



**HOW DO STARTUPS INTEGRATE STRATEGIES TO
ACHIEVE AMBIDEXTERITY?**

**EVIDENCE FROM THE CHINESE EDUCATION-
TECHNOLOGY INDUSTRY**

by

Cecca Xu

Thesis Advisor: Cheng Gao

A thesis submitted in fulfillment of the requirements of the
Michigan Ross Senior Thesis Seminar (BA 380), 4/19/2019.

Abstract

The paper examines how startup organizations integrate strategies to achieve ambidexterity through an inductive study of three ventures in the Chinese education-technology industry. The paper utilizes a multicultural perspective on the nature of ambidexterity and contributes a conceptual framework of how startups in China sustain long-term competitive advantage through strategy integration.

The concept of ambidexterity focuses on balancing the tensions between two strategic approaches: exploration (of new opportunities) vs. exploitation (of one's core business). While existing literature illustrates the importance and challenges attaining ambidexterity given resource-constraints, there is limited examination on *how* startups integrate strategies to balance this tension. I thus ask: *How can startups in China effectively integrate strategies to balance the tension between explorative and exploitative approaches? What are the specific building blocks of strategies implemented by these startups?*

This study follows an inductive grounded theory approach to build theory on how startups integrate strategies to attain ambidexterity. With an inductive research process, the study is exploratory: I study three ventures in a nascent industry in China—education technology (“ed-tech”)—to uncover patterns and interrelationships between theoretical constructs that emerged from the qualitative data. The three startups share similar founding timelines, size, and business offerings. I conducted onsite observations and semi-structured interviews, which served as the main source of data. I complemented this hand collected data with archival data (e.g. news articles) about the companies and industry.

I find that startups utilize structural approaches to effectively integrate strategies and I inductively uncover three common integration mechanisms. While previous studies suggest that strategic tensions are balanced at the firm level, I go *within* the firm and find that differing levels of management (executive and frontline level) utilize different structures for integration and have differing strategic focus. While the executive level focuses on exploration as well as on integration, the frontline level is structurally independent and is primarily exploitation-oriented. To integrate these two approaches together, I find that startups commonly employ three mechanisms: (1) at the cognitive level, startups form a collectivist organizational identity so that employees with different roles still feel that they are all working towards the same common end-goal; (2) at the organizational structure level, startups use some variation of a "Strategy & Planning" department to manage the functional processes of redirect firm strategy while maintaining core firm focus; and (3) at the organizational design level, startups construct reward systems to align incentives for strategic integration within the startup. This unique approach enables each of employees to maximize their resources and capabilities, thus pushing the firm to sustain its competitive advantage.

Synthesizing all parts together, these findings shed light on how executive and frontline levels of startups interact throughout strategy integration. Overall, by engaging in intensive field work to go inside the “black box” of the firm, this paper provides a rich, process-oriented perspective on how startups integrate conflicting tensions (exploration vs exploitation) to achieve long-term success in nascent markets. I hope that with the growth of quantitative “big data”, the theoretical framework that I present can be tested in future research.

TABLE OF CONTENTS

Introduction	pg #4
(Existing Literature and Studies on Ambidexterity)	pg #6
(Historical Background: Entrepreneurial Environment in China)	pg #8
The Importance of Strategy Integration: The Role of Rebuilding Startup Organizational Culture in China	pg #10
Evaluating the Education Technology Startup Landscape	pg #12
Methodology	pg #14
(Data Collection)	pg #16
(Data Analysis)	pg #23
Findings	pg #24
Conclusions	pg #44
(Significance)	pg #45
(Limitations)	pg #45
Appendix	
Appendix I	pg #46
References	pg #47

Introduction

The role of entrepreneurship in China has received increasing examination. Entrepreneurship is critical for the economic development of China as its economic model transitioned from central planning with large state-owned enterprises to a socialist market economy along with the growth of the private sector (Li H, 2006). Analyzing the entrepreneurship landscape in China is crucial to understanding the Chinese economy, which highlights the importance of this research.

One theme in entrepreneurship research focuses on cognitive and sociopolitical legitimacy of startups. For example, existing studies discussed how startups employ strategies to break into the market and stay competitive (Santos & Eisenhardt, 2009). A second theme of research focuses on examining the interfirm network outcomes, with the emphasis on resource dependence and social networks built within the organization (Xin et al, 2002). This study is building upon the second strand of the research on within-firm networks, as how startups navigate the tension between strategic approaches (exploration vs exploitation) in order to attain success. I thus ask: *How can startups in China effectively integrate strategies to balance the tension between explorative and exploitative approaches? What are the specific building blocks of strategies implemented by these startups?*

Current strategy research studies focused on emerging markets and types of strategies used by startups to transform the traditional market (Wiegmann, 2017). This paper extends resource-based theory to entrepreneurial actors through examining *types* of strategies used by startups and *how* they integrate various strategies to establish and eventually sustain their competitive advantage (Ott, T. E., Eisenhardt, & Bingham, 2017). This paper closely examines

the strategy formation processes generating cognitive, relational and resource structures for firms to dominate nascent markets.

After examining existing literature, there are multiple definitions of entrepreneurship: One among existing studies is the "context-dependent social process through which individuals and teams create wealth by bringing together unique packages of resources to exploit marketplace opportunities" (Ireland, Hitt, Camp, & Sexton, 2001, pg. 50). Entrepreneurs pushed the growth of a country's economy by creating employment opportunities and increase GDP growth, expanding the public's access to wealth through opportunities provided by market competition (Baumol, 2007). Entrepreneurship studies focus on two main stages: how startups break into the nascent market and how these firms survive in the long-term. (Wan, F., Williamson, P., & Yin, E., 2014, June 21). The paper focuses on the second stage of studies through evaluating the strategy integration process by entrepreneurs to survive in the long-term.

This study closely examines what type of strategies drive startups to balance the two strategic tensions. Historically, nascent industries have faced several challenges: unstructured market environment, unclear product definitions and ambiguous industry structure (Santos & Eisenhardt, 2009). The concept of ambiguity is due to unknown causal relationships among institutional actors and the market, making industry environment more difficult for startups to thrive. Nascent markets often lack clear industry structures, with ambiguous views on customers, competitors and suppliers (Eisenhardt & Graebner, 2007). Therefore, integrative strategies are important for startups to survive amidst market uncertainty and this field has been understudied by existing literature. This study aims to unpack the gap within existing studies and look at how startup firms integrate strategies to overcome such challenges. Ambidexterity has been emphasized in this study because it is one of the solutions to startup firms as they are navigating

through market ambiguity, which is the central research question the paper is attempting to answer.

Existing Literature and Studies on Ambidexterity

After analyzing existing literature work, the organizational ambidexterity appeared as a key strategy research topic. In 1996, Tushman and O'Reilly defined organizational ambidexterity as *“The ability to simultaneously pursue both incremental and discontinuous innovation...from hosting multiple contradictory structures, processes, and cultures within the same firm in order to survive in the long-term”* (O'Reilly & Tushman, 2008). In the relevant field, the concept of organizational ambidexterity has been referenced frequently as ventures faced dual demands of exploration and exploitation to survive competitive market environment (O'Reilly & Tushman, 2008). In order to survive in the changing environment of nascent markets, it is also essential for startups to integrate both new and existing assets to achieve long term capabilities. Due to the intense changing market environment in China, not only mature businesses but also startup firms need to achieve ambidexterity for long-term success.

The ambidexterity initiative is broken down into two dimensions: experimentation and exploitation processes. The first dimension is focused on exploration process to develop new strategy to resolve issues for future market opportunities. Central questions included: how do firms translate experiential knowledge into strategy? How are experiments created? The second dimension is focused on exploitation process to refine existing business offerings. Central questions included: how do firms translate current operational capabilities into strategy? (O'Reilly & Tushman, 2013).

In real world business settings, the success of ambidexterity has remained in questions. For example, very few organizations have the capabilities to afford to support independent structures to focus solely on exploration. But the economy crisis drove many firms to focus on firm efficiency and cost control, which in turn decrease the investment on explorative approach (Li, 2013.). Other studies also suggested that firm being successful in a single dimension is extremely difficult. Manuel Hensmans and colleagues investigated 215 of the largest publicly listed UK firms over a period of 20 years (1084 to 2003). Their research objective was looking at how well these firms will survive in the long term while running the existing business model more efficiently. Out of the 215 firms, they found that only 28 of the companies were able to consistently perform at the frontier over the two decades (achieving both explorative and exploitative dimensions). Therefore, many firms have experienced failures due to inconsistent alignments. Such failure is inevitable without the integration of both initiatives (Kirzner, 1979).

The integrative method is essential to overcome the trade-offs between explorative and exploitative dimensions and push the firm to achieve the optimal balance known as the ambidexterity. The concept of ambidexterity has remained underdeveloped in the academia space, since many are uncertain about how exactly startups utilize ambidexterity and what are the forces behind the strategy integration process: whether the process is cognitive, whether parts of the organization are divided based on the different strategic approaches, whether firms focus on exploitative then the explorative dimension, whether current departments and new departments remain separate from each other, or whether startup firm protect new units while preserving the existing cultural norms of old business. Through comparative case study of three most famous education technology company in China, this paper hopes to shed lights on the strategic management in startups in China from the perspective of ambidexterity.

