gradual learning process and companies avert risks. Enterprise entering into a global market acquires the knowledge needed for internationalization through “learning by doing”. Knowledge or valuable experience guide the enterprise to

choose target market and select a reasonable entry path into the market. The theory of the process of enterprise internationalization, founded by Johanson & Vahlne (1990, 11-24), is commonly known as the model or the stage theory of enterprise internationalization. Behavior theory of firm put forward by Cyert and March, and growth theory of firm put forward by Penrose believe that business is characterized by limited rationality and incomplete information. Knowledge, establishment Chain, loosely coupled system and physic distance depict the growth of an enterprise, as shown below.

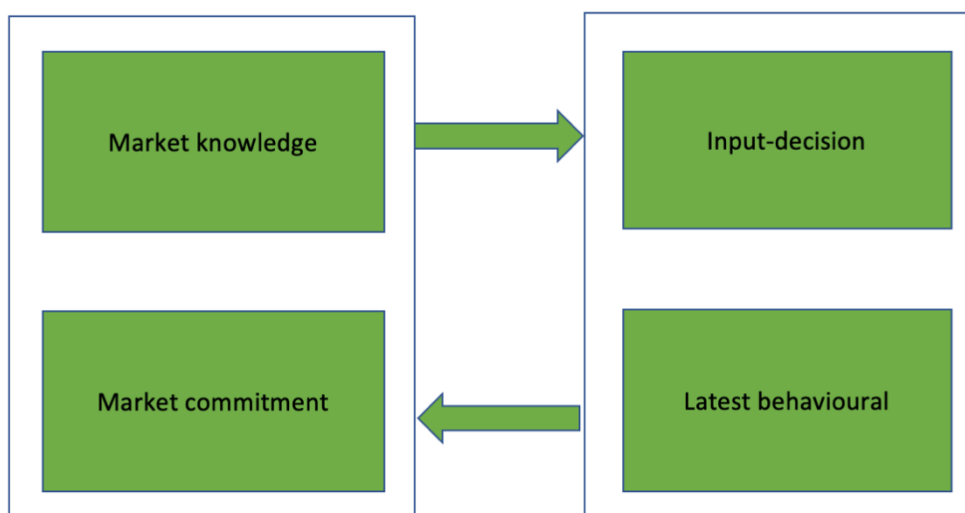


Figure 5 Dynamic and static factors of enterprise international growth (Johanson & Vahlne 1990, 11-24)

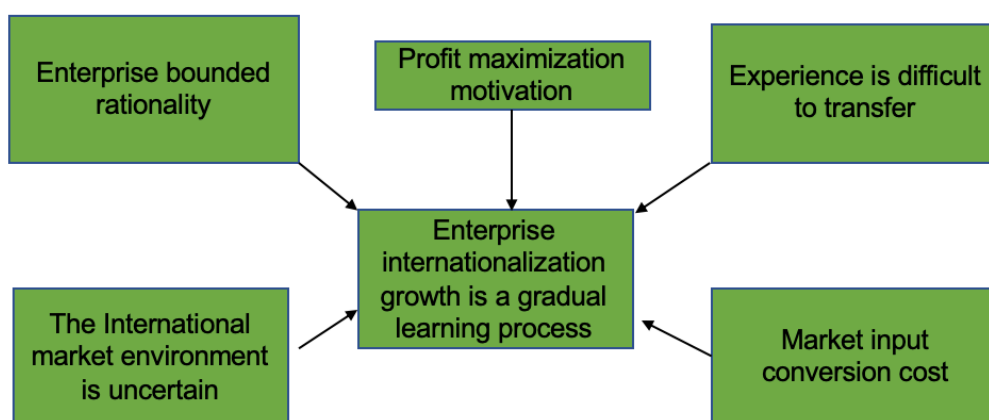


Figure 6 The logical assumption of enterprise internationalization growth process theory (Johanson & Vahlne 1990, 11-24)

The limited rationality of enterprises and the uncertainty of environment restrict the internationalization of enterprises. This paradox determines that the internationalization of enterprises must be a gradual process, and the mechanism of resolving contradictions is the core of the theory of the process of internationalization growth of enterprises. So how can we balance the contradiction between "enterprise environment"? Process theory holds that the only way is for enterprises to acquire international market knowledge and international operation knowledge through some way, which is a learning mechanism. (Johanson & Vahlne 1990, 11-24.)

The ability cultivation mechanism for the international growth of enterprises is in fact the "learning mechanism" of the enterprise. Johanson & Vahlne (1990) especially emphasize on "learning by doing". When companies choose how to serve foreign markets, they will be at risk due to uncertainties, such as different laws and regulations, consumers' preferences, etc (Conconi & Voon 2016, 211-234). Early on, Johanson & Vahlne (1977, 11-24), established the Uppsala international model by empirical research. The model emphasizes national market characteristics: uncertainties of the business environment, cultural practices, market structure and particularly customer differences which encourage enterprises to follow the gradual process of internationalization, i.e. entering foreign markets through exports before deciding whether to invest in the country.

In summary, the process theory of enterprise internationalization regards the dynamic and uncertainty of the international market as key obstacles to the internationalization of the enterprise. When entering into the global market, companies will try to control potential risks to the lowest.

