

## Article

# Promoting the Development of Enterprise Niche: Case Study on China's Organizational Ambidexterity

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**Abstract:** This paper aims to take the longitudinal development history of the Lenovo Cross-border complex nested R&D organization as the research object, to explore the development rules of enterprise niche. Strategic positioning is the core issue of enterprise management, and enterprise niche is the core issue of strategic positioning. This study elaborates on the three stages of enterprise R&D organizational ambidexterity promoting enterprise niche evolution, discusses the process model of space development, and reveals the life cycle of enterprise niche. It reveals the deep reason for promoting enterprise niche to develop—the ambidexterity of complex nested organization. The conclusion helps to promote the successful space development of enterprise niches through Cross-border merger and acquisition, and to enhance global sustainable development for the companies from emerging markets such as China.

**Keywords:** enterprise niche; organizational ambidexterity; competitive advantage; cross-border M&A; strategy management

## 1. Introduction

Strategic positioning is the core of enterprise management, and enterprise niche is the core of strategic positioning. In recent years, with the process of economic globalization, Chinese enterprises are gradually participating in global competition through cross-border M&A (Mergers and Acquisitions). Lenovo's purchase of IBM's global PC business made the managers and the scholars of the emerging market see a feasible approach to promote the enterprises' sustainable competitive advantage. However, as most Chinese enterprises still lack core technologies and products, when their labor dividend gradually disappeared, they experienced a common problem concerning how to choose M&A enterprises so as to gain a sustainable business ecological competitive advantage.

The more similar the enterprise's demand for resources is, the more similar the product technology and market are, the higher overlap of the niche, the greater the competition will be. Organizational ambidexterity may promote the separation of enterprise niche through successful cross-border M&A. Organizational ambidexterity refers to an enterprise's ability to apply two different actions to solve the duality paradox when balancing complex situations [1]. Fierce competition leads to the separation of enterprise niche [2,3], thus enterprises gain ecological competitive advantages. Scholars put forward the perspectives of strategic niche management [4,5], niche width [6] and technological niche [7] to study the development and evolution of enterprise niche in an innovation ecosystem [8–13].

These studies provide a useful inspiration for this study, but there are also two deficiencies: (1) the cross-border M&A of emerging market enterprises requires more theoretical and empirical research; (2) the spatial expansion of enterprise niche lacks in-depth and systematic research. Therefore, this study attempts to explore the above problems through a case study of the longitudinal development process of Lenovo's cross-border complex nested R&D organization. This study explores the spatial expansion of enterprise niche, and it has an important reference value for emerging market enterprises to succeed in cross-border M&A, and to improve global sustainable capacity.

This paper is structured as follows: First, the introduction section introduces the background of this research. Second, the theoretical background section reviewed the history and the gaps of enterprise niche and ambidexterity theories. Third, we introduce the longitudinal case method, the data collection process including field research, depth interview etc. in this study. Then, we describe and analysis the three stages of the Lenovo's enterprise niche space expansion in details. In the case discussion part, we summarize the process model of enterprise niche's space expansion, the life cycle of enterprise niche in general conditions, and the integration of enterprise niche promoted by the complex nested organizational ambidexterity. Finally, we conclude with the theoretical and practical significance of this paper in the conclusion part.

## 2. Theoretical Background

Enterprise niche derives from the biological "ecological niche", according to the concept of biological niche, biological niche is an assemblage of selective range for every kind of organism towards resources and environment. It represents mutual function relations between biological organisms and the living environment [14]. Analogously, enterprise niche is the characteristic of enterprise in resource demand and production capacity, and it is the state where enterprises interact and match with the environment. Individual enterprises should have their own ecological niche, and the enterprise population is a collection of enterprises with a similar ecological niche [15]. The enterprises niche term originates from the biological "niche", which was first used by Johnson (1910): "different species in the same area can occupy different ecological niches in the environment" [16]. Freeman introduced the niche concept and research method for the first time [6] in the commercial sector. The enterprise population forms the fundamental niche who occupies a specific resource space, and each enterprise in the population actually occupies part or all of the basic ecological niche, which is called the realized niche [16].

Based on the evolution of enterprise niche, Schot et al. firstly put forward the perspective of Strategic Niche Management (SNM) [17]. SNM emphasizes the importance of protecting space and user participation, which provides insight into fostering technological and social change and at the same time initiates sustainable innovation at the niche level [18]. They are the early technologies developed to create new paths to replace unsustainable technologies [19]. SNM is an evolutionary method used to cultivate innovation with sustainable benefits and protect the sustainability of innovation, supporting and controlling play a role in it. It is a tool for fundamental technological innovation and overcoming system layer locking [4]. As a principle of evolution, SNM has been highly praised by the policy of system transformation [19], but it has been criticized by Berkhout and others because it has too many bottom-up strategies [20]. According to the research of Geels & Schot, technology transformation influences each other at the three levels of landscape, system and ecological niche [7].