Historical Background: Entrepreneurship Environment in China

The research setting of this study builds upon the setting of entrepreneurship landscape in China. During the Mao era (1949-1976), entrepreneurship was completely eradicated with negative social perceptions towards the occupation. The public often referred “entrepreneurs” as those who had criminal records and thus unable to find a job (Harding H, 1987). But in recent years, China is viewed as the most entrepreneur-friendly country in the world: the world’s second largest producer of “unicorns” (non-listed companies that are valued over \$1Bn) followed the United States. A report by the China’s Ministry of Science and Technology found that there are 115 university science parks and over 1,600 technology business across the country. The incubators for startups provided mentorship, office space and funding support to new generations of entrepreneurs (Kshetri, N., 2007). A telephone poll conducted with 463 communications, 49% of the respondents agreed that China provided resources and support to be the world’s next technological innovator (Puffer, S. M., McCarthy, D. J., & Boisot, M., 2010, May). Only 21% of the respondents agreed that “the next Bill Gates” will come from the United States but majority agreed that it will come from China. A survey conducted among the public in China found that 70% respondents claimed entrepreneurship was a good career path (Kshetri, N., 2007).

The first wave of economic reforms under Deng Xiaoping spurred the first generation of entrepreneurs in the 1980s. The entrepreneurs were made up of pioneers who lacked access to relevant education and knowledge but simply wanted to start their own businesses. During that time, government support was limited and no remedies were provided if their business ventures failed (Tse, E., 2016). In late 1990s, Internet giants, such as Alibaba, Tencent and Baidu, entered the Internet market. The growth of Internet industry sparked the growth of entrepreneurs in various industries: energy, healthcare, financial services, consumer, and retail, where businesses

where technology became the main strategic focus in all startup firms (Wright M, Liu X, Buck T, 2008). China's new generation of entrepreneurs is made up of younger and highly well-educated, aged from 25-34. The Global Entrepreneurship Monitor (GEM) report pointed out that China has a high proportion of young entrepreneurs, with 57 percent between 18 and 34 (Xavier SR, Kelley D, Kew J., 2013). One prevalent trend is the increasing population of overseas returnee entrepreneurs: highly-educated individuals who were trained in developed countries and returned to China to start technology ventures (Ahlstrom, D., & Ding, Z., 2014). They brought back western organizational culture influence which will be discussed in the later section of the paper as their backgrounds have huge influence on the strategy integration used by startups in China.

In recent years, the CCP (Communist Party of China) has made multiple public acknowledgements regarding to the benefits and impact entrepreneurship had on the economy. In addition, both the Chinese government and society perceived "entrepreneur" as a stable career path, where they were given numerous opportunities to move up the social ladder, such as being introduced into the inner circle of the party and playing important roles in the government policy implementation process (Luo, 2005). The party and societal approval of the entrepreneur position further supported Deng Xiaoping's famous ideology: "To be rich is to be glorious," which encouraged increasing household income and improving social well-being through the entrepreneurship path (Tse, E., 2016). The nation has undergone significant economic, political and legal reforms to continue supporting the entrepreneurship expansion in China, which increases the significance of this study as the findings are influential to the nation's economy.

The Importance of Strategy Integration: The Role of Rebuilding Startup Organizational Culture in China

Internally, startup organizations in China are re-engineering organizational culture to formulate strategies and better challenge the incumbents. Christensen defined the organizational culture as the “culture that affects and regulates the way members of the organization think, feel, and act within the framework of that organization” (Christensen, Clayton M., 1997). Historically, organizational culture has been examined, some being unique to the Chinese business context. For example, Xin et al. (2002) study identified the five attributes of organizational culture in Chinese SOEs. The five dimensions are related to both external adaptation and internal integration function: employee development, harmony, customer orientation, social responsibility and innovation. When the study by Xin et al. (2002) is informative in terms of organizational culture in Chinese SOEs, it provided limited information on whether these dimensions are applicable to startup organizations in China and their impact on firm strategy.

When examining the organizational culture in China, the concept of *Guanxi* is often referenced. Chinese people often refer *Guanxi* as a part of the core cultural value that emphasizes on the importance of personal relationships in the business world, including connections between corporations and government officials. Existing literature highlighted that the network outcomes formed by a firm’s organizational culture have direct relationship with the perceived firm performance (Wiegmann, T., 2017, October 26). Organizational culture is a meaningful resource deployed by firms to sustain their competitive advantage and potentially a point of differentiation with the incumbent firms, which startup firms often integrate to their strategies.

Prior research has shown that overseas Chinese returnees played critical roles in promoting new organizational culture within the entrepreneurship landscape, which is a unique

phenomenon dominating the current market trend in China. The previous managerial practices and culture framework were heavily influenced by the traditional Chinese values: collectivism and shared identity of the group to achieve social harmony, which stemmed from Confucianism and Taoism. The organizational system is based upon the values of hard work, loyalty and dedication, but placed limited emphasis on individual thinking and innovation (Wiegmann, T., 2017, October 26). While individualistic values were promoted in the West, the Chinese employees are encouraged to act for the greater benefit of the group and always prioritize organization before individual goals. This ideology was extended to explain the organizational structure of Chinese companies, where hierarchy is more predominant and junior employees should not question or challenge their superior with rare occasions of disagreements (Tsui, A. S., Wang, H., & Xin, K. R., 2006).

Interestingly, with the nation's political system being a top-down planned economy approach, its new leading entrepreneurial companies, adopted their mindset and culture from western organizational culture, especially the Silicon Valley region. One founder of entrepreneur firm claimed that the culture of his startup is much closer to the west coast of United States than to Beijing (Tse, E., 2016). The Chinese returnees introduced Western level of risk taking and promoted innovation among the firm. The rising Chinese startups also encouraged flat hierarchy within the organizations to stimulate innovative ideas, which marked the shift to the western organizational style from traditional Chinese firm style. The startup leaders have fused their organizational culture values with western influence, each affecting one another and creating a different culture framework, which eventually become one of the startup firms' key resources within the strategy integration process.

Evaluating the Education Technology Startup Landscape

The paper used education technology market as a sample industry to examine the evolved driving strategic forces behind ambidexterity. The traditional education industry is based on classroom settings: simply with blackboard and a teacher that provided afterschool tutoring to students. The industry has been disrupted by the rise of education technology, such as digital online teaching platforms and new educational technologies, where students can participate in tutoring sessions online, upload homework through portal and even learn concepts through 3D immersion (Tse, E., 2016). The disruption rate of education technology is the highest in the Asia market, especially China. Since Education technology platform is one of the fastest growing industries in China, this research will utilize the digital education landscape to answer the central research question: *How do startups integrate strategies to achieve ambidexterity in the China market?*

In 2016, global investments in Chinese education technology companies rose to \$1.2 billion, which was more than triple the amount raised in 2014 and comparable to Lyft's most recent funding round. The report indicated that the education technology industry in China is expected to grow 20 percent annually (Nataf, E. 2018, January 19). One rationale for the expansion of education technology startups in China is its constantly growing student population and traditional cultural values that placed heavy emphasis on education. The Asian education system is the largest market globally: more than 600 million students are enrolled in K-12 schools in Asia, which is 10 times more than the student population in the United States. China's young population is the highest in the world with a population of 269 million (Tse, E., 2016). What added to the growth of Education technology market is that education is generally deeply valued in traditional Chinese culture. The educational services are where Chinese families spent

the most income on besides housing and medical services. Studies have pointed out the desire to invest in children's futures and pressure on family to send children into prestigious universities increased their willingness to pay on education. The shift from traditional education industry to digital education platform also indicated the shift of revenue from traditional incumbent education companies to education technology startup companies in China. The focus on education and rising target student population played a significant role in driving the acceleration of education technology industry in China.

Since 1998, China's online education providers existed but the market did not start to grow until the 2011-2013 period. The China's online learning market successfully disrupted the traditional education market and continued to expand. For example, the Education technology industry grew from 500 startup companies to 4200 in 2016. The China Online Education Report (2015-2020) claimed that the number of students studying online in 2014 was 77,097 million, composed of only 30% of the student population in China ((Ahlstrom, D., & Ding, Z., 2014). The market is far from reaching its peak and more firms are entering the market to exploit the remaining 70% target population. The education technology startup organizations have utilized network expansion strategy to align with government objectives in order to gain support from the formal institution. With the Chinese major economy model shifting from manufacture-based economy to service-based one, more emphasis is placed on stimulating growth of the online education market. The Chinese government indicated that its 13th Five-Year Plan is aimed to modernize the education system and focus on the growth of online education. In 2015, the Chinese government invested \$1.07 billion in education technology startups. It will invest \$30 billion in the industry by 2020, with the goal to provide all K-12 schools with resources and increase the student-to-computer ratio of 6:1 within the three-year period. The strong support by

the party and state-supported venture capitalists also encouraged the entrance of private funds into the industry and bringing more private startup players into the landscape to accelerate the E-learning revolution in China (Nataf, E., 2018, January 19). The increasing number of entrants into the industry further increased the intra-industry competition, pushing all education technology startups to frame and integrate strategies to expand into new markets as well as sustaining their existing business model.