### 3 EMPIRICAL RESEARCH AND DATA ANALYSIS

#### 3.1 Current situation of Huawei internalization

The four stages of Huawei's network expansion are closely integrated:

The first stage: from 1987 to 1995 Huawei sold electronic communications equipment and acted as an agent of a Hong Kong company. Slowly, Huawei began to make products independently. Its market was first laid in China's rural areas, through low-cost preemption of the market and expansion of the market network. After the expansion of sales, Huawei continued to work on the manufacture of electronic communication equipment, strengthening the depth and breadth of the social network in this field. At that time China has lots of communications equipment made by overseas companies, there is a complex network in Chinese market. However, Huawei survived and began to thrive. In 1994, Huawei's only sale 800 million yuan and had more than 600 employees. At beginning of development, the organizational network structure within the company is simple. (Huawei 2019c.)

The second stage: from 1996 to 2003. In this stage, Huawei only sold communication equipment, and gradually enriched product types by trying to build a multi-disciplinary product network covering mobile communications, transmission and other product areas. Huawei began to diversify services. In 1995, Huawei organized a research institute in Beijing. In 1996, products of HUAWEI entered into the international market. Its product network gradually internationalized and supplied products to markets of developed countries. For example, Huawei, in 1997, ventured to do business in the commonwealth of states (CIS). Of course, the process is arduous. In 2001, sales in CIS exceeded 100 million U.S. dollars. Overseas market network system was then set up. Their product network expanded to other countries and has been successful. (Huawei 2019c.)

The third stage: from 2004 to 2012. Huawei's business network has truly become globalized. From 2004, the size of the company's business is growing at 40% per year. In 2010, for the first time, became one member of the global 500. Since then, Huawei has moved up the list steadily. In 2012 Huawei overtook all its competitors, including Ericsson and officially became a behemoth. The company has become a multinational enterprise with overseas sales accounted for more than 70% and there are three major business systems included carrier business, enterprise business, consumer business. ((Huawei 2019c.)

The fourth stage: from 2013 to present. Huawei's business network has become more and more complex and international. In 2017, there are 197 Fortune 500 companies to work

were working with Huawei; in 2018, there were 211. Now, in 2019, there are 228 Fortune 500 companies working with Huawei. (Huawei 2019d.)

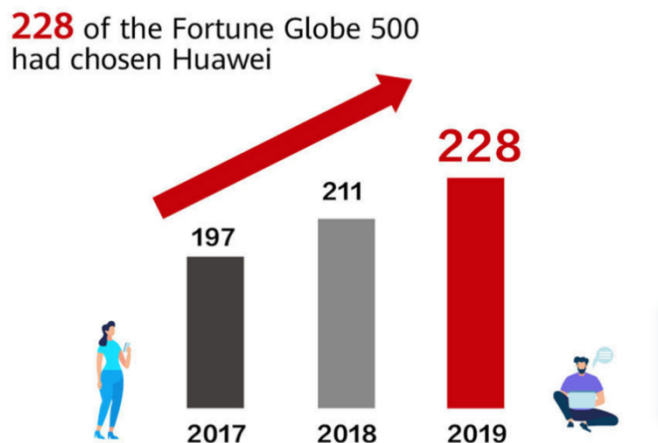


Figure 7 The fortune globe 500 (Huawei 2019d)

Huawei provides services to 400 million people in 200 cities in more than 40 countries and regions around the world, including Ping A City Business Network, which covers more than 100 countries and serves 1 billion people in more than 700 cities (Huawei 2019d).



Figure 8 Safe city (Huawei 2019d)

In terms of capital networks, Huawei now has partnerships with 20 international banks of top50 in the world and collaborate with more than 1,000 banks. In April 2019, Huawei cooperated with international partners to create the "strongest brain" of smart finance. (Huawei 2019d.)

In 2018, the company achieved sales revenue of CNY 721,202 million, a year-on-year improve of 19.5%. Net profit was CNY 59,345 million, a year-on-year improve of 25.1%. The raise in profit was mainly due to the raise in scale, the improvement of operational efficiency and the improvement of business quality. (Huawei 2018, 20.)

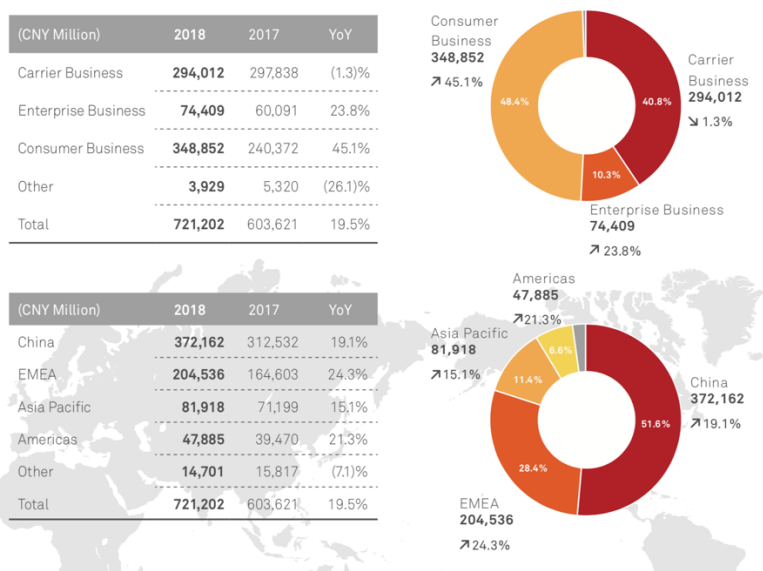


Figure 9 Business review 2018 (Huawei 2018, 20)

In 2018, the overall growth of the global economy was relatively stable, but faced with the pressure to slow down, Huawei concentrated on ICT infrastructure and smart terminals, continued to invest, insisted on creating value for customers, provided better consumer experience, improving business quality, and achieving sales revenue of CNY 721,202 million annually, increasing 19.5% year on year. (Huawei 2018, 65.)