In recent years, Chinese scholars have conducted further studies on the evolution of enterprise niche. Liang et al. pointed out that the evolution of enterprise niche has two aspects: "state" and "potential" [21]. Xu and Li proposed four forms of niche evolution caused by competition and cooperation among enterprises: Compression, expansion, movement and co-evolution of enterprises niche. [22]. Zhu et al. have revealed that architecture innovation provides a rare window of opportunity for latecomers to occupy a favorable ecological niche, it is an effective way to optimize their enterprise niche [23]. Ye and Xu argues that the enterprise niche as an analysis model of technology paradigm evolution, it builds a real bridge between the ecology, evolutionary economics and technology research,

and their research provides a new idea of comprehensive analysis for technology change [24]. Li and Ouyang believe that enterprises should draw lessons from the successful experience of the imitation model and select and optimize their ecological niche [25]. According to Xu and Wang, there are two different mechanisms of green ecological niche transition in energy and chemical enterprises: Achieving green transformation by integrating internal and external knowledge of the value chain; developing green capability by integrating upstream and downstream of the value chain, expanding vertical and horizontal value chain [26].

Two species cannot occupy the same ecological niche permanently [27]. Hannan & Freeman proposed the concept of “niche breadth” and “niche overlap” to describe the relationship between population niche and competitive advantage [6]. Enterprises usually adopt two different strategies to occupy the ecological niche: Specialization and generalization, also known as specialist-generalist [28]. Peng Benhong and Sun Shaorong revealed that comprehensive third-party logistics enterprises should choose the strategy of “generalization”, while the asset-oriented and management-oriented third-party logistics enterprises should try their best to promote the “specialization” development model [29]. Friesen & Miller pointed out that the status and the real ecological niche breadth occupied by a single enterprise within the population determine the number of competitors and also affects the strength of the competition [30].

Diversity is a way of avoiding competitive competition in species. However, if two enterprises occupy the same resources or environment variables in order to meet their demands of survival and development, the two enterprises’ niche will overlap. Niche overlap produces competition [3]. The fierce competition leads to the separation of ecological niche. Enterprises in different ecological niches have greater opportunity than enterprises sharing similar market ecological niches [31]. Bian Weijun and Liu Wenguang proposed the measurement methods of population niche breadth, overlap degree and suitability degree of technology start-ups by refining the population niche factor of technology start-ups [32].

From the perspective of the internal evolution of the enterprise, organizational ambidexterity is an important reason for the evolution of enterprise. Early research on organizational ambidexterity suggests that ambidextrous enterprises have ambidextrous structures, which can not only calibrate and effectively manage current business requirements, but also have the ability to respond to environmental change in the future [33]. With the changing of the way enterprises think, the theory of organizational ambidexterity focuses on discussing the balance between the application and exploration of enterprise in organization design [34,35]. Simsek considered that the ambidexterity has ability of exploration and application, and this was reflected in three aspects, including organizational structure, process and behavior [36]. In the past 15 years, there was an explosion of research on organizational ambidexterity [37]. The research on the path of ambidextrous organization construction are mainly based on the basic theories of organizational evolution, organizational situation theory, contradiction management theory, social network theory, and so on [38]. However, how does organizational ambidexterity evolve to promote the evolution of enterprise niche? There is still no detailed explanation given in the available literature.

To sum up, the existing literature focused on the dynamic evolution of enterprise niche to enhance the competitive advantage (see Table 1). However, it still needs further exploration on the cross-border M&A theory and empirical studies of emerging market enterprises, and on the concrete space expanding process of enterprise niche.

**Table 1.** Review of previous literature on evolution of enterprise niche.

Literature Theme	Literature Proposer and Time	Main Idea
Enterprise niche concept	Freeman, 1977	Introducing niche concept and research method for the first time in the commercial sector [15].
Strategic Niche Management	Kemp, Schot & Hoogma, 1998	Emphasizing the user involvement and the technology involution of enterprise is affected by the interaction of landscape, system and niche [19].
Chinese Enterprise Niche Evolution	Chinese Scholars, from 2005	Introducing the forms of enterprise niche evolution and the different strategies to occupy enterprise niche [21–26].
Cross-border M&A Based on Enterprise Niche Theory	Hannan & Freeman, 1977; Friesen & Miller (1986)	Describing the relationship between “niche breadth”, “niche overlap” and competitive advantage [6,30].
Organizational Ambidexterity	Gupta, Smith & Shalley, 2006	Discussing the balance between the application and exploration of enterprise in organization design [34].

### 3. Research Method and Data Source

According the above problems, longitudinal case study method is adopted in this study. First, the research question of this study is to explore “how” to achieve the space expansion of enterprise niche in all stages of R&D, so as to build a theoretical model [39]. Second, this study is exploratory research, Lenovo niche space expansion is a complex phenomenon, and the related factors have still not been fully found, so the quantitative research method may not be able to achieve the research objectives, and the analytical inductive [32] method is more suitable for this study. Third, this study adopts the longitudinal study [40], which can see the relatively complete development process and some key turning points of Lenovo’s R&D organization.