Methodology

The paper used an inductive research process with grounded theory approach to explore the forces behind China's entrepreneurship expansion and how startups integrate various strategies to achieve ambidexterity (Corbin & Strauss, 1990). The potential strategy formation and integration included but not limited to: dual emphasis on achieving breakthroughs (exploration) and incremental gains from existing product offerings (exploitation), establishment of organizational culture framework, and interaction approach among all levels of management. The data were collected, compared and analyzed based on existing inductive studies, which will be discussed in the "data analysis" section (Santos & Eisenhardt, 2009).

The research methodology was based on in-depth fieldwork that I conducted on three education technology startup ventures in China: their names were coded as firm A, B, and C to ensure confidentiality. Before the interviews and firm visits, a one-page confidentiality form was sent to, reviewed and signed by the interviewees. The confidentiality form was established to ensure firm interviewees give the most candid responses throughout the data collection process (See Appendix I).

I studied more than three ventures but eventually chose these three ventures for the following reasons: In the beginning of data collection process, I interviewed more than three

ventures but did not include them in the paper. The ventures that were not chosen provided the same business service offerings as the three sample ventures, such as English tutoring or career recruiting services for Chinese international students. But they were not based in metropolitan cities in China and onsite interviews or firm visits were difficult, as I was not able to get enough number of responses to identify potential patterns for the study. Another reason was that these startup firms were founded after 2018 and still have not developed a clear organizational structure with limited size to be examined and to provide insights for this study. I ended up choosing the three sample ventures due to the following reasons: The timing is attractive of these firms as these three startups were founded within similar time frame (2013-2017). They also provided similar business offerings and had similar profile size. Table 1 provided descriptions of the startup ventures. Onsite observations and interviews with firms were recorded and analyzed to examine strategy integration the startups used to stay competitive in the market.

Table 1: Description of Ventures

	Firm A	Firm B	Firm C
Business Focus	K-12 after-school English tutoring services Overseas exams preparation (Ex: SAT, ACT, GRE, etc) Focus shifted to online education since 2015	Full-service career consulting company Provides 1-on-1 career workshop, career panel targeting Chinese international students	English tutoring services Overseas college application preparation
Headquarter Location	Beijing, China	Chengdu, China	Shenzhen, China
Year Founded	2013	2015	2018
Professional Investment Attempts	Series B funding round	Series A funding round	Pre-Seed funding stage

Prior Corporate Leadership Experience of Senior Executive Level	Managers and senior executives at public companies in the education industry	Managers and senior executives at public companies in the education industry and investment banks	Managers at public companies in the education industry
Number of Employees	250 frontline employees 1000+ teachers	150 frontline employees 2000+ global mentors	15 frontline employees 100 mentors in Southern China region

Data Collection

The primary data sources were: interviews, onsite visit notes, and follow-up phone calls to access firm strategies. The secondary data sources were: news articles, internal documents, company strategic plans, meeting notes, and company profiles, etc. I held a round of 30 interviews on average from January 2019 to February 2019. The interviews were semi-structured and ranged from 30 to 45 minutes, conducted in first language of interviewees (Mandarin Chinese) to ensure participants were expressing their thoughts and knowledge comfortably and accurately, ultimately avoiding any cultural ambiguity. The responses were recorded, transcribed and then translated into English for further data evaluation. During the process, I manually transcribed the interview responses to identify relationships between the information categories through axial coding (Corbin & Strauss, 1990). Table 2 provided an overview of the number of interviews conducted with all three sample startup ventures. The table also illustrated a breakdown of relevant titles of interviewees at the startup ventures to give a holistic view on the data collection process.

Table 2: Cases and Interviews per Startup Firm and Breakdown of Relevant Titles of Interviewees at the Ventures¹

	Firm A	Firm B	Firm C
Interview Structure	Semi-structured Interviews	Semi-structured Interviews & Onsite Observations	Semi-structured Interviews & Onsite Observations
Number of Interviewees from The Executive Level	Interview responses from executives: 2	Interview responses from executives: 5	Interview responses from executives: 4
Job Titles of Interviewees from The Employee Level	<ul style="list-style-type: none"> • COO (1) • CAO (1) 	<ul style="list-style-type: none"> • CEO (1) • COO (1) • CTO (1) • CAO (2) 	<ul style="list-style-type: none"> • CEO (1) • COO (1) • CTO (1) • CFO (1)
Number of Interviewees from The Frontline Level	Interview responses from employees: 6	Interview responses from employees: 7	Interview responses from employees: 6
Job Titles of Interviewees from The Frontline Level	<ul style="list-style-type: none"> • VP of Marketing Department (2) • VP of Strategy and Planning Department (1) • Employee of Human Resources (2) • Employee of R&D Department (1) 	<ul style="list-style-type: none"> • Employee of Strategy Department (3) • VP of Marketing Department (1) • VP of R&D Department (2) • Employee of Marketing Department (1) 	<ul style="list-style-type: none"> • Director of Academic Resources Department (1) • Employee of Academic Resources Department (1) • Employee of Strategy and Planning Department (2) • VP of Marketing Department (1) • Employee of Marketing

¹ Besides the executives and employees of the three startup ventures, I met and interviewed external stakeholders, such as professionals working in the education technology industry to throughout the networking and data collection process. Throughout the process, I was able to expand understanding of startup strategies and market dynamics and added new insights to this paper.

			Department (1)
Total Number of Interviews of Executive Level and Employee Level	8	12	10
Archival Sources	Semi-structured responses from executives: 2 Semi-structured responses from employees: 6 Internal presentations: 3 Meeting notes: 8 Strategic plans: 2 Company profiles: 4 Conference call notes: 1	Semi-structured responses from executives: 5 Semi-structured responses from employees: 7 Onsite visit observations: 1 Internal presentations: 5 Company profiles: 4 Conference call notes: 2 Strategic plans: 3	Semi-structured responses from executives: 4 Semi-structured responses from employees: 6 Onsite visit observations: 1 Meeting notes: 6 Company profiles: 7 Strategic plans: 2 Conference call notes: 2

Despite the insights that Chinese education technology startups can offer, many scholars been having difficulties accessing to these startups in mainland China. First, many startups are linked to or mainly funded by the Chinese government. As a result, many employees are not willing to sharing their experiences due to the political environment. Second, the Chinese market and society are based heavily on *Guanxi*, or social connections or personal interactions. Therefore, startups rarely give open interview or onsite visit opportunities unless there is a personal relationship built between the me and people within the firm.

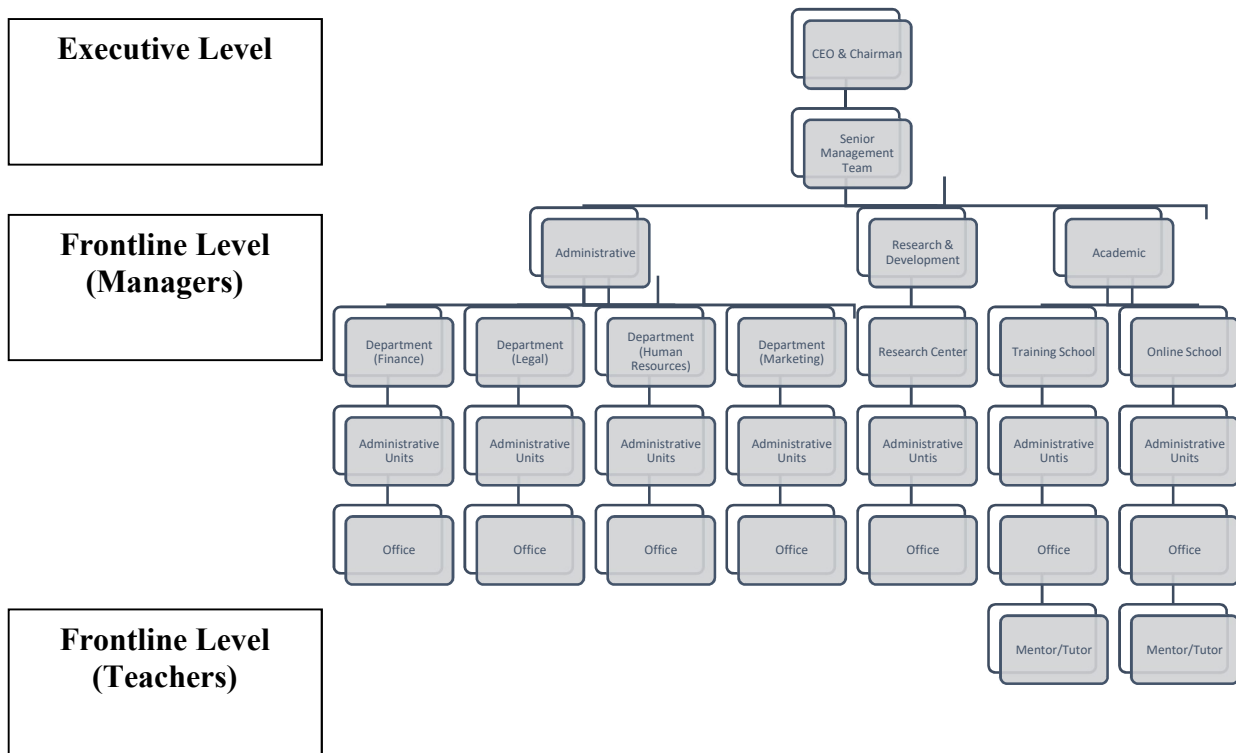
The author of this article was born and lived in China for twelve years and has personal connections with a few education technology startups prior to the research. She taught SAT at another startup firm her freshman summer in college and is currently working as a part-time mentor at one of the recruiting service startups. Her former employers introduced her to employees of the three sample education technology startups. After four weeks of intensive networking in January 2019, the firms finally accepted my interview requests, ultimately enabling the data collection process to kick off. All three startup ventures fit the profile of education technology startups discussed above; they are well-known to customers and are playing important roles in the education space in China.