## Results of Operations

### Financial Performance

(CNY Million)	2018	2017	YoY
Revenue	721,202	603,621	19.5%
Gross profit	278,171	238,142	16.8%
– Gross profit margin	38.6%	39.5%	(0.9)%
Total operating expenses	(204,884)	(181,758)	12.7%
– as % of revenue	28.4%	30.1%	(1.7)%
Operating profit	73,287	56,384	30.0%
– as % of revenue	10.2%	9.3%	0.9%
Net finance expenses	253	(573)	(144.2)%
Income tax expenses	(14,301)	(8,673)	64.9%
Net profit	59,345	47,455	25.1%

Figure 10 Financial Performance (Huawei 2018, 65)

To sum up, Huawei has built a complex and extensive social embedding system in the talent system, capital system, product service system and market system, and through 30 years of growth, Huawei has become a fast-growing international enterprise in China.

### 3.2 Research object selection and data collection

Many experts often use the case study method to study the internationalization of enterprises (Johanson & Mattsson 2006, 165-178). By applying case study method, researchers have more contact with the interviewees to communicate in depth, to be able to truly hear feelings of employees, and to observe. By interviewing employees, the author can combine knowledge with practical experience, and come up with the practical advice that better guide the problems encountered in the management practice.

The case study process itself requires a more comprehensive contact with the case object, this process can obtain a lot of data, this paper selects Huawei Technologies Co., Ltd. as the case to study for the following considerations: First of all, Huawei is a leader in China's technology enterprises. After 20 years of development, it grows from only a small company to the industry's leading global enterprise. According to the 2019 Fortune global 500 (2019), Huawei is now ranked 61st internationally and has 188,000 employees. Huawei's social network embedding system has a complex network and a high level of internationalization. The outdoor talent network also has a high level of internationalization, and Huawei has a high internationalization of talent in attracting talents, with more than 188,000 employees by the end of 2018. Huawei's recruited their employees from nearly 160 countries and regions around the world, with employees from 41 ethnic groups in China alone. The report said Huawei has set and implemented diversity goals regarding employees' nationality, gender, age, race, religious beliefs, etc. (Huawei 2019e.).

Data used by this study mainly collected through interviews, the author visited Huawei Technology Co. Ltd. Shenzhen headquarter and Beijing branch and interviewed manager and marketing personnel over the pre-determined issues. This interview lasted about two weeks. Furthermore, in order to explore more reliable and wider information, the author interview 5 Huawei employees online. The interviews lasted about one month. The problem mainly revolves around the following three aspects: The first question is: The role of trust. and how this reliable relationship helps Huawei to control risks in the global market. The second question is: global market path and the influence of international social networks on the development of global services. The third question is the establishment of the company's international reputation. In addition to the interviews, the

authors also reviewed authoritative media reports on Huawei, such as Fortune. com, Bloomberg. com and so on. to get case-related data.

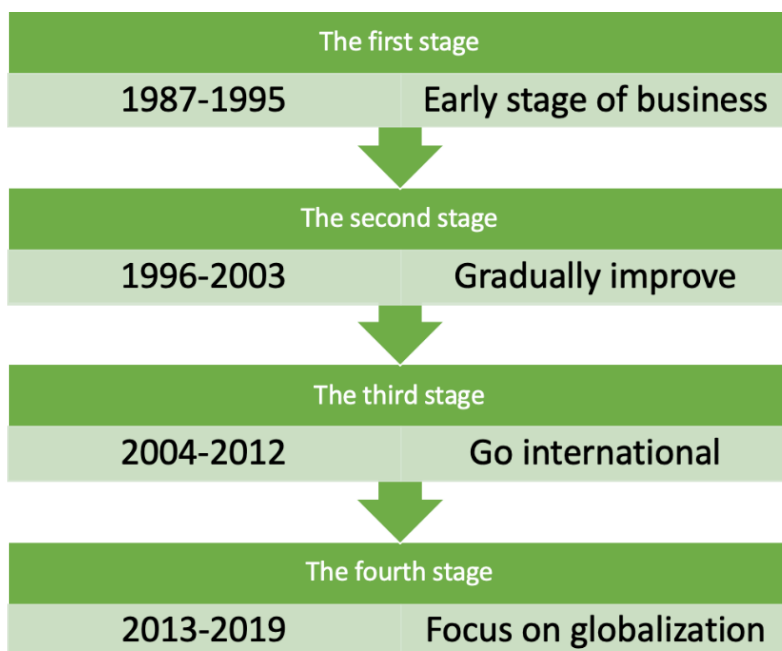


Figure 11 The four stages of Huawei's network expansion

### 3.3 Phases of the study

First phase of the study: determining topic and literature review

From May 15 to June 23

In the first phase of the study, the author visited websites to search news about Huawei. The author watched lots of news related to Huawei including interviews, official websites. This news-searching process took approximately two weeks. In the meanwhile, the author did literature review to decide the scope of the work. After deciding the topic, the author got to know more about social embeddedness network. Literature review lasted three weeks. When beginning writing this thesis, the author reread some of the topic-related literature or some new literature.

In order to explore more reliable information, the author has done seven interviews in total. There were seven participants, two were from Shenzhen and Beijing. It was finished in the second phase. The reason why the author chose those two participants was because they are professors in their fields. It means they own professional knowledge and work experience. The other five interviews were done online and finished in the third

phase. They were employees of Huawei and the interviews presented different and wider views to Huawei.

