ATLANTIS PRESS

Advances in Economics, Business and Management Research, volume 186

Proceedings of the 2021 International Conference on Transformations and Innovations in Business and Education (ICTIBE 2021)

Identifying Key Success Factors of International Joint Ventures

— A Case Study of Nokia Bell

Yiheng Ding

SILC Business School, Shanghai University, P.R. China
[*] Corresponding author, Email: ariading@163.com

ABSTRACT
The International joint ventures (IJVs) are the most effective way for companies to gain the scale and strength. This has been one of the leading foreign market entry methods over the last decade, especially in the vast Chinese market. Although IJVs are one of the most common forms of entry, numerous studies have shown that IJVs have failed to achieve the goals set for them, or even failed. Therefore, it is significant to study the factors that determine the success of IJVs. This paper takes Shanghai Nokia Bell, which has a foreign enterprise background and is a state-owned enterprise directly under the State-owned Assets Supervision and Administration Commission, as the research object. An interview-based survey method and an analysis based on the Ice Cone Model reveals that similar levels of commitment are critical factors for internal success. In contrast, an excellent regulatory environment and human resource factors can be considered as external success factors. These factors are particularly critical for Chinese-Finnish joint ventures during their operational phase in mainland China. Firms that do not include these conditions should concentrate on fulfilling them. Finally, the limitations of this study are discussed.

Keywords: *International joint ventures (IJVs), Ice Cone Model, Chinese market, Shanghai Nokia Bell.*

1. INTRODUCTION

The use of joint ventures (IJVs) has increased significantly in recent years in both international and domestic settings (Harrigan 1988; Hergert and Morris 1988). Because of their growing strategic importance, IJVs are also a critical issue for international operations. Increasingly, these ventures are seen as key elements of a company's business unit network and as strategic weapons for competing within the company's core markets and technologies (Harrigan 1987) [1].

International joint ventures formed by firms from different countries were widely used as early as the 1980s, and the number of international joint ventures continued to grow globally into the 1990s (Tian 2014) [2]. As of December 2019, there were 352,076 Sino-foreign joint ventures in China, accounting for 35.2% of foreign direct investment. In 2019, the top 15 countries (regions) in terms of the investment amount in China established a total of 32,699 new enterprises in China, accounting for 79.9% of the total number of new foreign-invested enterprises in China in that year, and the actual investment totaled $133.63 billion, accounting for the actual use of the actual investment totaled US$133.63 billion, accounting for 94.6% of the total foreign investment used in China. (Information Office of Ministry of Commerce, PRC, 2021) [3].

Despite the popularity of international joint ventures in emerging markets, some studies have shown that the goals set for international joint ventures have not been achieved and that the instability and failure rates of international joint venture operations are high (Gomes-Casseres, 1987; Beamish, 1998; Hennart et al. Ungason, 2001) [4]. In the literature, there has been a marked increase in research on Sino-foreign joint ventures, but research has focused on joint ventures in Asia, particularly in Hong Kong, China, and many studies have also focused on parent company joint ventures from large Western countries (Information Office of the Ministry of Commerce, PRC, 2021). Research on IJVs (and FDIs) by firms from smaller developed European economies such as the Nordic five countries has been extremely limited to date, so there is a need to focus on international joint ventures in smaller developed European economy countries such as the Nordic five countries and find solutions to the problems and identify key factors for the success of IJVs in China. This study seeks to fill this gap by identifying the key factors that determine the success of Sino-European joint ventures in China.

In this study, a detailed case study will be conducted using Shanghai Nokia Bell, which has a foreign enterprise background and a state-owned enterprise directly under the State-owned Assets Supervision and Administration Commission, to identify the key factors of IJV success and thus contribute to the existing IJV literature.

2. LITERATURE REVIEW

A joint venture (JV) is one that involves two or more different organizations in a legal sense, each of which should be actively involved in the decision-making activities of the entity, and not just in an investment role as a joint venture (Geringer 1988). For an international joint venture (IJV), at least one parent company needs to be headquartered outside the country in which the joint venture operates or the joint venture has a significant degree of operations in more than one country (Geringer & Hebert 1989) [5].

Since the publication of Penrose's (1959) paper "A Theory of Business Growth", many studies on strategy began to focus on a firm's internal resources rather than its external environment, eventually leading to a new mainstream theory in strategy theory: the resource-based theory. Traditional strategy theory mainly analyzed factors external to the firm such as its competitive environment and competitive position and argued that firms had to find strategic matches between their internal characteristics (strengths and weaknesses) and their external environment (opportunities and threats) to gain sustainable competitive advantage. However, later studies found that even in similar environments, the performance of firms still differed greatly from each other, so the research began to focus on the internal aspects of the firm, examining the importance of the firm's internal resources and capabilities, etc., in building a firm's sustained competitive advantage (Penrose,1959) [6].