Even though these startup ventures provided various tutoring or recruitment consulting services to customers, but they all followed a similar organizational structure, as presented in Figure 1. Each startup has a CEO or Chairman, that leads the senior management team. There are various functional departments located at the headquarters along with the senior management team, such as finance, human resources and R&D department. Then there are administrative units under each department in other office locations. These administrative units are labeled as employees because they are connecting the firm with students, while being geographically closer to the client (student) sites. The final level of employees are part of the frontline level², classified as career mentors or teachers that are directly providing the education services to students. They often cooperate closely with employees from administrative units to update student learning statuses while employees check on teachers regularly to ensure quality services

² Since the three sample ventures are currently in early development stage, there is no clear distinction between frontline and front-line levels, as all front-line levels are responsible for front-line firm activities and operations.

to clients. Such organizational structure was further examined to generate theories on strategy integration process.

Figure 1: Organizational Structure Chart of Startup Ventures



I held a round of the 30 interviews with the founders and executives of startups to examine strategic development at the executive level. I listed a breakdown of interviewees and their relevant titles at the sample startups (See Table 2). After the initial interviews, I also identified and scheduled interviews with employees across various departments based on the following criteria: (1) tenure in the firm, which would provide a more comprehensive perspective on the firm’s strategic decisions; (2) Degree of involvement with firm strategic implementation

and their interaction with executive level; (3) Use of diverse and multiple internal employees will mitigate the potential biases of their responses while giving broader insights on the firm’s strategy integration process to achieve ambidexterity.

The first part of interview are composed of broad open-ended questions. Table 3 provided a list of detailed leading questions during the interviews. The questions were targeted towards participants to provide a holistic view on the competitive landscape of education technology in China and how the firm strategized to enter the nascent market. Then more in-depth questions were modified and asked to access the firm’s strategy integration process: how executive and frontline levels were integrated to better execute the firm’s strategy and how was the firm positioning itself to achieve ambidexterity. The interview questions were constantly modified based on participants’ responses in order to capture more findings for the paper.

Table 3: Interview Leading Questions

<u>General Questions:</u>
<i>What is the strategic focus of your company?</i>
<i>What is your perspective on the competitive landscape of education technology startups?</i>
<i>Can you describe the historical development of your company?</i>
<i>How does your startup differentiate with other platforms in the industry?</i>
<u>Organizational Structure and Culture Related Questions:</u>
<i>What is the organizational structure of the firm?</i>
<i>What kind of roles do you think executive level and frontline level play in your organization?</i>
<i>How are upper executive and lower frontline levels different?</i>
<i>What % of company executive level and frontline employees are overseas returnees?</i>

<i>How would you describe the firm's organizational culture and identity?</i>
<i>What type of impact do overseas returnees have on the organizational culture?</i>
<i>What are major activities of senior executives and frontline employees?</i>

The organizational structure of the startup organizations was drawn to better illustrate the organizational culture. Then I formulated questions during interviews to access the employee and founder ratings of the organizational culture based on five cultural dimensions mentioned in the earlier part of paper: employee development, harmony, customer orientation, social responsibility and innovation (Xin et al., 2002). I conducted interviews and participated in onsite visits to further evaluate the organizational structure of each venture to access each firm's cultural framework and identity formation process. The interviewees provided insights into how each level of management responded to a firm strategy and whether the proportion of overseas returnees in each level would affect the firm strategy direction and organizational culture. Through analyzing the internal cultural framework, I inferred how each level contributed to the firm's ability to achieve ambidexterity.

After February 2019, I followed up with the first-round interviewees to evaluate their thoughts on how interaction among different levels of the firm has helped their firms to integrate strategies. The second round of the interview was conducted in the form of follow-up phone calls with a focus on specific strategy questions prompted by the interviewer: in which strategic decision the interviewee was directly involved in: exploration or exploitation. The questions emphasized on facts, events and interpretations of strategies as well as resources used by startup firms to attain ambidexterity. Table 4 provided a list of detailed leading questions during the

round of follow-up interviews. The participants provided complementary information on the strategy integration process, which provided space for potential reconstruction of theories.

Table 4: Follow-Up Phone Call Leading Questions

<u>Strategy Integration Process and Ambidexterity Questions:</u>
<i>What type of external and internal strategies has your firm implemented to stay competitive in the market environment?</i>
<i>How did you integrate all types of strategies?</i>
<i>How did you integrate upper and lower level of management?</i>
<i>Would you describe the firm’s strategy implementation approach as top-bottom or bottom-up? If so, can you describe the process?</i>
<i>“How has different levels of your company interacted to yield network outcomes? If so, what were the direct impact?”</i>
<i>How do you form ties and keep employees informed of firm strategy within the organization?</i>
<i>How does your firm strategize to achieve incremental gains with existing processes while exploring potential opportunities and markets?</i>
<i>How does each business unit/department reinforce each other to support and execute the firm’s strategy?</i>

Data Analysis

The data analysis process was divided into three stages that supported each other to provide a comprehensive perspective into the topic. It followed the procedure suggested by

Corbin and Strauss (1990). By using “open coding,” I identified the information categories and by “axial coding,” and identified the relationships between the categories. Then I created the grounded theoretical model to depict the interrelationships of the axial coding categories of information.

The three stages are divided into the following: First, through referencing to existing literature work, I confirmed that the three education technology startups chosen fit the description of startup ventures in China, as their major goal was to achieve ambidexterity for market competition advantage and long-term development. Second, I followed Eisenhardt’s (2009) inductive study methods to analyze the firm’s responses, compared them, summarize common trends to identify: how exactly do these firms integrate strategies and how do they balance the tensions between exploration and exploitation. Third, I continued adjusting and validating interview questions with additional information from the interviews. In fact, the responses and firm visits offered new insights and I decided to expand beyond the original research question and asked, *What are specific building blocks of strategies implemented by these startups?* Then I inferred from the data collected and triangulated themes from each stage to summarize into a theoretical framework presented in the next section.

Findings

What are the strategic differences between executive and frontline level?

Finding 1. All executive level employees took an explorative approach (instead of exploitative approach) and focused on expansion beyond current market opportunities

After I interviewed a total of 11 senior executives from all three sample ventures, a common pattern was found as their strategic focus lied upon changing-the-business model and creating long-term vision and future plan for the company development. According to their internal meeting notes, most discussions centered around new market initiatives, projects and tactical programs to pursue innovation byond current product and service offerings. These objectives were closer to long-term vision and increased future value for the organization, with less focus on tangible operational objectives and existing offerings.

The fact that more than 50% of the founders or senior executives were composed of overseas returnees while more than 50% of the frontline level are made up of employees from local settings (See Table 5). Table 5 provided an overview of the profile of the sample ventures and the percentage of overseas returnees in each management level based on interviews and company reports given to me.

Table 5: Breakdown of Key Executives and % of Overseas Returnees at Each Firm Level

Venture	Key Executives in Fundraising	% of Overseas Returnees in Executive Level	% of Overseas Returnees in Frontline Employee Level
Firm A	CEO, Chairman, CFO, COO, CTO	90%	10%
Firm B	CEO, CFO, CAO (Chief Academic Officer), COO, CTO	100%	12%
Firm C	CEO, CAO, CFO, COO	95%	5%

According to Table 3, one fundamental difference between the executive level and frontline level was their cultural differences, both influenced by their education backgrounds and work experiences. With the shift towards western startup culture and organizational style on innovation and risk-taking, the senior executive level’s business mindset was mainly about

changing-the-business model, with a strategic focus on long-term growth of the firm. During the interview, one of the executives of firm A mentioned, “*I would say our level (executive level) has western-oriented culture, which is great to provide the firm with new perspectives to focus on.*” With their previous abroad education experiences, their main function was explorative in nature: establishing growth incubator, new venture under the startup, new line of business offerings (protecting it as it evolved), and market expansion beyond mainland China to overseas markets (such as to North America and Europe regions). One major strategic focus of the senior level is expanding the startup firm market beyond mainland China. Table 5 illustrated the interviews conducted within the senior management team and relevant archival sources associated with the quotes and underlying themes.