Second phase of the study: empirical research design and implementation

From June 31 to September 10

In this period, the author designed questions to be asked in the coming interview. The author contacted the interviewees in Shenzhen, where Huawei's headquarter lies, and Beijing. The author first introduced topics of this thesis and discussed set questions. The first meeting generated lots of information. The author took lots of notes for further analysis from the perspective of social embeddedness theory. In this process, the author got a deeper understanding of Huawei's recent situation. By rereading news and reports of Huawei, the author supplemented more details for this thesis. After interviews, in order to discussed and inform the details of information, the author ccommunicate with participants via emails and WeChat which is the most popular social application in China.

Table 1 Interview 1

Date	Participants	Time	Pages	City
31 June 2019	Interviewee 1	1.5 Hours	3	Shenzhen
2 July 2019	Interviewee 1	1 Hour	3	Shenzhen
5 July 2019	Interviewee 1	2 Hours	5	Shenzhen
7 July 2019	Interviewee 2	2 Hours	6	Beijing
9 July 2019	Interviewee 2	1 Hour	2	Beijing
11 July 2019	Interviewee 2	1.5 Hours	3	Beijing

Based on the data collected from the first two interviews, the author did a review on the basic terms of social embeddedness network including node, network, strong ties, and weak ties. Since Huawei's CFO was arrested, Huawei's situation has always been a hot topic. Then the Trump's administration blacklisted Huawei. The world may think Huawei run into an unprecedented crisis. However, Huawei's performance for the first half of 2019 is still sound. The company's net profit margin for H1 2019 was 8.7%. This may serve as a good example for other companies in the process of internationalization. In that, the

author discussed about risks management from the perspective of social embeddedness network.

Third phase of the study: data analysis and results

From September 20 to October 20

The author arranged a second interview with more employees of Huawei for on September 20, 2019 Huawei announced H1 2019 revenue. In order to collect more dynamic situation of Huawei, the author conducted a second interview via the internet. This time, the author recorded the interview. After collecting new data, the author provided results based on all interview data collection and three research questions.

Table 2 Interview 2

Date	Participants	Time	Recording	City
20 September 2019	Interviewee 3	1 hour	45 minutes	Lahti-Shenzhen
30 September 2019	Interviewee 4	1 hour	50 minutes	Lahti-Shenzhen
7 October 2019	Interviewee 5	1 hour	50 minutes	Lahti-Beijing
14 October 2019	Interviewee 6	1 hour	40 minutes	Lahti-Beijing
20 October 2019	Interviewee 7	1 hour	55 minutes	Lahti-Beijing

Fourth phase of the study: conclusions and summary

From October 25 to November 18

During this period, author did conclusions based on results. Moreover, the author answered research questions based on data collection. Thereafter, the author did reliability and validity, and suggestions for further research. In the end, the author presented the summary which summarized the whole thesis.

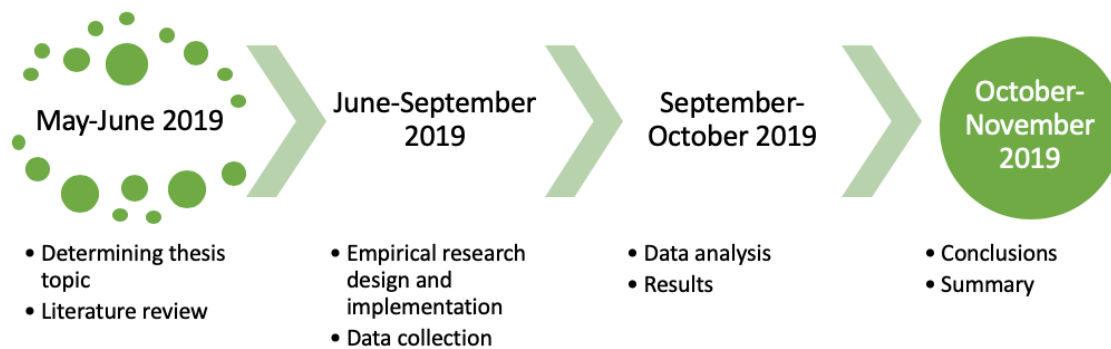


Figure 12 The timeline of thesis implementation

## 4 RESULTS

### 4.1 Long-term relationship and risk management based on relational network

In the process of internationalization, enterprises should not only interact with the main body of international market based on market mechanism, but also with the price as the core. Furthermore, this interaction is also a kind of social interaction. The relationship between enterprises and international market players is not only economic, but also informal social network in the process of cooperation. In order to test this theoretical hypothesis, the author asked questions, two respondents gave detailed answers on these questions respectively and expressed their views. The following will list the evidence of the embeddedness hypothesis of enterprise internationalization network as many as possible in combination with the interview content.

Through interviews with Huawei executives, organization finds that Huawei attaches great importance to establishing a long-term cooperative relationship with its customers in the process of developing international business. Huawei tries to maintain a long-term cooperative relationship with its customers.

*Sometimes the cost of developing a new customer is much higher than that of maintaining a loyal customer.*

In the process of internationalization, enterprises should not only establish economic cooperation with customers in the international market, but also pay attention to establishing a social relationship with customers, which will promote the establishment of communication mechanism between enterprises and customers and lay a good foundation for the follow-up cooperation.

*Our company pays great attention to the maintenance, communication and long-term cooperation of regular customers. For loyal customers who have cooperated many times, they usually visit and communicate through the Internet and telephone within a certain period.*

Further, the relationship between enterprises and enterprises has become more solid, so in dealing with crisis, mutual help effectively alleviated each other's pain. Therefore, this shows that the internationalization of enterprises is not only an economic construction, but also a social construction, which is the embodiment of the social embeddedness of the internationalization of enterprises.