The reasons why this study took Lenovo’s cross-border complex nested R&D organization as the case study object mainly include the following three points: First, since its establishment in 1984, Lenovo’s computer-related R&D has been in the leading position of Chinese enterprises and Lenovo is also the representative of the Chinese manufacturing industry. Second, with the development of Lenovo in China, it acquired IBM’s global PC business, and in doing so, Lenovo gradually realized globalization through this process. This development process has provided abundant data sources and has typical and promotional value. Third, Lenovo has formed a cross-border and complex nested dual R&D organization, which is conducive to the global expansion of the enterprise niche. The author was particularly impressed during the field survey.

In terms of draft design, modeling and data collection, this study is led by interview and observation, and is supplemented by documents and archives [41]. First, since 2010, the research team has conducted in-depth interviews and field research on Lenovo’s cross-border R&D department. Second, in 2011 the research team worked as interns in Lenovo’s product divisions, and collected and accumulated abundant data and fresh materials. Third, during the case writing, the real-time data is conducted by adding researches on the telephone and the mail for several times. Fourthly, relevant information of this case was collected through the Internet, books and other public materials, forming a data relationship of triangle verification [42] with the field interview of this study.

### 4. Case Description and Analysis

Lenovo Group LTD. (hereinafter referred to as “Lenovo”) was founded in 1984, led by founder Liu Chuanzhi and other 10 technical personnel and Institute of Computing Technology, Chinese Academy of Sciences invested 200,000 Yuan in it. Lenovo makes products like PCs, cellphones, servers, motherboards, TVs and application software. Since 1996, Lenovo has been the biggest seller in China’s domestic market. In 2005, Lenovo acquired IBM’s PC business. Through this process of “the snake swallowing an elephant”, Lenovo entered the world’s top 500 enterprises with about 7.8% of the global PC share. In the 2018 “Fortune” global 500, Lenovo ranked 202, up 24 places from the previous year. Lenovo has truly achieved globalization through the acquisition. From 2013 to 2016, Lenovo’s PC sales have risen to among the highest in the world. In 2017, it ranks second in the world in terms of PC sales. In fiscal year 2017/18, Lenovo’s turnover was 45.4 billion US dollars, up 5.4% over the previous year, and customers spread over 160 countries and regions around the world. At present,

Lenovo's R&D centers are mainly distributed in China, Japan and the United States. The process of Lenovo's R&D organizational ambidexterity has experienced three different stages and presented different characteristics, thus promoting the continuous evolution of enterprise niche.

#### *4.1. First Stage: Bipolar Alternation of R&D organization Promotes Enterprise Niche Creation (1984–1998)*

Under the pressure of internal and external environments in the early stage of enterprise survival, there is a conflict between long-term strategic research and short-term application research in order to make profits (cost control). Therefore, Lenovo's R&D had experienced the alternation process of organization led by designers, namely, long-term strategic research—short-term applied R&D—long-term strategic research—short-term applied R&D.

At the beginning of Lenovo's establishment, a technical achievement was industrialized into LX-PC, which completely solved the problem of using Chinese characters in computers and promoted popularization and application of microcomputers in China rapidly. As a core product in the early days of establishment, Lenovo's profit margin of LX-PC was as high as 50%, which brought positive benefits to Lenovo. In the first three years, the profit of LX-PC was over 12 million Yuan (including tax rebates). During the 10-year life of LX-PC, a total of 160,000 sets were sold, and the profits and taxes were over 100 million Yuan. When the first Lenovo microcomputer launched in the market in 1990, Lenovo became a manufacturer and seller of its own brand of computer products from an agent of imported computer products.