Table 6: Representative Data Supporting Interpretations of Strategic Approaches Across Management Levels (Executive Level)

	Mechanisms for Explorative Strategic Approaches		
	Learning	Execution	Resource Recombination
Definition	Executives discovering new market opportunities	Integrated executive team work to resolve any conflicting viewpoints Triggered top-bottom approach to execute the consensus strategy	Share and distribute resources, such as funding, expertise, and network
Rationale	The overseas experience drove the upper level’s strategic focus towards changing-the-business model	Strategic intention to disrupt current business model and protect growth of new startup line until turning into mature business line	Maximize resources of the integrated senior team to achieve shared vision

<p>Example from Firm A</p>	<p><i>“For my job, I spent most of my time attending social engagement (Yingchou). China is a real relationship-based society.”</i></p> <p>- COO</p>	<p><i>“It is the long-term growth of company that is chiefly pursued through strategy execution.”</i></p> <p>- CAO</p>	<p><i>“I would say our level (executive level) has western-oriented culture, which is great to provide the firm with new perspectives to focus on.”</i></p> <p>- COO</p>
<p>Example from Firm B</p>	<p><i>“After ending work at the office, Yingchou is something I have to do to stay ahead of the market. Meeting other startup teams and VC people is important to seek new opportunities.”</i></p> <p>- COO</p>	<p><i>“Most of our teachers had overseas experience, as we invested heavily in recruiting them abroad in order to provide the most authentic experiences to our students.”</i></p> <p>- CAO</p>	<p><i>“When I wake up in the morning everyday, there are 300 to 400 unread messages in the Wechat group (consisted of members within the senior management team). My job is to go through all the messages and ensure that I am aware of any senior team updates or ideas.”</i></p> <p>- CEO</p>
<p>Example from Firm C</p>	<p><i>“We often get dinner with other startup founders to see what they are up to and what are gaps in the market that our business can fill.”</i></p> <p>- CEO</p>	<p><i>“We will increase our investment in the North America market this year. International students are our target customers.”</i></p> <p>-CFO</p>	<p><i>“We excel in new ideas and human resources. We got a really creative team.”</i></p> <p>- CTO</p>

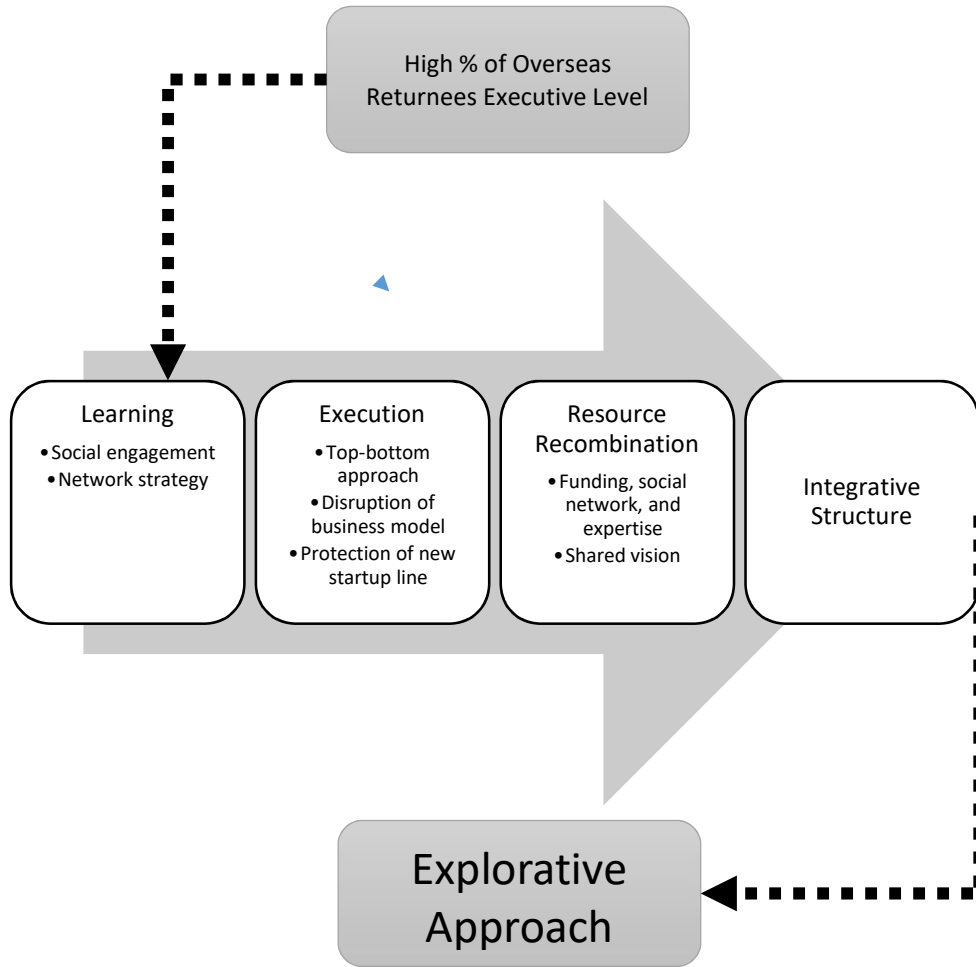
As seen in Table 6, the cultural influence from Western startups was built upon the senior executives’ resources and capabilities as they were able to leverage their previous overseas network and personal understanding of foreign markets. One common pattern from the interviews was that the founding members of these three sample startups were graduated from

the same school overseas, had similar working experiences, and returned to China to start their business venture together. Also influenced by their own education experiences in western countries, mentors and teachers, those that provided direct tutoring or consulting services to students, usually had personal connections with the executive level team, such as being previous classmates, alumni or colleagues during their overseas periods. One of the firm B executives recalled, *“Most of our teachers had overseas experience, as we invested heavily in recruiting them abroad in order to provide the most authentic experiences to our students.”* Their overseas experiences, as opposed to local frontline level, turned into the most valuable resources and shaped the senior strategy approach to more explorative-based.

As shown in Table 6, another major strategy focus by the senior team was the potential disruption to firm’s own business model and establishment of startup branches or a new department in order to seek new market opportunities. After collecting qualitative data from interviews and follow-up phone calls, a strategy implementation process by the senior level is framed: *learning, execution, resource recombination of growth market opportunities* (See Figure 4). When asking about the major roles of senior executives, the senior team members of firm A, B and C all mentioned *Yingchou*, usually in the forms of dinner gatherings regularly, an important occasion when conducting businesses in China. The occasion was designed for startup executive team to meet other startup executive members and venture capitalists during the dinner event. During the round of interview, CEO of firm B mentioned, *“After ending work at the office, Yingchou is something I have to do to stay ahead of the market. Meeting other startup teams and VC people is important to seek new opportunities.”* The discussions occurred during these networking sessions were aimed to explore new markets and recruit executive talents to the

startup firm, shaping the learning process of senior level. The social engagements provided new perspectives for the learning process as executives were discovering new market opportunities.

Figure 2: Explorative Approach: Strategy Formation Process



As seen in Figure 2, during the execution process, the senior team adopted the network strategy among all members and all members were integrated at the top under a distinct operational structure to promote content sharing and tight communication. The startup often relied on establishing a new venture or startup line to disrupt its own business model, ultimately protecting to grow the new line until it became a mature profitable business line within the

startup. The execution and resource recombination process will be discussed under the third session on structural differences between executive and frontline level.

Finding 2. All frontline level employees took an exploitative approach (instead of explorative approach) and focused on firm's competency in local settings

Contrasted with the senior executive level, the frontline level of startup ventures served as the bridging function between executives and teachers while focusing on the interaction with external stakeholders, such as consumers and suppliers. As one of the employees of firm C highlighted her role in the company, *"We are often told that we are the 'voice' of the firm, where we connect the firm with rest of our external stakeholders."* As Figure 1 (organizational structure chart) has shown, the frontline level was broken down into various functional departments, such as operations, sales, legal and finance. Most revenue generated by frontline level came from running of daily business activities. As one of the employees of firm C addressed, *"I think our work is biased towards operational logic."* Another employee of firm B also identified the same role, *"I think our work is biased towards operational logic."* Therefore, the focus of lower level was on short-term financial plan and from a performance-driven perspective, where the frontline level also emphasized on firm efficiency, operational productivity and speed. Table 7 illustrated the interviews conducted within the frontline employee team and relevant archival sources associated with the quotes and underlying themes.