*In the trade war, the United States presented China a 90-day temporary license. The US suppliers worked overtime to manufacture products for Huawei. It makes me very touched. Of course, it is the inevitable result of long-term cooperation to build trust.*

#### 4.2 International information acquisition based on relational network

There are two main ways for enterprises to acquire customer resources in the process of developing international business. The first is that customers actively contact the company, and the other is that the company actively takes the initiative to obtain information of market demand. One channel is that Huawei acquires market information by growing up with its partners.

In order to confirm the hypothesis that market information can be obtained through international networks, this study sets up relevant questions in the interview outline, which can be indirectly proved by participants' answers and explanations.

From the interviews with senior executives, domestic and foreign market participants, including suppliers, partnerships, industry alliances and source communities, have provided Huawei with relevant information on the international market in different forms, and these evidences are obvious. Therefore, it is reasonable to believe that the international relations network of enterprises can bring relevant information of internationalization to enterprises and facilitate enterprises to obtain information of international market and business cooperation.

*As you know, some loyal customers have already cooperated for a long time. Our company would like to communicate and understand customers deeper. Some customers often intentionally or unintentionally provide us with valuable information about the needs of local enterprises.*

It is not necessary that the main bodies of Huawei's international network provide more market information, such as suppliers, partnerships, industry alliances and source communities. This shows that Huawei should strengthen communication and cooperation with these organizations in the process of internationalization.

*Suppliers, customers, and intermediaries have provided us with some information about customer needs. This is also an important channel for us to obtain market information. Our company has joined some industry associations that able to obtain relevant information about internationalization. For example, we are a member of a Chinese-invested association of local Chinese merchants in India. We also I have*

*participated in the association and communicate with local Chinese merchants to get useful information.*

Secondly, Huawei executives realize the importance of obtaining international information through networks. The organization emphasize that management of customer relationship should be strengthened in the next step. This is conducive to Huawei's second cooperation in main-taining loyal customers, and to obtaining more information on demand, to continuously develop new customers.

*Customers who have had long-term cooperation with our company have a very good relationship with us. Any information that is mutually beneficial will also be shared with us, as long as this information does not infringe on their interests.*

#### 4.3 International reputation acquisition based on relational network

In the process of enterprise internationalization, reputation information is exchanged and disseminated among stakeholders at home and abroad, forming reputation information flow and reputation information network, becoming information display mechanism, increasing the openness of transactions, and helping to improve transaction efficiency. From the perspective of stakeholders and management, the following three factors have a great impact on the international reputation of enterprises: first, high-quality products and services. Customer is an important stakeholder of an enterprise. Customer's experiences and evaluation is one of the key factors in the formation of an enterprise's reputation. Secondly, business partners and competitors. Huawei believes in win-win policy. Thirdly, Organization shoulders the responsibilities of the society.

Since this study focuses on the impact of enterprise international relations network on enterprises international reputation acquisition, the relevant descriptions of Huawei's product quality factors on enterprise international reputation acquisition are filtered out in the table below, and the content of interaction among with customers, partners and competitors , and reasonability is emphasized to explain organization international relations network.

Firstly, in order to provide high quality products and services to customers. Huawei highly pay attention to R&D investment. It means innovation and research play a significant role in their organization. Thus, organization on-going to invest over 10% of their annual revenue in research and innovative technology. They are top five in The 2018 EU Industrials R&D Investment Scoreboard due to the fact that they invest 100 billion yuan in R&D investment. Huawei has achieved great results because of Huawei long-term investment. It provides them potential to bring their customers with creative goods and

more productive services. Secondly, Huawei focuses on investing R&D and respects intellectual property. Huawei is one of the global's largest patent holders thanks to Huawei ongoing R&D investment. By December 31, 2018, the organisation had achieved a total of 87,805 patents of which 11,152 core patents were granted by the US. It presents important value to information society on a large scale because of patented technologies, including in the US.

*I think Corporate reputation is very complicated. Sometimes some customers are not satisfied with your products, they will spread the news and the reputation will be destroyed. But a good reputation can be passed down to ten, and multiplied by ten times, then our products are able to achieve good reputation. So, in the past few years we have invested a lot of money to R&D ensure that we can provide high quality products and services to our customers.*

Additionally, it is worth noting that Huawei attaches great importance to customer satisfaction management and has formed a complete set of management plans and systems. In recent decades, Huawei has continuously improved its service management methods to improve the overall process service level. In fact, the management of customer satisfaction is another important means for Huawei to improve its customer relationship to obtain an international reputation. Continuous improvement in customer satisfaction will be the enhancement of the international image of Huawei's products and is an important driving force for enterprises to boost revenues. Through the above analysis, the author basically confirmed that Huawei's interaction with external network partners as well as customers is a significant factor influencing the international reputation of Huawei and its products. This basically proves the relevant assumptions presented in the third chapter.

*Our company has accumulated more than ten years of experience and is well known to the international peers. On the one hand, the quality of our products is excellent. On the other hand, we attach great importance to customer relationship management and form a complete set of customer relationship management system. If we do not do good relations with our customers, the international business of the company cannot be established.*

Secondly, business partners and competitors. Enterprises should pay attention to business ethics and win-win cooperation, which is the proper idea for enterprises to treat competitors and co-operators. On the one hand, enterprises should properly handle the relationships with their competitors, and abide by business ethics is conducive to shaping a good corporate reputation. On the other hand, enterprises and partners should abide by

contracts in their business activities. Honest enterprises will win more partners, more consumers' trust and support, and form a win-win situation of cooperation, thus shaping a good corporate reputation.