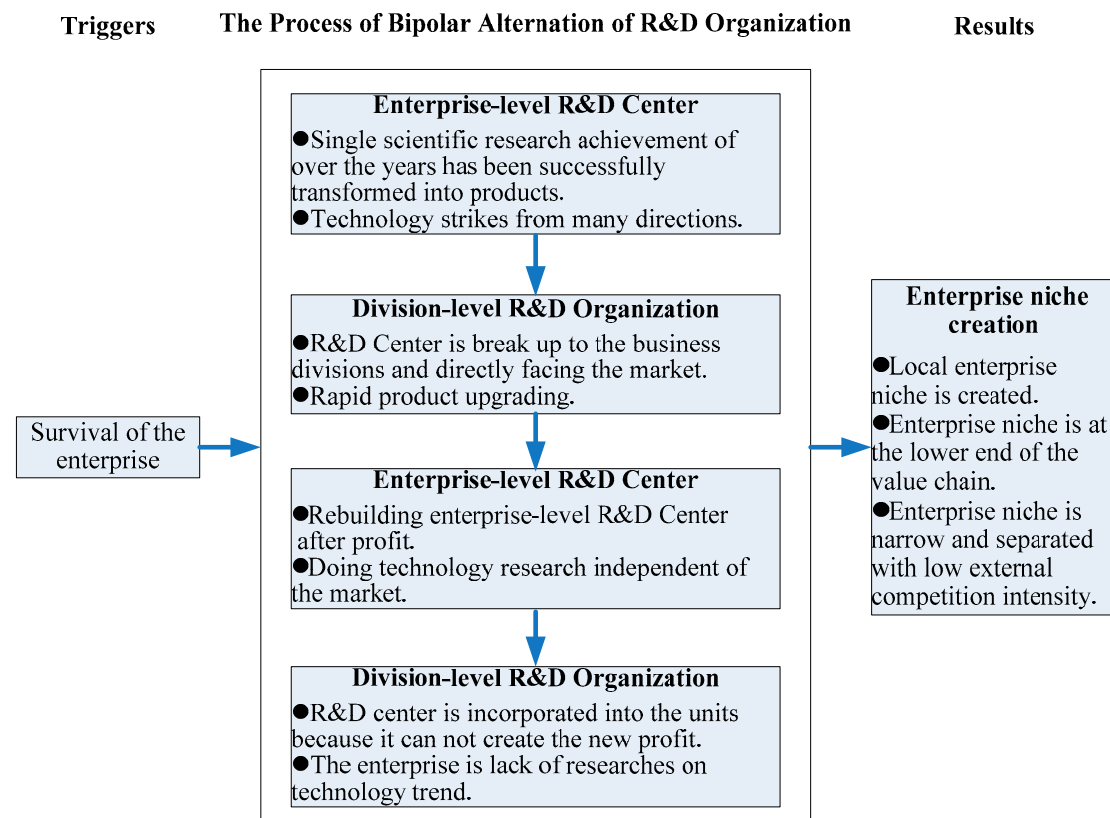
However, in the past 10 years, the Lenovo R&D center had not created new profit growth points during its attempts on all sides. Therefore, the R&D center has been merged into various business divisions and faced with the market directly, which had brought unexpected competitive advantages for Lenovo to launch new high-performance products quickly. In 1996, when the first Pentium product was launched in the United States across the ocean and was priced at 16,000 Yuan, Lenovo produced the Pentium computer almost synchronously for 9999 Yuan. This pattern let Lenovo's computer sales rise by 300% in 1996 and became Number 1 in the Chinese market in 1997, and changed the previous international practice of China being a dumping ground for obsolete, high price products and cleaning stocks.

In the first stage, Lenovo obtained the local enterprise niche through two levels alternation of R&D organization. The results are: (1) local enterprise niche is created through a leading technology to produce the differentiated products; (2) enterprise niche is at the lower end of the value chain with low cost and rapid upgrading for the products; (3) enterprise niche is narrow and separated with low external competition intensity. The process pattern is summarized as shown in Figure 1, where the bipolar alternation of R&D organization promotes enterprise niche creation.

#### *4.2. Second Stage: Domestic R&D Organizational Ambidexterity Promotes Enterprise Niche Expansion (1999–2004)*

Under the pressure of internal and external environment of sustainable development, enterprises are faced with the following contradictions: In terms of technology, they should pay attention to long-term strategic research and short-term applied research at the same time; in terms of the market, they should pay attention to both future and current customer needs. In this case, Lenovo had solved the above paradox through the R&D organization ambidexterity, thus promoting the expansion of the enterprise niche domestically.



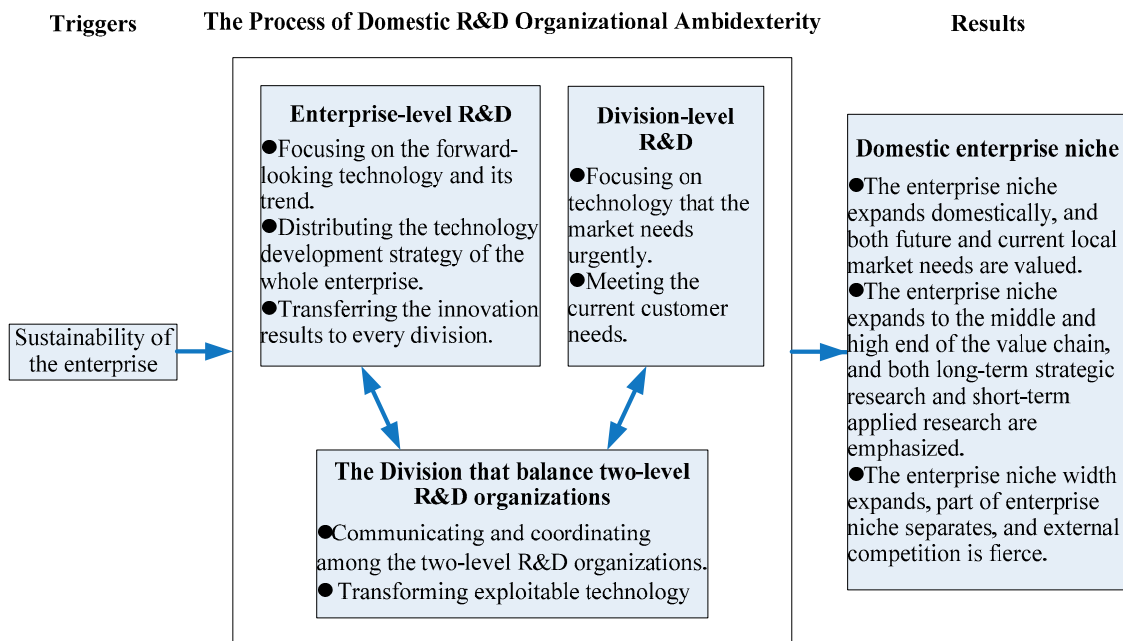


**Figure 1.** Process pattern of the bipolar alternation of R&D organization promoting enterprise niche creation. The horizontal arrows reflect the causal relationship, and the vertical arrows reflect the time sequence.