Resource base theory is a framework used to explain the development of competitive advantage of firms, which is related to organizational performance7 (Barney, 1991; Wernerfelt, 1984). Organizations are defined as collections of tangible and intangible resources and capabilities that are used by firms to develop and execute their strategies (Amit & Schoemaker, 1993; Barney & Arikan, 2001) and to achieve organizational competitiveness (Eisenhardt & Martin, 2000) [8] [9].

Barney (1991) argued that if an organization has valuable and scarce resources, then it can gain a competitive advantage and perform well in the short term. Therefore, he proposed the VRIO framework to assess the competitive advantage of a company in terms of financial and human resources. In addition to being valuable, rare, and inimitable resources, an organization gains competitive advantage in such a way that it needs to develop the full potential of these resources within such a framework (Barney 1991). The title of the VRIO framework is an acronym consisting of the initials of the names of its elements (Barney, Wright 2009) [10].

Al-Khalifa and Peterson (1999), based on a survey of 42 international joint ventures in Bahrain, concluded that partner-related factors were more important than task-related factors [11]. Glaister and Yu (1993) found that the partner's ability to negotiate with the host government was particularly important in the selection of a Chinese partner [12]. Larimo and Rumpunen (2006), based on the analysis of a sample of 60 joint ventures established by Finnish firms in different foreign countries in the 1990s, found that the specific location of the joint venture and the specific variables of the investment influenced the relative importance of the partner selection criteria used by Finnish firms. And there were differences in the relative importance of selection criteria between better and worse performing IJVs [13].

3. COMPANY PROFILE

3.1. Nokia

Nokia Corporation, from Finland, is a leading global manufacturer of mobile communications products. The company is an industry pioneer in mobile, fixed and cloud network innovation and technology. In terms of long-term research, the company creates value through Bell Labs in terms of intellectual property, etc. In 2020, Nokia had net sales of €21.9 billion and employed more than 92,000 people worldwide (Nokia, 2020) [14].

Nokia has had trade relations with China since the 1950s; the initial phase of its development in China began in 1985 with the opening of its first office in Beijing; in the mid-1990s, Nokia established a joint venture in China as a way to localize production, and gradually saw China develop into Nokia's main global production base, with nearly 13,700 employees in China (Yuan, 2007) [15].

3.2 Shanghai Nokia Bell Company

Shanghai Nokia Bell Company is the only Sino-foreign joint venture among the central enterprises directly supervised by the State-owned Assets Supervision and Administration Commission of the State Council and the exclusive operating platform of Nokia in China. As the first Sino-foreign joint venture in the field of information and communication and high technology established by China at the beginning of the reform and opening up, the company has responded to the "One Belt, One Road" initiative and taken a unique path of development as a central enterprise in terms of technological innovation and international development cooperation. The company has made positive contributions to the leapfrog development of China's communication networks and technologies and has effectively driven the rise of China's communication industry.

In 2017, Alcatel-Lucent Shanghai Bell Co. completed the integration with Nokia's operations in China and formed the new Nokia Bell Shanghai Co. The company now has about 15,000 employees and operates in more than 50 countries and regions, providing end-to-end information and communication solutions and high-quality services for global telecom operators and industry informatization in various fields, while Nokia Bell Shanghai is a key part of Nokia's global R&D with more than 10,000 R&D staff, six product development centers, and Bell Labs' strong global innovation resources. (sbell, 2020) [17].

When the company was established, Nokia and China Huaxin signed a joint venture agreement in which both parties agreed to integrate Nokia's business in China with Shanghai Bell, still using the equity structure with Nokia owning 50% + 1 share and China Huaxin holding 50%. The formal establishment of the new joint venture makes Shanghai Nokia Bell the only joint venture among the 101 central enterprises directly under SASAC.

China is one of Nokia's largest markets in the world, and the combined business is performing very well through integration with Shanghai Bell, leveraging Nokia's global innovation capabilities and brand. After the merger, Nokia reported double-digit year-over-year growth across several business developments in Nokia Communications Greater China in the second quarter of 2017, with overall net sales reaching EUR 627 million, up 13 percent compared to the previous quarter. In particular, net sales of the Ultra-Broadband business reached EUR 275 million, up 14% YoY; net sales of the Global Services business reached EUR 232 million, up 13% YoY and 12% YoY; and net sales of the IP Networks and Applications business reached EUR 120 million, up 4% YoY and 12% YoY (Wang, 2017) [18].