*Enterprises in this market must pay attention to certain rules of the game. This game rule is to establish a win-win situation with partners. It is impossible for get all benefits, so that partners not cooperate again next time.*

Organization not only focuses on protecting their own intellectual property rights, but also respecting others' rights. Therefore, they settle down cross-licensing agreements with many organizations globally.

*We not only respect our intellectual property rights, but also respect the intellectual property rights of other companies. It will be influencing our reputation in the industry.*

Huawei pursues win-win policy with partners. Their objective enables all partners co-existence and common prosperity in an open, dynamic, and diverse business ecosystem. Huawei cooperate extensively and have created long-term relationship with more than 13000 suppliers globally. In the future, they will go on encouraging business success via strategic procurement. It is via mutual trust, support, and the simplest possible transaction ways that they forward together with their partners to realize industry development and do business continuity.

*Whatever the conditions are, Huawei will be focusing on win-win rules.*

Thirdly, Huawei shoulder the reasonabilities of society. Huawei is extremely important to industry organizations which drive industry forward. They are a member of over 400 standards organizations, industry alliances, and open source communities, where they shoulder the responsibilities for over 400 core positions. Company provides over 5,000 standards proposals, an increasing number of nearly 60000. (Huawei 2018, 5.)

*We join in multiple organizations and play an important role in the organization. The more duty we have, the more good reputation we gain.*

Huawei will go on getting more involvement in the more fields and local communities. They focus on creating substantial contribution to the locals where they operate their business, supporting construction of infrastructure, quickening industry development, providing more jobs or opportunities and raising individual's living standards. It is a significant factor to gain a good reputation.

*We will continue to increase global industrial layout and investment, and make tangible contributions to improving the infrastructure, accelerating industrial development, expanding employment opportunities, and improving people's livelihood and welfare. We are doing good things for people, and a good reputation naturally comes.*

Cyber security requires all organizations to face challenges together. To maintain cyber security, industries and regulators should develop unified standards and verification mechanisms. All equipment suppliers and carriers need to obey the regulation. To make secure equipment industry standards is the duty of equipment supplier. (Huawei 2018, 4.)

*We will take the initiative to assume social responsibility, and ensuring cyber security is the common responsibility of the whole society and the whole industry.*

## 5 CONCLUSION

### 5.1 Discussion of results

This study based on the theoretical research with case analysis. From the social embedded network to the internationalization of enterprise growth, the relationship network theory believes that the relationship between countries is more and more closely linked, the market between the participants becomes more and more close. The environment has been changing. From the "enterprise-environment" perspective to "enterprise-network" "The direction of development, the author thinks that a large number of international enterprises get opportunities from the network established by enterprises. Enterprises tend to choose the relevant resources to develop international business.

The establishment, development and promotion of enterprise international relations network will become the primary challenge facing the enterprises internationalization. The cross-border development of enterprise relationship network and the international growth of enterprises are mutually enhancing. In the process of enterprise internationalization, enterprises in the international market network establish, develop network relations, then, adjust their network location. With the development of enterprise relations network, network location optimization, enterprise relations network gradually embedded into international business network, and finally build a global strategic network. Enterprises will get more international information, intellectual resources and gain reputation, therefore, through the "resource acquisition" mechanism, the enterprises will facilitate internationalization. The internationalization of enterprise will also affect the transnational development of enterprise relations network through the "relationship operation" mechanism, so the two are a collaborative relationship.

Relationship network is the "condition of using and controlling resources" of enterprises, which also guarantees the loyalty between enterprises and enterprises from the level of interest. In a word, the relationship network theory of enterprise internationalization has been confirmed to some degree, and the external relationship network of enterprises and its transnationalization play a positive role in development of enterprise internationalization, and the three dimension structure and relationship peacekeeping and cognitive dimensions of the enterprise's external relationship network are all significantly positively correlated with the performance of enterprise internationalization. The relationship dimension in the enterprise relationship network has the most significant impact on the enterprise performance.

The internationalization of enterprises is a complicated process affected by some factors (etc. external factors and internal factors, the environment, organization and strategy factors of enterprises). Current global economic and business environment are dynamic and uncertainties abound, companies aiming at the global market must attach great importance to it, because it brings certain risks to the construction and development of enterprise relationship network, thus affecting the success or failure of enterprise internationalization.

Generally speaking, there are several key reasons for the risk of enterprise international relations. Firstly, the risk of imperfect cooperation schemes brought about by insufficient preparation of partners chosen by enterprises. Secondly, the imperfect reputation mechanism between enterprises and their international partners will lead to the risk of trust crisis. The relationship between an enterprise and its international partners depends on a commitment to future behaviour, which can be either explicit or implicit. Its essence is an incomplete contract. Therefore, the crisis of cooperative trust has become an important part of the network risk of enterprise international relations. Third, the risk of opportunism caused by information asymmetry.

Many enterprises focused on short-term interests with the expense of the common interests to maximize personal profits. Thus, they undermines the harmonious relationship of cooperation and bringing harm to the internationalization of enterprises. In the process, Chinese enterprises must pay attention to avoid falling into the predicament of inappropriate loss of control and strive to make cooperation. It does not deviate from its own strategic goal of internationalization. Therefore, enterprises need to do the following things well.