Table 7: Representative Data Supporting Interpretations of Strategic Approaches Among Management Levels (Employee Level)

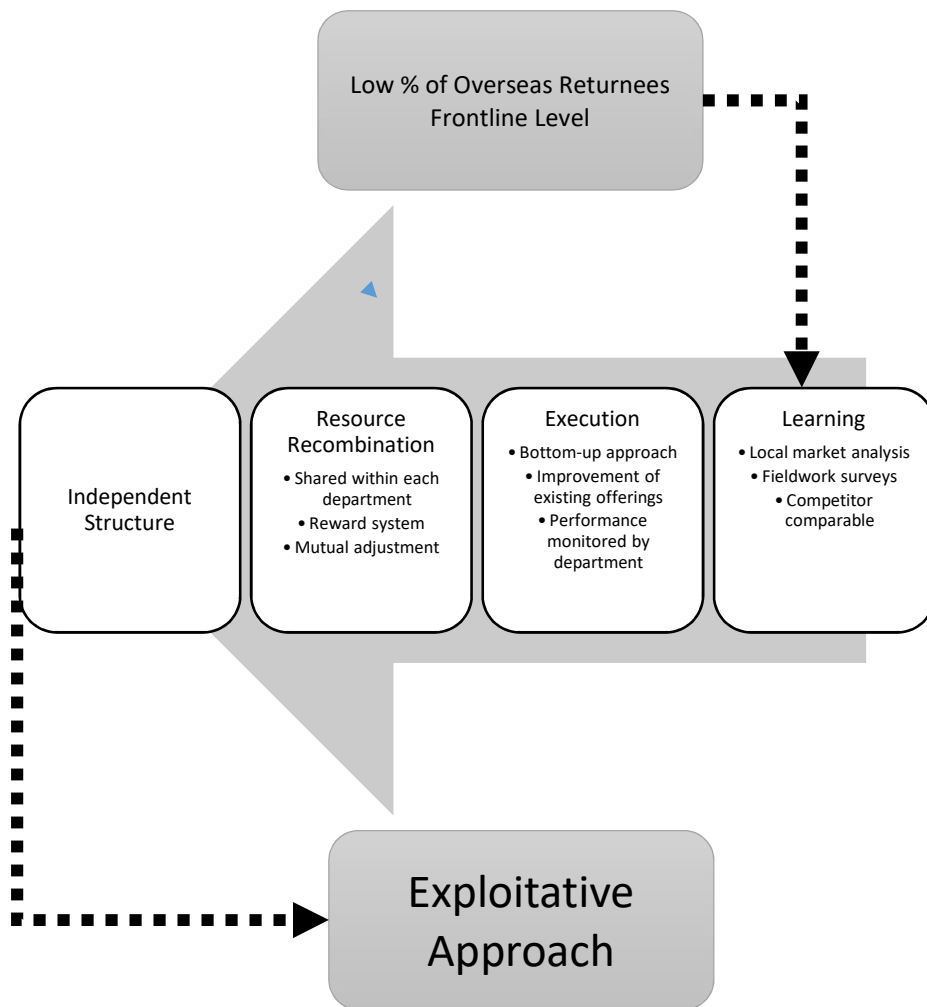
	Mechanisms for Exploitative Strategic Approaches		
	Learning	Execution	Resource Recombination
Definition	Employees focus on conducting competitor analysis and developing current firm operational advantage	Structurally independent employee team come up with strategic plan as the main agenda for Monday meetings Applied bottom-up approach to execute the consensus strategy after approval from senior executive level	Share and distribute resources within each functional department with reward system in place
Rationale	The local education experience drove the lower level's strategic focus towards running-the-business model	Strategic intention to improve existing business offerings with tight performance control within each functional department	Maximize resources of the structurally independent departments to increase mutual adjustment
Example from Firm A	<i>"Our main responsibilities include: market share analysis, current customer base expansion, and sustain firm competitive advantages."</i> -VP of strategy & planning department	<i>"We want to find every opportunity to improve our current business and increase profitability."</i> -Employee of human resources	<i>"I graduated from a university here in Beijing. Most of my colleagues from the same department are former school mates. We worked well together since we are used to the same culture and have the same backgrounds"</i> -VP of marketing department
Example from Firm B	<i>"Among our competitors, our cost control system is the most efficient."</i>	<i>"I think our work is biased towards operational logic."</i>	<i>"The market is intense and always has been changing. We need to make sure we are always ahead"</i>

			<i>of our competitors and expand our current market share.”</i>
	-Employee of marketing department	-VP of marketing department	-Employee of strategy department
Example from Firm C	<i>“I joined the company as employee 24 and we have surpassed our competitors at that time as we kept improving our services to students.”</i>	<i>“We are often told that we are the ‘voice’ of the firm, where we connect the firm with rest of our external stakeholders.”</i>	<i>“We are the bridge between our senior leaders and the market, including customers and the government.”</i>
	-Director of academic resources department	-Employee of marketing department	-VP of marketing department

As mentioned in Table 5 before, with more than 50% of them were recruited from local Chinese universities and had in-depth understanding of Chinese market and teaching culture. During interviews with the frontline level, their main roles included but were not limited to creating short-term firm objectives: such as developing operational advantages of the startup, targeting existing markets to increase share, expanding current customer base, maintaining connections with governments to gain support, and sustaining competitive advantages. Their most valuable resources are their understanding of local markets and competitors. As one of the employees from firm A discussed, *“I graduated from a university here in Beijing. Most of my colleagues from the same department are former school mates. We worked well together since we are used to the same culture and have the same backgrounds.”* Continuing the firm operational advantage and create solutions through using existing resources made their strategic focus to be more exploitative in nature.

Due to their experiences with local settings and roles as the connector between firm and existing market, the culture framework of frontline level was also heavily influenced by the traditional Chinese organizational culture, with an emphasis on collectivism, risk-averse firm behavior and priority of social group harmony. The emphasis on dedication and group identity might limit individual innovation (Wiegmann, T., 2017, October 26). Such cultural difference enabled frontline level to drive the essential focus on efficiency and cost control side of the business as seen in Figure 3.

Figure 3: Exploitative Approach: Strategy Formation Process



In order to evaluate the frontline level's strategy design and implementation process, I collected ethnographic data and visited startup to observe firm operation processes. Based on the evidence collected, the frontline level followed the same strategy implementation framework as the senior level: *learning, execution, resource recombination of existing market opportunities*. I had the opportunity to sit in two of the frontline employee weekly Monday meetings (one for Firm B and one for Firm C) and observed the most frequent topics that came up during these meetings: the major topics were market analysis, competitor comparable, fieldwork surveys to analyze whether the startup firm is playing a leading role in the industry. Through focusing on gathering information about the startup's current performance compared to its market competitors and refining the running-the-business model, the frontline level was able to shape its learning process about the current state of the firm. The execution and resource recombination process will be discussed under the third session on structural differences between the executive and frontline levels.

What are specific building blocks of strategies implemented by these startups?

Finding 3. Startups utilize structural approaches to effectively integrate strategies.

While the executive level is integrative and explorative, the frontline level is structurally independent and exploitative.

After analyzing qualitative data from interviews and onsite visits, I inferred from the data to categorize the differences between upper management level and lower frontline level. The overseas experience by returnees among the upper level drove the strategic focus towards changing-the-business model, influencing by Western Silicon Valley startup culture. The local

education backgrounds and in-depth knowledge of local settings pushed the frontline level to focus on the firm operational management towards running-the-business model.

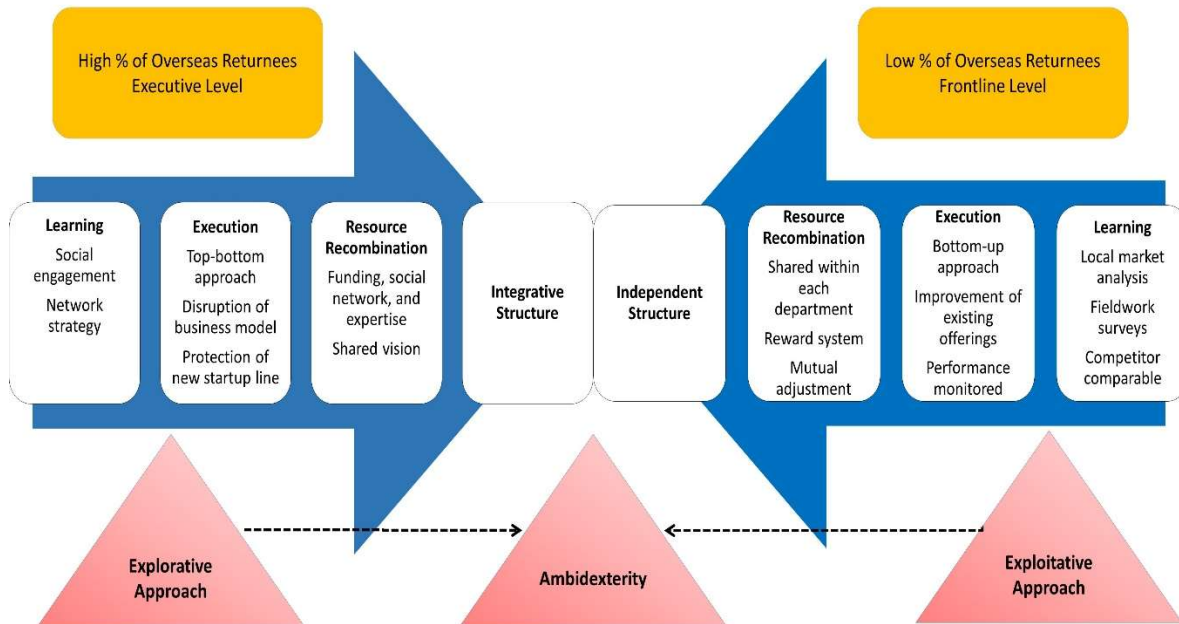
Besides the cultural component, the distinction is further expanded by the structural approach applied by these startups. Even though each senior team member possessed similar overseas academic and career backgrounds (graduated from the same schools, had similar business backgrounds, and started the startup business together), but each senior team member has their own expertise: such as talent recruitment, teaching experience, or technological development skills. The upper level focused on creating tight links across units, as each member would provide their expertise advice to rest of the team and contributing to the holistic strategy. For example, when I visited the sample startups onsite, the senior team held Monday meetings frequently and often communicated intensely among the group on Wechat, which is the most prevalent communication platform in China. During one of the follow-up phone calls, the COO of firm B addressed the tight communication pattern within the senior level, *“When I wake up in the morning everyday, there are 300 to 400 unread messages in the Wechat group (consisted of members within the senior management team). My job is to go through all the messages and ensure that I am aware of any senior team updates or ideas.”*

To ensure the managerial structure of the top management team was completely integrated: the senior team would work on accepting different perspectives on distinctive strategies to resolve any conflicting viewpoints among the management team. Monday meetings were essential as senior executives engaged in open discussions on various strategic options. Once the consensus strategic plan is confirmed, then a top-bottom approach is triggered to execute the strategy. The resources would be recombined and distributed among the upper level to achieve the shared vision, including funding, social network and expertise (See Figure 4).