Since 1999, the R&D organization has carried out a series of adjustment, and the R&D organization started ambidexterity: Firstly, enterprise-level R&D centers have been established in Lenovo to explore the forward-looking technology, software, industrial design, hardware and other fields, which focus on the technology of the next 18 months to 5 years and even longer, transferring the knowledge, experience and technology to business divisions to promote the transformation of technological achievements. Secondly, more than 10 product divisions of Lenovo have their own development teams, and they pay attention to the technical R&D of urgently needed products within the next 18 months continuously. 18 months is the R&D cycle of a new computer system. In addition to the R&D ambidextrous organization, Lenovo has also established the product chain management division, which is responsible for the communication and coordinate management of the R&D on enterprise-level and division-level.

Lenovo's two-level R&D architecture ensured a balance of innovation, efficiency and pace. Such a two-level R&D system covered almost all the R&D areas of enterprises including basic technology and applied (product-level) technology, and also covered every link of technological achievements from basic R&D to product-level application. On one hand, it ensured the long-term competitiveness of the enterprise in the technology field; on the other hand, it also guaranteed the marketization of technology at any time.

In this stage, Lenovo's R&D developed the domestic enterprise niche combined with domestic characteristics. The results are as follows: (1) The enterprise niche expands domestically, and both future and current local market needs are valued; (2) The enterprise niche expands to the middle and high end of the value chain, and both long-term strategic research and short-term applied research are emphasized. (3) The enterprise niche width expands, part of enterprise niche separates, and external competition is fierce. The process pattern is summarized as shown in Figure 2 that the domestic R&D organizational ambidexterity promotes enterprise niche expansion.



**Figure 2.** Process pattern of domestic R&D organizational ambidexterity promoting enterprise niche expansion. The two-way arrows reflect the interaction relationship, and the one-way arrows reflect the causal relationship.

#### 4.3. Third Stage: Cross-Border R&D Organizational Ambidexterity Promotes Enterprise Niche Global Embedding (2005–Today)

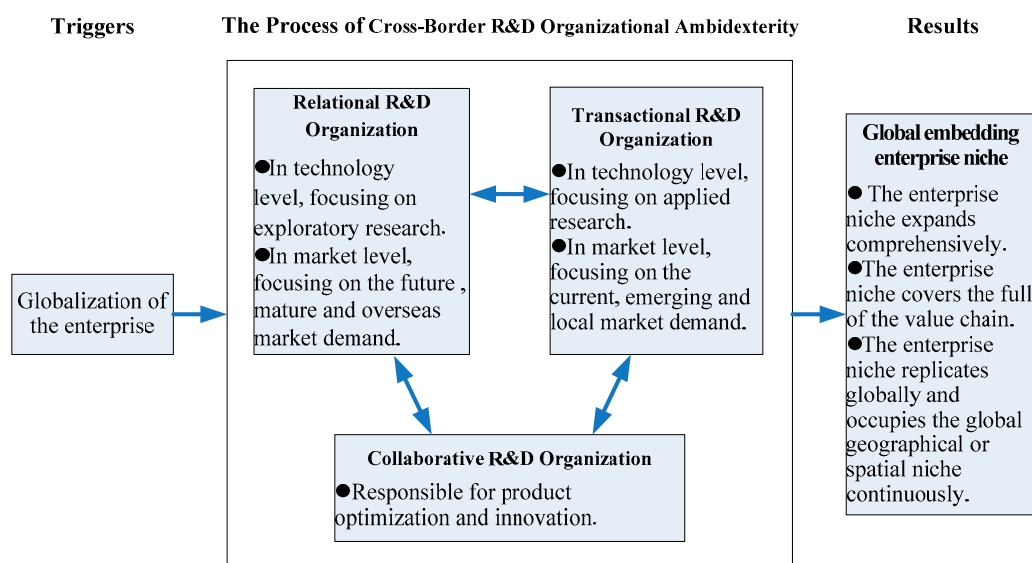
In the process of cross-border R&D organization ambidexterity, in order to meet the need of global expansion, Lenovo acquired IBM PC business and formed a huge cross-border R&D organization. To complete the global embedding of enterprise niche and solve the paradox in technology and market, Lenovo adjusted its research framework quickly and divided R&D organization into three areas. The relational R&D organization focused on exploratory research in technology and paid attention to the future, mature and overseas market demand. The transactional R&D organization paid attention to applied research in technology, and focuses the current, emerging and local market demand in the market. There was also a collaborative R&D organization responsible for product optimization and innovation.