4. RESEARCH METHOD AND DATA COLLECTION

The interview method was mainly used in this report, and the interviewees were the managers of the Purchasing Department of the Infrastructure Network Business Group of Shanghai Nokia Bell company. Qualitative data was collected through in-depth interviews with senior management and categorized as a shorter case study interview. In addition, the case study will be supported by a model that will guide data analysis and support conclusions and generalizations.

To more systematically analyse and identify critical success factors in the operational phase of international joint ventures, The Ice Cone Model of the IJV success analysis conceptual model (Gewiss & Oestersporkmann, 2017) is cited in this paper [19]. After identifying the main factors affecting IJVs, it is necessary to integrate them with the performance of IJVs. The model suggests the use of both objective and subjective measures to avoid any bias and increase reliability. On this basis, it is possible to identify the key success factors of international joint ventures during their operating phase in China.

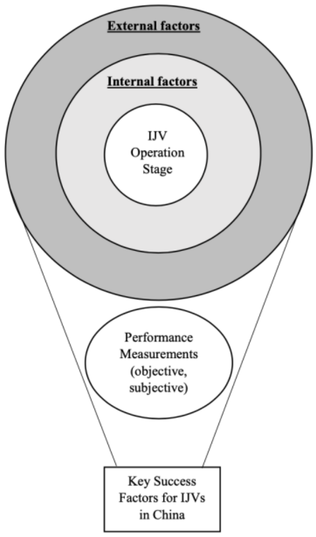

Figure 1 The Ice Cone Model of IJV success analysis

5. DATA AND ANALYSIS

Question 1: Nokia Group and Huaxin Post each hold 50% of the shares, is there any competition for control in the real decision, and why?

Answer: The predecessor of Shanghai Bell is Alcatel-Lucent, a foreign shareholder acquired by Nokia in 2016, which led to the change of the foreign shareholder of the joint venture company to Nokia. In 2017, Nokia and the Chinese shareholder had signed a framework agreement, which stipulates the decision-making and control rights of the cooperation model between the Chinese and foreign parties, and the agreement between the Chinese and foreign parties on the management and operation rights of the joint venture company. The Chinese party, as the controlling party, had the same main management as the foreign party, which solved the problem of contention. Although there have been several changes in the foreign shareholders since 1984, including Alcatel even earlier. The framework agreement of the joint venture signed by the Chinese and foreign parties at that time was for the Chinese and foreign parties to jointly participate in the operation and management of the company, but there was no control struggle between the Chinese and foreign parties in either joint venture model.

Nokia and Shanghai Bell have both been in the Chinese market for more than 30 years. From Nokia's point of view, the Chinese market is very important. The new company has more than 16,000 employees, of which more than 10,000 are engaged in R&D. Nokia has more than 40,000 R&D staff worldwide, which means that close to 1/3 of the R&D staff is in China. A large part of Nokia Bell's products, wireless and fixed network R&D is carried out in China, and many applications such as IP, transmission, data analytics, network management, etc. are also landed in China.

Question 2: What is the difference between Nokia's strategy and business philosophy and that of the Chinese company?

Answer: Shanghai Bell's current foreign shareholder Nokia, its previous foreign shareholder Alcatel-Lucent, Alcatel, or the earlier Belgian Bell, all use completely different strategies and business models. Shanghai Bell has undergone many changes since the establishment of this high-tech joint venture in 1984. The shareholding structure of the Chinese and foreign parties has changed from 60:40 to 50:50, and the Chinese and foreign directors are relatively unified in terms of the company's strategy and business philosophy.

Shanghai Bell's strategy, including the business management model, is consistent with the foreign company, and even some of the systems we use are the same as the foreign party, working in the same workflow and environment, so this is also to ensure that the company's development is the most efficient. This is a very special place in the domestic joint venture.

Question 3:Are there any conflicts between Nokia Group and Huaxin Post and Telecom? How is the conflict generally resolved?

Answer: The Chinese and foreign parties are Nokia and Huaxin Post and Telecom. At present, in addition to the Nokia Bell joint venture, Nokia and Huaxin have a lot of strategic cooperation in new product development, including some new market development and even overseas market development. Perhaps at the board of directors' level, there may be some differences of opinion between the Chinese and foreign shareholders on some major issues, but in the end, the Chinese and foreign shareholders can reach a unified opinion and form and sign the board of directors' resolution.