### **Risk management strategies of international relations network of enterprises**

Firstly, it is necessary to avoid the trap of international contract terms. Enterprises voluntarily give up some control power to ensure that both parties can achieve cooperation and thus achieve their own strategic objectives. However, companies are not familiar with the laws and regulations of various countries, not knowing the business rules in the process of international cooperation and not being accurate enough about the future development trend of the industry. Chinese enterprises need to carefully study the terms of the contract and need the help of professionals at home and abroad. Chinese enterprises should not only see the commitment of the partners, but also analyse whether their counterpart has the ability to fulfil the commitment.

Secondly, enterprises should strictly distinguish between strategic cooperation and strategic cooperation in the process of internationalization. For strategic cooperation with

foreign enterprises, enterprises must pay great attention to the control of international relations and should not easily compromise on holding. Enterprises should select talented people who are capable and loyal to our company to represent our company in dealing with the cooperation between the two sides and monitor them appropriately. For strategic cooperation, the requirement of control can be reduced appropriately according to the situation. Internationalization of enterprises is a complicated process. Influenced by many factors, such as external factors and internal factors, the environment, organization and strategy factors of enterprises all affect the realization of the internationalization goals of enterprises. Current global economic and business environment are dynamic and uncertainties abound, companies aiming at the global market must attach great importance to it, because it brings certain risks to the construction and development of enterprise relationship network, thus affecting the success or failure of enterprise internationalization.

## 5.2 Answers to research questions

To maintain a clear focus of the research, the author created three research questions. These set questions guide the study through entire procedures of the acquired knowledge. Finally, a valid research providing information answers all the inquiries clearly. This sub-chapter recaps the research questions and summarizes the main findings of the questions.

- 1) Why does a company establish a long-term relationship with their customers in the international market? Is it a way to control risk management?

Key word: long-term business, relationship building

The study shows that dealing with the relationship between enterprises and international customers is the same as dealing with the relationship between people. Business requires long-term cooperation rather than some purely bargaining and one-hammer business relationship. The company pays close attention to the establishment and management of customer relationship, but after long-term contacts with customers, when enterprises face crises, such as the Sino-US trade war triggered by 5G, the United States will add China in the trade blacklist. However, the suppliers which cooperates with Huawei, does not want to lose their customer. It is said that some of Huawei's American suppliers even try to lobby the government. Companies are mainly driven by profit; enterprises will help partners in crisis. There is a saying for companies whose profit are closely linked are like friends in the same ship. If their ship sink, all of them will struggle.

Key word: "Cooperation" and "Customer Trust" "

"Sincerity" and "Honesty

Relational marketing is very important in developing domestic business. The organization hold the view that it is very important in developing international market. Because the company's products are more competitive in the international market. In fact, the products' price is more transparent. In the process of negotiating with international customers, enterprises do business with sincerity. If not, the organization believes that international business is very difficult to carry out, because they are not a monopoly enterprise. In the process of expanding international business, pricing is generally not the most important factor. Customers generally look at the reputation of this enterprise and salesmen. Some salesmen have established very good friendship with customers and won the trust of customers not only in business cooperation, but also in private gatherings, such as Birthday parties.

Key word: "Relations Are Important"

It is very important to develop business relationships in the international market. Customers are not only concerned about products, but also about the reputation of the company. When the products of a company are well-received in the market, the sales and business of their future products may become easier to sell. For example, the Sino-US trade war, the United States gave China a 90-day temporary license, and American suppliers worked overtime to manufacture products for Huawei. This moved Huawei very much, which is also the natural result of long-term cooperation with trust.

Key words: "loyal Customer" and "Re-Cooperation"

The company attaches great importance to the maintenance of loyal customers, communication and secondary cooperation. For important customers who have cooperated with Huawei for a long time, the organization usually visit and communicate with them through social network, which is conducive to the acquisition of market information. And this connection will also promote the smooth development of companies' international business.

- 2) How does a company acquire international information? Does relational network support a company to obtain international information?

The result shows that if some customers cooperate for a long time, the office with strong business relationship will be better. Through continuous communication and understanding with customers, customers often intentionally or unintentionally provide the

organization with some information about the needs of other local enterprises. Some customers attach great importance to the relationship with sales representatives. Departments will bring more opportunities for business development. Moreover, suppliers and partnerships have provided Huawei with valuable information about customer needs, which is also an important channel for us to obtain market information. Huawei has also joined in industry alliances and opened source communities to enhance communication and communication, which is Huawei's platform to obtain information. In line with the principle of mutual benefit, the organization works with their partners to create greater value and benefits.

- 3) How does a company improve reputation in the international market based on relational network? Do products and customer satisfaction influence reputation?

Firstly, the organization has made a lot of investment in R&D and is committed to creating better and satisfactory products for customers. The company is constantly communicating with customers and meeting their needs. This is Huawei's original intention and an important aspect of gaining international reputation. In addition, Huawei attaches great importance to customer relationship management, they form a set of customer relationship management system. Secondly, Huawei joined in industry alliances and source communities in the spirit of win-win cooperation with their partners. At meetings, Huawei shared their experience with members. Thus, they won a good reputation. The organization attaches great importance to protect and respect intellectual property rights. Thirdly, they also share responsibilities as Huawei is extremely important to industry organizations and drives industry forward. Huawei will go on raising their involvement in the field and local communities. Cyber security requires all organizations to face challenges and Huawei focus on it as well.