Under the pressure of the internal and external environment of global expansion, enterprises are faced with the following contradictions: In terms of technology, they should pay attention to both exploratory research and applied research; In terms of the market, attention is focused on future and current, mature and emerging, local and overseas market needs at the same time. To solve this binary paradox, Lenovo acquired the world's leading enterprise IBM's PC division in a "snake swallowing an elephant" way. After the acquisition, the former IBM PC division focused on relational R&D (high-end and mature PC markets), while the former Lenovo focused on transactional R&D (low-end PC and emerging markets). In terms of technology, continuous integration and collaboration through cooperation in the development of new products have greatly improved Lenovo's PC product R&D ability.

Before the acquisition, Lenovo was mainly engaged in PC and related products. IBM is the world's leading information technology enterprise, which also operates PC and related products. Lenovo's niche overlaps with IBM, making it compete fiercely in the PC market. In December 2004, Lenovo announced their agreement to acquire IBM's PC business. The acquisition of IBM's PC business involved about 10,000 employees in 160 countries around the world. Lenovo thus won the world's 160 countries' customers, distribution channels, 5-year rights to use the IBM Think trademark and related patents; IBM's joint venture in Shenzhen, China, IIPC (which does not include the production and service capacity of the X series) and R&D centers located in Raleigh, USA and Osaka, Japan.

After the acquisition, an independent new Lenovo was established very quickly. Lenovo separated the IBM PC division in 65 countries in 90 days. 150 days later, the new Lenovo launched a new product. 165 days later, a new management structure was set up. Lenovo achieved a pre-tax profit of 507 million HKD when analysts were still worried about whether would report a loss in the second quarter of the year.

At this stage, the global embedded replication of enterprise niche is reflected in: (1) The enterprise niche expands comprehensively with the equal attention on future and current, mature and emerging, local and overseas markets; (2) The enterprise niche covers the full of the value chain with exploratory and applied research integrated in the world; (3) The enterprise separates from the dominant competitors' niche, the niche replicates globally, reduces the competition intensity, and the enterprise occupies the global geographical or spatial niche continuously. The process pattern is summarized as shown in Figure 3 that the Cross-border R&D organizational ambidexterity promotes enterprise niche global embedding.



**Figure 3.** Process pattern of Cross-border R&D organizational ambidexterity promoting enterprise niche global embedding. The two-way arrows reflect the interaction relationship, and the one-way arrows reflect the causal relationship.

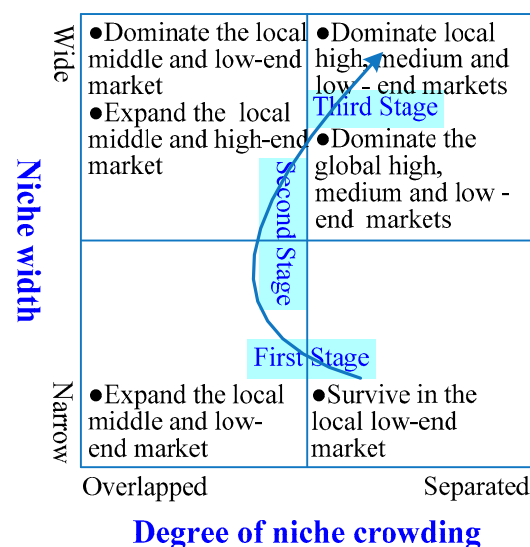
## 5. Case Discussion

### 5.1. Process Model of Enterprise Niche's Space Expansion

Based on the case of Lenovo's cross-border complex nested R&D organization, this research derived the process model of enterprise niche's space expansion, as shown in Figure 4.

The niche width of Lenovo is expanding continuously. In the earlier first stage, Lenovo's niche survived in the domestic low-end PC market, and IBM's niche was booming in the global medium and high-end PC market. In 1997, Lenovo sold 0.44 million PCs, accounting for 10.9% of the Chinese PC market and 3.2% of the Asia-Pacific market (source: IDC). In the second stage, the domestic enterprise expanded its niches in the middle and high-end domestic market to seek for development, while the global enterprise's market share reduce in the world's high-end market. In 2004, Lenovo's 15,904 million PC sales accounted for 28.3% of China's PC market (source: IDC). Only 3% of Lenovo's revenue came from outside the country, and mostly from Southeast Asia. In the third stage, after the domestic enterprise acquired the business of the global enterprise, it replicated their advantage niche internationally, the domestic enterprise took over the whole global niches of the global enterprise. Lenovo's global PC market share reached 7.8% in fiscal year 2006/2007, according to its financial report. Lenovo shipped 54,857 million PCs in 2017, accounting for 21.14% of global market share (source: IDC).





**Figure 4.** Process model of enterprise niche's space expansion. The curve with an arrow reflects the path of enterprise niche's space expansion.

In the view of the degree of niche crowding between the PC businesses of Lenovo and IBM: In the earlier first stage, there are still some undeveloped and unutilized niches, which caused irrationality and waste of market resource utilization. The two enterprises' niches were separated, so there was no competition between them. In the second stage, the two enterprises' niches overlapped, which led to the fierce competition within the overlapped market. The two enterprises within the overlapped niches were not conducive for the rational allocation of enterprise market resources. In the third stage, the business niches of domestic enterprise and the acquired enterprise separated again. The separation of niches was beneficial to the allocation of enterprise market resources and the utilization of market resources tended to be ideal.