To rationalize the enterprise's shareholding structure, Shanghai Bell's status as a first-class central enterprise directly under SASAC continued until the middle of last year, when the Chinese shareholder of Nokia Bell was not held by SASAC, but transferred to Poly Group. Nokia Bell also went to Poly Group. Our current Chinese shareholder is Huaxin Post and Telecom, but in fact, its parent is Poly Group, so we are a joint venture between Poly Group and Nokia, and Huaxin Post and Telecom is equivalent to a secondary enterprise in Poly Group.

Q4. How do you think the culture of China and Finland affects the cooperation and why?

Answer: Nokia Bell is fortunate to have a stable and friendly relationship between the Chinese and Finnish governments. China and Finland have had diplomatic relations for more than 60 years, and Finland is one of the more important overseas trading countries and international partners for China in Northern Europe. Such important friendly relations can lead to more consultations.

At national and international exhibitions, such as the Shanghai Fair, the Finnish ambassador to China came to our booth to promote our communication products and solutions, giving our company a positive image to the outside world.

Based on the above interviews, the following table can be summarized

Table 1. Results of IJV Internal Factors

Control	Balanced
Commitment	Similar Level,Resolve the conflict
Cooperation	Limited to predefined work processes
Bargaining power	Relatively low
Trust	Relatively low

Table 2. Results of IJV External Factors

Culture	Great disparity in general, smaller within organization
Regulatory Environment	Big impact, good relations with government, Policy support
Infrastructure	Well-developed
Human Resource Factors	Strong R & D team and talent pool

According to the resource-based theory and VRIO model to analyze the competitiveness of Nokia Shanghai Bell, it can be found that Nokia Shanghai Bell is a Sino-Finnish joint venture, on the one hand, Nokia Bell has a foreign enterprise background, on the other hand, it belongs to the central enterprise directly under the State-owned Assets Supervision and Administration Commission, this dual identity is more beneficial than detrimental to the development of the Chinese market, and is the core competitiveness of Nokia Shanghai Bell, and the friendly and reciprocal relationship between the two countries also gives Bell The friendly and mutually beneficial relationship between the two countries also brings good reputation to Bell. With the advantageous platform of the joint venture, Bell is able to continuously promote the development of communication high-tech products and expand some overseas markets, in line with China's Belt and Road strategy. And taking root in China and relying on the huge market of China has the ability to attract and enhance the confidence of foreign shareholders to keep investing in China.

Table 3. VRIO analysis of Shanghai Nokia Bell

Styles	Valuable	Rare	Inimitable	Organized
A joint venture with the background of a central enterprise	√	√	√	√
Equal control	√	√	√	√
The same management mode	√	√	×	×
Develop a memorandum of understanding in advance	√	√	√	√
Cooperation between China and Finland	√	√	×	×
The research and development center is located in Bell	√	×	×	√

6. CONCLUSION

As a standard mode of expansion of international firms in mainland China, the market entry mode of IJVs is also an important source of FDI. Many scholars have shown strong interest in the determinants affecting the performance of joint ventures. However, studies to date have focused on parent companies in the US and Asian countries rather than exclusively from a Central European perspective. This paper fills this gap from the Sino-Finnish cooperation perspective.

Based on the ice cone model and VRIO model, this paper analyses Shanghai Nokia Bell Company and recalls two research questions： 1) Internal success factors of Nokia Bell Shanghai's operations in China. 2) External success factors of Nokia Bell Shanghai's operations in China.

First, similar levels of commitment are a critical factor for internal success. Nokia signed a framework agreement with the Chinese shareholders, which clearly defines the decision-making and control rights of the Chinese and foreign parties under the cooperation model, as well as the agreement between the Chinese and foreign parties on the management and operation of the joint venture.

However, a sound regulatory environment, such as a positive relationship with the Chinese government, and human resource factors can be considered as external success factors. As a Sino-foreign joint venture, Nokia Bell has the background of both a foreign company and a central enterprise directly under the SASAC, and this dual status is more beneficial than harmful for exploiting the Chinese market. Bell has played a historic role in the development of China's telecom industry, the friendly and mutually beneficial relationship between the two countries has given Bell a good reputation and resource base. With the advantageous platform of Finland's joint venture in China, Bell is able to continuously promote the development of communication high-tech products and broaden overseas markets, in line with China's Belt and Road strategy. And being rooted in China and relying on the huge market of China can attract and enhance the confidence of foreign shareholders to continue investing in China.