### 5.3 Validity and Reliability

In order to enable the reliability and validity of this thesis, the author used both secondary and primary data. First, the literature review comprises with the professor material in the domain, including peer-reviewed journal papers and book chapters. Before using any secondary source, the author obtain them from a recent date of publication, literate language, reliable references, research methods, and authorship. Secondly, the author utilizes a clear and consistent way of data collection and analysis. (Middleton 2019.) The interview design closely connects with the research questions and the theoretical framework. Additionally, the author does the pilot interview carefully before interacting with interviewees. As a result, the previous lists of clarifications and concept definitions matched each meeting, therefore enabling that participants understand the questions

correctly. Furthermore, each interview was advanced by the explanation of the research objectives. In addition, in order to enable their relevance and comparability, the interviews followed a defined structure. Meanwhile, the structure of interview enabled clarifying and suggestive questions to utilize. The relevance of information was further secured by choosing a sample with a wider experience in network embeddedness. Subsequently, the process of reliability of the analysis used a word-to-word transcription and literally full translate to answers. All in all, the size of the study corresponds with a qualitative nature of the research and presents efficient of information of the purpose of the study.

#### 5.4 Suggestions for further research

First, the study looks back on Huawei's development in recent 30 years. The past 30 years is also China's 30-year of reform and opening. The domestic and foreign environment experienced by Huawei must be different from the current and future conditions. The study did not track Huawei dynamically due to time limit and Huawei's 30-year of development provides lots of lessons for other enterprises to learn, so it is possible to increase the duration of the study and study it dynamically.

Second, Huawei made its list of the Fortune 500 for the first time in 2012 and continued to move up in the list in the following years. Now Huawei ranks 61st in the latest Fortune 500 ranking, and it has become an international enterprise, and there are doubts about whether their development experience is applicable to small and medium-sized enterprises. Therefore, the future research can focus on the development of small and medium-sized enterprises, and research social embedded network and risk control. There are many successful enterprises in the process of internationalization, and the failed enterprises also have research value, and it may be useful for other enterprises to explore the reasons of failure from the perspective of social embedded network.

Third, as we all know, Huawei is a high-tech company, the core business is communication electronic semistandard and services. Enterprises deal with all kinds of businesses while this research mainly focuses on technology companies, thus future researches can study the process of globalization from the perspective of social network like industrial enterprises, cultural enterprises. Risk control in the process of internationalization, such as banks, the social networks set up by different types of enterprises are similar, whether the nature of the enterprise leads to the difference or product differences, the research can be extended in-depth.

## 6 SUMMARY

As more and more enterprises do businesses globally, networks established in the process of internationalization exert huge influence on its survival. The author chose Huawei as a case to interpret its success from the perspective of embeddedness theory. Harrison White regarded market as network. From White's view, market is an extension of social network which serves as a platform for economic sectors to exchange services and make profits. While global market will make greater and more complex networks where suppliers, customers, government, competitors and various organizations are connected. In the author's view, doing business calls for cooperation and cooperation creates relationships or networks. It is in these networks that information of enterprises of different industries are exchanged, at domestic or global level, resource are shared, and revenues are generated. These networks can be strong and weak. For start-up companies, strong ties first help them survive and expand then weak ties will be established to make business grow bigger and stronger. As for risks happening in this process, the network will provide help too. As shown in the case of Huawei, many business suppliers in America tried to make products for Huawei as much as possible.

In fact, Huawei's pay a lot of attention to maintain a strong link with its suppliers and customers. Their process of development was divided into four stages as illustrated in chapter three. Thus, the author designed three core questions to be asked in the interview with Huawei's employees. These three questions are all concerned with embedded network. After analysing these interviews and other data collected online and offline, the author reached the results.

The author concluded that networks exert huge influence on the internationalization of enterprises. In these networks, enterprises maintain long-term relationships in order to get useful information and resources, develop customers, generate revenues and manage risks. Huawei has honoured its commitments to contract signed with suppliers and has started business in Africa and diverse areas to extend its networks. Huawei enjoyed good reputation among customers and business partners. In that, America's blacklist or other hardships experienced in the process of internationalization did stop its development. They focus on win-win policy with stakeholders which means they prefer to create more benefits via cooperation. Huawei not only protect their intellectual property, but also respect partners intellectual property. Moreover, enterprises pay attention to R&D aim to produce high quality products. Huawei sets the customer system aim to raise customer satisfactions. Finally, the organization shoulder the society responsibilities and create more

job opportunities and better life for more individuals. It is a way to obtain good reputation in the international market.

Chapter 5 is conclusions, discussion the results were presented in sub-chapter 5.1. The author believes that a large number of international enterprises obtain possibilities from the network established by enterprises. Organizations tend to choose the relevant resources to develop international business. The three-dimension structure and relationship peacekeeping and cognitive dimensions of the enterprise's external relationship network are all significantly positively correlated with the performance of enterprise internationalization. The relationship dimension in the enterprise relationship network has the most significant impact on the enterprise performance. Although, there are several key reasons for the risk of enterprise international relations. As for risk management, the author provided strategies of international relations network of enterprises. Firstly, it is necessary to avoid the trap of international contract terms. Furthermore, enterprises should strictly distinguish between strategic cooperation and strategic cooperation in the process of internationalization. In sub-chapter 5.2 author asked three research questions. In sub-chapter 5.2 analysed reliability and validity. Eventually, suggestions for further research was written.

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## APPENDICES

### Appendix 1 Interview questions

#### Question 1

Does your company tend to establish a long-term relationship of mutual trust with customers in the international market? Does this relationship help in times of crisis?

#### Question 2

How do you get information about demand in the international market? Can domestic and foreign suppliers, customers and intermediaries provide you with some information about international business?

#### Question 3

What is the reputation of your products in the international market? How do you think the international reputation of enterprises and their products should be established?