The model reveals the evolution process of separation—partial overlap—separation and embedded replication of enterprise niche. The process is consistent with the conclusion that fierce competition leads to the separation of enterprise niche to gain ecological competitive advantages for the enterprises [2,3]. It's worth mentioning that the curve in Figure 4 is not a really mathematical function curve, but a qualitative trend summary according to the different market segment product sales of the two enterprises.

## 5.2. Life Cycle of Enterprise Niche

Based on the development process of Lenovo niche and its space expansion, the life cycle of enterprise niche can be deduced (see Figure 5). That is to say, the life cycle of enterprise niche is divided into three stages: Creation, expansion and maturity. Scholars put forward the perspectives of strategic niche management [4,5], niche width [6] and technological niche [7] to study the evolution of enterprise niche. This paper systematically studies on the life cycle of enterprise niche.

After entering the mature stage, the enterprise niche may develop in three different directions, including self-renewal, replication and retrenchment. Self-renewal refers to a process by which an enterprise elevates its niche to a new stage of development when it encounters a crisis. Firstly, the enterprise may research new products to update its niche. Secondly, the enterprise may configure its niche to a different product. The new products of the enterprise may be configured into the geographic space of its old products or into the new geographic space. Thirdly, the enterprise may recombine one's own niche and another related niche through mergers and acquisitions, forming an enterprise niche with complementary advantages. Retrenchment refers to the gradual degeneration of the niche hierarchy, which in some cases may be discrete. Replication is the succession of enterprise niches in other geographic locations.

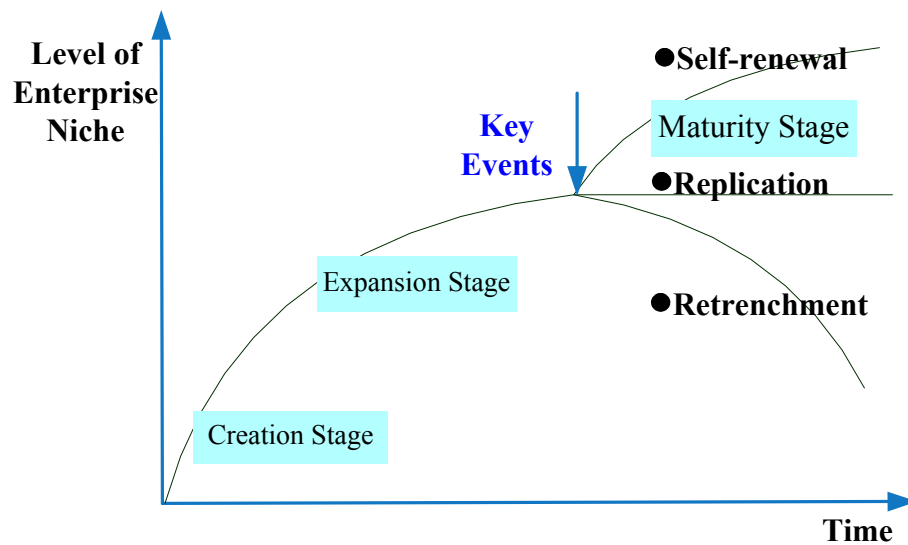


Figure 5. Life cycle of enterprise niche.

### 5.3. Complex Nested R&D Organizational Ambidexterity Promotes the Integration of Enterprise Niche

Lenovo finally realized the integration of enterprise niche because of the ambidexterity of its complex nested organization. The previous studies focus on the role of internal executives in the process of organization ambidexterity [37], and the function of executive level's ambidexterity. This section analyzes the process of cross-border R&D organization's ambidexterity from the perspective of M&A of external stakeholders (global competitors). After the acquisition of IBM PC business, Lenovo still maintained the domestic ambidexterity of corporate and business divisions. Internationally, the old Lenovo system and IBM PC system realized organizational ambidexterity. This forms a complex structure nested within each other at home and abroad:

(1) Two-level R&D structure of the company and the business units ensures the balance of innovation, efficiency and rhythm. Two levels of R&D system cover the basic and applied technology including almost all of the links, so as to ensure the enterprise' long-term competitiveness in the field of technology and the short-term competitiveness in the field of the market.

(2) Global innovation triangle structure ensures the integration of R&D dual modes. The dual modes are the relationship business (R mode) for big customers and the transaction business (T mode) for individual consumers. Lenovo's Chinese team is young and energetic, and is able to integrate American and Japanese ideas. It is also fast, efficient, able to create popular consumer product designs, and good at T mode. The American team is good at designing schemes and strong in software and hardware architecture. It has formed the product, technology R&D management and development process for nearly 200 countries. It has logical and comprehensive talent advantages and is good at R mode. The Japanese team is serious and understanding the users' experience. Its technical industry circle can be lean, undertake the research involving product quality, and be good at implementation and development.