On the other hand, the frontline level applied a different structural approach. During the same Monday meeting, frontline level representatives would bring up exploitative based strategic objectives through applying a bottom-up approach. The senior team would undergo learning process about how the company can achieve incremental gains (exploitative strategic gains) based on existing business lines through hearing the plans suggested by lower level. As the frontline level of firm B addressed their concerns, *“The market is intense and always has been changing. We need to make sure we are always ahead of our competitors and expand our current market share.”* After the frontline level proposed their exploitative plan during the meeting, then the startup firm would form a consensus on the exploitative plan followed by the same execution process.

One distinction is that the lower level was structured independently, as resources were usually shared within each department instead of across all frontline levels. With the distinctive structure, the firm could monitor the performance of each department to ensure the firm’s competing at its best. Within each of the department, the reward system was put in place to encourage mutual adjustment among each functional department (See Figure 4). The team strategic objective could be achieved and in turn increased the direct interests of their own department and created collective benefit after teamwork efforts. Furthermore, the framework would increase the impact of learning process and encouraging potential exploitative strategies. The explorative and exploitative objectives were integrated later in the process to encourage healthy competition between each department.

Figure 4: Specific Building Blocks of Strategies Implemented by Startups



The structural and cultural differences drove the two management levels to have different strategic focuses, as the organization was capable of mastering both adaptability to changing business environment and excellence in daily operations. Knowing these startup firms have the conditions of both components (exploitation and exploration) of ambidexterity, the key for the ambidexterity framework to work was integrating the firm strategy to achieve the optimal balance between both approaches, which will be discussed in the next section on strategy integration process model.

How can startups in China effectively integrate strategies to balance the tension between explorative and exploitative approaches?

Theoretical Framework: Strategy Integration Process Model

During the follow-up phone calls with both upper and lower management level of the sample firms, I asked and observed the strategy integration process of combining explorative and

exploitative approaches within the firm: “How exactly does the startup firm integrate the upper and lower level?” Table 8 illustrated the data from follow-up phone calls with both executive and frontline levels within the startups and relevant archival sources associated with the quotes and underlying themes.

Table 8: Representative Data Supporting Interpretations of Strategic Integration Process Across All Management Levels (Executive and Employee Level)

	Common Mechanisms for Strategy Integration Process		
	Cognitive Model	Strategy & Planning Department	Reward System
Definition	Establishment of common organizational identity	Overcome trade-offs between redirecting firm strategy and maintaining core firm focus	Well-performed employees exposed to both approaches
Rationale	Integrate “who we are?” concept as an overall firm to increase firm loyalty and pride	Strategic intention to redirect firm strategy and balance between two dimensions of ambidexterity	Reward system put in place to increase social integration among employee and executive level
Example from Firm A	<p><i>“In our company, everyone is asked to do what they are best at and we communicate well.”</i></p> <p>-CAO</p>	<p><i>“I think the resource integration ability and communication skills of the strategy department is key to our firm development.”</i></p> <p>-VP of strategy & planning department</p>	<p><i>“I think our firm structure gives us many advantages. Each department is rewarded based on performance and we all work towards one common goal.”</i></p> <p>-Employee of human resources</p>
Example from Firm B	<p><i>“Our firm really focused on developing a collectivistic culture and promoting that idea of different roles under one firm.”</i></p>	<p><i>“The strategy and planning department gives us many advantages as we apply what we are best at to excel in the market.”</i></p>	<p><i>“I think resource sharing ability and communication skills are essential to our firm’s reward system.”</i></p>

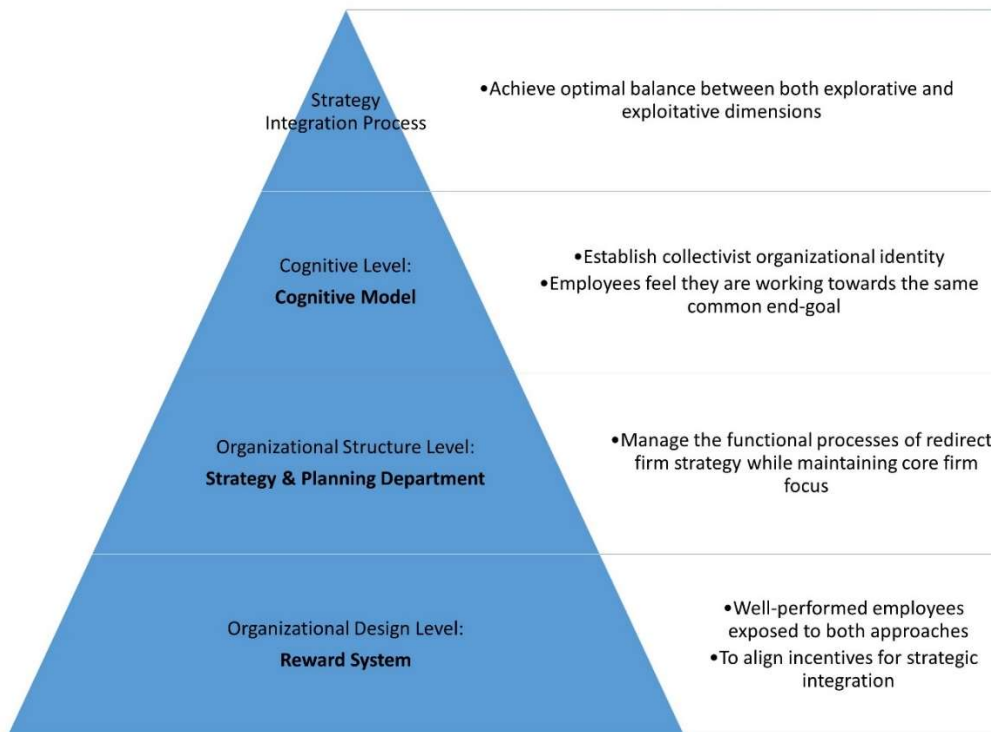
	-CEO	-Employee of strategy department	-Employee of marketing department
Example from Firm C	<i>“In recent years, the firm focused on improving communications within the firm to achieve full integration of the firm”</i>	<i>“We invested heavily in our strategy department that focused on communication strategy. It’s important to keep everyone informed with our decisions at all time.”</i>	<i>“The leadership of the firm is essential as everyone is rewarded for contributing to the firm and helping the firm to adapt to the market changes, which is crucial.”</i>
	-Director of academic resources department	-CEO	-Employee of strategy & planning department

The integration process was key to ensure the firm was able to achieve ambidexterity after identifying and balancing the tensions between the two approaches. During the first stage of data collection, existing literature has questioned the success of ambidexterity in real world business settings. For example, Christensen (1997) argued that firms cannot both exploit and explore and must spin-out their exploratory business to succeed. Other scholars (Taylor & Helfat, 2009) have argued that there is a trade-off between exploitative and explorative approaches, as firms cannot achieve future gains at the cost of today (operational failure) as well as only focusing on current profitability (failure of adaptability).

After analyzing the data from Table 8, the major strategic concern for startup firms was the need to eliminate challenges associated with balancing between explorative and exploitative approaches. After analyzing the data collected, a common pattern was found where the startup ventures in China often followed the structural ambidexterity model, where there were separate structures or departments for different types of activities; where parts of the process were either solely aligned or solely adaptive; and where employees have clear mandates that rewarded them accordingly. Since the upper and lower levels of the firm were structurally and culturally

different, to resolve the differences and encourage communication across the whole startup: there was the establishment of a cognitive model to form common identity, a strategy department to communicate all strategy design and implementation updates, and a reward system to further increase social integration (See Figure 5).