Secondly, in terms of human resource factors, Nokia Bell Shanghai is an important part of Nokia's global R&D, with over 10,000 R&D staff, 6 product R&D centers, and strong global innovation resources from Bell Labs. Nokia Bell has a very strong R&D team in China, with each business group having an R&D center in China. This large R&D team not only develops products for the Chinese market but also develops and works on Nokia's products for other overseas markets, enhancing the competitiveness of the R&D team (Nie, 2017) [20].

In conclusion, these factors are particularly critical for Sino-Finnish joint ventures that are in the operational phase in mainland China and should focus on meeting these conditions if they are not already included. For all studies, however, this paper contains various limitations. On the one hand, the case study includes only one example of an international joint venture and the results should be considered as the first approach to this particular topic. Secondly, since qualitative data were collected through only one in-depth interview, bias may exist in the study. Further research is necessary to validate or refute the identified success factors.

REFERENCES

[1] Harrigan, K. R. Joint ventures and competitive strategy. Strategic management journal, 1988, 9(2), 141-158

[2] Tian Linjie. Analysis on the evolution process and driving factors of organizational practices in Sino-f oreign joint ventures. THE SIS FOR MASTER' S D EGREE Thesis, NORTHEASTERN UNIVERSITY , 2014.

[3] Fdi.mofcom.gov.cn. [online] Available at: <http://fdi.mofcom.gov.cn/come-datatongji-con.html?id=15107> [Accessed 26 June 2021].

[4] Gomes-Casseres, B. Joint venture instability: is it a problem? Columbia Journal of World Business, 1987, 22(2), 97-102.

[5] Geringer, J. M., & Hebert, L. Measuring performan ce of international joint ventures. Journal of Interna tional Business Studies, 1991, 22(2), 249-263.

[6] Penrose, E. T., & Pitelis, C. (Eds.), The growth of the firm: the legacy of Edith Penrose. Oxford University Press on Demand, 2002.

[7] Barney, J. B., 'Firm resources and sustained competitive advantage', Journal of Management, 1991, 17 (1), pp. 99–120.

[8] Amit, R., & Schoemaker, P. J., Strategic assets and organizational rent. Strategic management journal, 1993, 14(1), 33-46.

[9] Eisenhardt, K. M., & Graebner, M. E., Theory building from cases: Opportunities and challenges. Academy of management journal, 2007, 50(1), 25-32.

[10] Barney, J. B., & Wright, P. M., On Becoming Strategic: The Role of Human Resources in Gaining Competitive Advantage. Human Resource Management, 2009, 31-46.

[11] Al-Khalifa A.K. & Peterson E. S., The partner selection process in international joint ventures. European Journal of Marketing, 1999, 33:11/12, 1064-1077.

[12] Glaister, K. and Yu W., Management and Performance of UK Joint Ventures in China. Journal of Euromarketing, 1994, 4(1), 23-39.

[13] Larimo J. & Rumpunen S., Partner selection in international joint ventures. Journal of Euromarketing, 2006, 16:1/2, 119-137.

[14] Nokia, About Us | Nokia Corporation. [online] Available at: <https://www.nokia.com/about-us/> [Accessed 21 June 2021].

[15] Yuan yang, Analysis on the Localization Strategy of Nokia in China and Relevant Illuminations. Professional Degree Master Thesis Thesis, School of Management, Tianjin University,2007.

[16] Nokia, About Us | Nokia Corporation. [online] Available at: <https://www.nokia.com/about-us/> [Accessed 21 June 2021].

[17] Nokia-sbell.com, Nokia Bell - Company Profile. [online] Available at: <http://www.nokia-sbell.com/staticpage/index?page=CompanySurvey> [Accessed 20 June 2021].

[18] Sohu.com, Wang Jianya, President of Nokia Bell: N okia Bell is both a joint venture and a central enterp rise. [online] Available at: <https://www.sohu.com/a/166473967_464075> [Accessed 12 June 2021].

[19] Gewiss, T., & Oestersporkmann, J., Key Success Factors of International Joint Ventures Operating in China- A Sino-German Perspective. In International Conference on Transformations and Innovations in Management (ICTIM 2017) (pp. 261-276). Atlantis Press.

[20] Nie dan, Research on management integration strategy after enterprise merger and acquisition, taking Nokia Shanghai Bell GE&PS department as an example. Professional Degree Master Thesis, East China Institute of Technology, 2017.