(3) The dual modes are replicated at home and abroad on a large scale. Lenovo has copied the R model in China. In 2008, the financial crisis led to the decline of the R-mode business in the international market. Lenovo's loss was severe. Inside the company, many international people could not understand the T mode. For example, when the headquarters of Asia Pacific exploited T mode firstly in Singapore, they neither replied nor agreed. Lenovo sent a Chinese team to India and ASEAN countries to expand the T mode little by little. The Japanese team flew to Beijing every week to learn how to copy the T mode.

(4) "Defense + attack" strategy enhances the value of double brands. On the one hand, Lenovo used IBM's brand to show customers that Lenovo would also maintain the high quality of the brand. On the other hand, Lenovo strengthened the ThinkPad brand and launched the parent brand of Lenovo

to build the brand image quickly. In 2007, Lenovo announced that the right to use the IBM's brand would be "retired" two years earlier in 2008. Lenovo's logo across the world was transferred to Lenovo. In addition, in 2008, Lenovo released the global consumer computer brand Idea. It complemented high-end business brand such as ThinkPad notebooks and ThinkCentre desktop computers and was launched simultaneously in 15 countries and regions, including China, US, France and so on.

(5) The talent structure of globalization effectively solves the problem of cultural conflict. Retaining the whole management team of the acquisition can not only avoid the cultural conflict of employees, but also exerts their strength. Lenovo retained the entire management team of the former IBM PC. For the overseas firms formerly owned by IBM, the IBM's old employees mainly undertook management responsibilities. Lenovo's Chinese executives rarely parachute into R&D departments and tried to rein in their power as much as they could. Lenovo respected American and Japanese R&D teams and gave them sufficient room to build their sense of belonging and security. In terms of language, Lenovo required English as the universal language.

## 6. Theoretical Significance and Implications for Emerging Market Enterprises

This study systematically reveals that the successful reason of Lenovo's cross-border M&A lies in its appropriate enterprise niche occupation, continuous space expansion, and the identification of the process characteristics, results, model and life cycle of enterprise niche expansion through the process of Lenovo's R&D organization ambidexterity. The main reason for the evolution of enterprise niche lies in the three stages of the complex nested process of its organizational ambidexterity. The conclusion of this study provides an important theoretical and practical reference on the enterprises in emerging market under the cross-border M&A environment. The theoretical contribution of this study is reflected in two aspects:

First, the process model of the space expansion of enterprise niche reveals the evolution process of separation—partial overlap—separation and embedded replication of enterprise niche (see Figure 4). It complements and enriches the theoretical and empirical research on the evolution of enterprise niche from the micro level. SNM faces the problem of how to accelerate the transformation from the original "niche" to a large scale [43]. Lenovo and IBM have occupied different basic niches for a long time in the PC field and have their own comparative advantages. This study demonstrates the process of the large-scale transformation after the combination of the two enterprises' niches.

Second, it reveals the life cycle of enterprise niche (see Figure 2). Scholars have provided meaningful references for research on strategic niche management, enterprise niche breadth and niche overlap. However, there is still a lack of systematic research on the life cycle of enterprise niche. This study shows that the life cycle of enterprise niche is divided into three stages of creation, development and maturity. Entering the mature stage, the enterprise niche may lean towards a different direction, such as self-renewal, replication and retrenchment.

Third, it reveals the development of enterprise niche—the process of R&D organizational ambidexterity—deepening the theory of organization ambidexterity. In the past ten years, the research on organizational ambidexterity has shown an explosive growth [37]. However, on the one hand, previous studies have not provided managers with the interface management between application and exploration research [37]. The three patterns discussed in this study can direct the interface management of enterprise between application and exploration. On the other hand, the existing literature ignores the external stakeholders, and focus on the role of internal executives in the process of organization ambidexterity [37], and the function of executive level ambidexterity. This study analyzes the process of cross-border R&D organizations from the perspective of M&A of external stakeholders (global competitors).

The practical significance of this study is to direct the emerging market enterprise especially in China to acquire the complementary advantage of enterprises who take different a basic niche for a long time. As we have mentioned in the beginning of this paper, most Chinese manufacturing enterprises have the problem of lacking core technologies and products. With the increasing of labor costs, they can hardly survive the fierce market competition they face. This process of enterprise niche's separation

and embedded replication help enterprises obtain the sustainable development of innovation ability and competitive advantage, which has important reference value for the development of enterprise in emerging markets. The emerging markets' enterprises may identify their current stages in the life cycle of enterprise niche and adjust their strategy in time to complete the ambidextrous nest of complex organizations. More specifically, for an enterprise in the creation stage, the most important thing is to accumulate as many resources as possible and occupy as wide a enterprise niche as possible. For an enterprise in the expansion stage, in order to obtain a competitive advantage, it should start to find the field whose enterprise niche overlaps with it and prepare to expand its enterprise niche. When an enterprise in the mature stage, there will be three possible situations: Self-renewal, replication and retrenchment. Self-renewal requires enterprises to choose appropriate companies to complete cross-border M&A; replication needs enterprises to breed enterprise niche in other geographic locations; and the retirement means this enterprise niche is being replaced by other enterprises.

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