Figure 5: Strategy Integration Process Model



To synthesize all parts of the process model together, the firm’s goal was to increase the interaction between two levels of management: executive and frontline level in order to integrate all strategies together to stay competitive (See Figure 5). Figure 5 is an expansion based on the concepts introduced in Figure 3 and Figure 4. The two strategic approaches (explorative and exploitative) from both levels are integrated at the firm level, with three common mechanisms that were organizational design elements, in order to achieve ambidexterity.

First, the firm formed a cognitive model to establish common firm identity as in “who we are?” as an overall firm. The Chinese firm culture placed a huge emphasis on building collective organizational culture, especially the diversity existed among the lower and upper level. During the data collection process, as the interviewees from firm B mentioned, *“Our firm really focused on developing a collectivistic culture and promoting that idea of different roles under one firm.”* The formation of cognitive model with the emphasis on collective identity was essential to the strategy integration process. Through creating a collective identity among all levels, the firm was able to increase the success of ambidexterity.

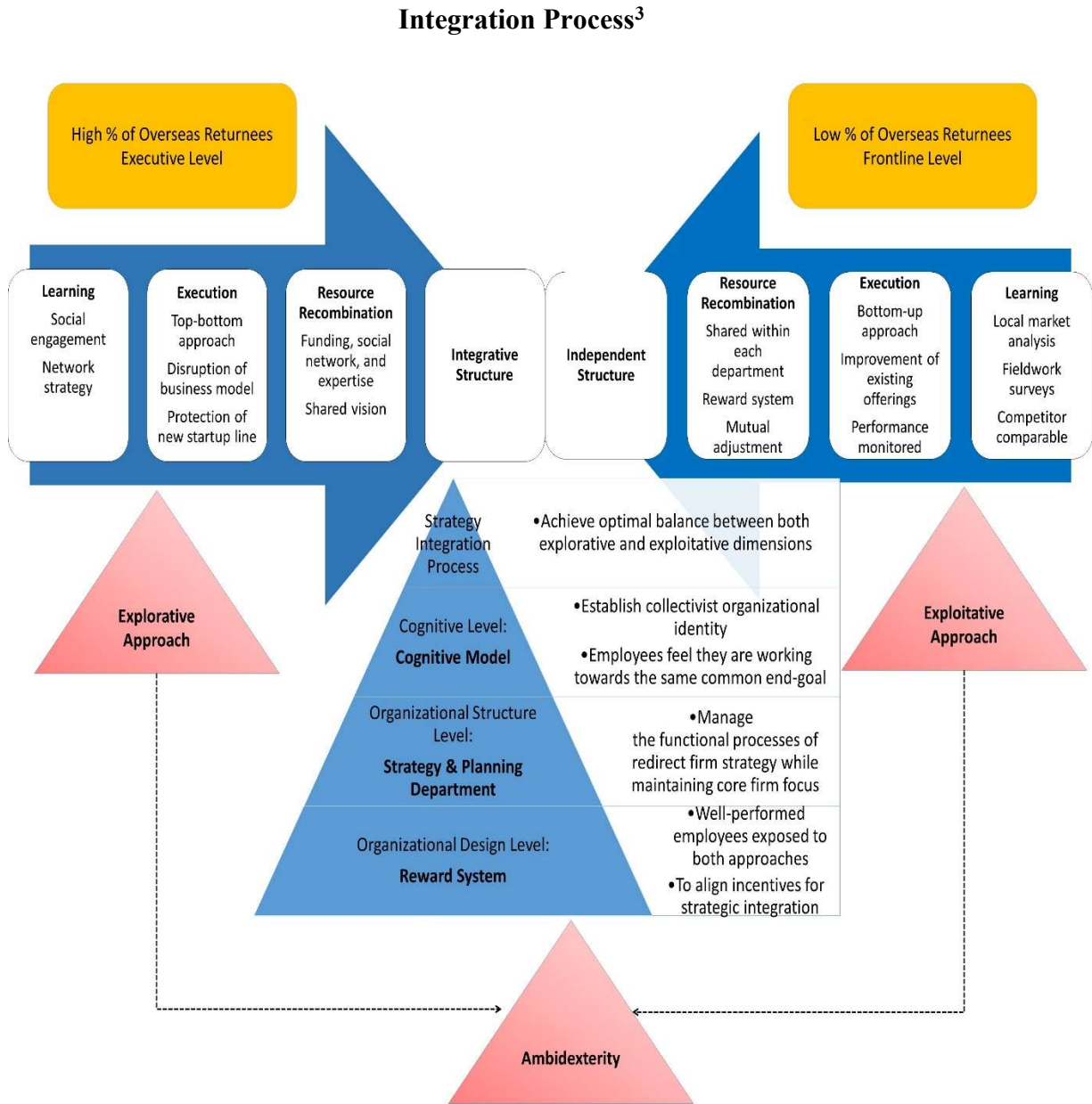
The findings aligned with theories brought up by existing literature. Strong organizational culture framework increased the strength of ambidexterity. Identity formation was the central part of culture framework as firms defined “who we are” and positioned to frame strategy and communicate that strategy across all firm levels. A cognitive model was put in place to create holistic understanding of firm strategy, which was used to speed up strategy formation process (Taylor & Helfat, 2009). The cognitive model used within firm’s strategy was based on the firm’s prior business model but with extra information on new strategy being added to refine the cognitive model.

Second, after speaking with executives from the sample startups, a new department known as “Strategy & Planning” is either already existed or in the process of establishment within the three startup firms. Strategy departments were established among these startup ventures to achieve the optimal balance and to overcome the trade-off between these two dimensions. For example, one of the executives of firm C highlighted, *“We invested heavily in our strategy department that focused on communication strategy. It’s important to keep everyone informed with our decisions at all time.”* Therefore, the major role of the strategy department was to communicate both

explorative and exploitative approaches, ultimately achieving the optimal balance between these two dimensions. That way, the department ensured that the firm was able to redirect its strategy while maintaining the core firm focus and culture. Even though each level had its own strategic focus, but an overall firm strategic intent helped to justify the importance of both focuses and in turn increased the success of ambidexterity.

To further enhance the strategy integration process, the firms utilized an incentive system where highly motivated individuals with exceptional performance from the frontline level were able to join the strategy department. Besides the reward within each department, the incentive system was set up to ensure that those well-performed employees are exposed to both dimensions alternately. For example, an employee spending two years in finance division would be given the opportunity to move on to the strategy & planning department, gaining experience in strategies to achieve long term profitability while applying his experience in financial operation area (exploration approach experience). The incentive system was aimed to increase firm social integration between each level to ensure that both dimensions could be achieved. For example, the frontline level of firm noted, *“I think our firm structure gives us many advantages. Each department is rewarded based on performance and we all work towards one common goal.”* Figure 6 provided a theoretical framework on the strategy integration process after synthesizing all stages. Such the targeted integration allowed the startup ventures to increase success rate of ambidexterity after balancing the tensions between the two dimensions.

Figure 6: Putting Everything Together: Grounded Theoretical Model of Startup Strategy



³ Figure 6 is an expansion based on the concepts introduced in Figure 4 and Figure 5. The two strategic approaches from both levels are balanced at firm level with the three integration mechanisms.

Conclusions

Initially, the research focused on the broad question of how startup firms strategized to achieve organizational ambidexterity. Based on the inductive multi-case study and the data collected from fieldwork, this research extended to examining the fundamental differences between each firm management level, in terms of culture and structure. The context of Chinese startup firms achieving ambidexterity gains invited this study to look at how startups integrate various strategies to resolve the trade-offs between strategic approaches (exploration vs exploitation), ultimately providing a theoretical framework that synthesized all stages of the integration process. The overseas experience drove the executive level's strategic focus towards changing-the-business model; the local education backgrounds pushed the frontline level to focus on running-the-business model with the independent structure.

To integrate these two approaches together, I find that startups commonly employ three mechanisms: (1) at the cognitive level, startups form a collectivist organizational identity so that employees with different roles still feel that they are all working towards the same common end-goal; (2) at the organizational structure level, startups use some variation of a "Strategy & Planning" department to manage the functional processes of redirect firm strategy while maintaining core firm focus; and (3) at the organizational design level, startups construct reward systems to align incentives for strategic integration within the startup. This unique approach enables each of employees to maximize their resources and capabilities, thus pushing the firm to sustain its competitive advantage.

Grounded in the context of China's education technology landscape, this study's findings are significant as it advanced the understanding of strategy design, implementation and integration model utilized by startups. With the amount of qualitative data collected from

intensive field work to dive inside the “black box” of the firm, this paper provides a deep, process-oriented view on how startups integrate conflicting tensions (exploration vs exploitation) to achieve long-term success in nascent markets.

There are several limitations to this study: The findings of the study may or may not be applicable to other cultural settings or markets. For example, North American or European markets might employ different strategy integration processes, as they have different organizational culture framework and work practices, etc. A second limitation is that the study’s approach is an inductive one based on developing rather than testing a theoretical framework; further quantitative data is needed to test the findings that I proposed. Lastly, the sample size of three startup ventures can be further expanded to identify other potential patterns relating to a startup’s strategy integration process as well as the nature of ambidexterity.

I hope that with the growth of quantitative “big data”, the theoretical framework that I present can be tested in future research. Hopefully future research will also explore these ideas further by studying other cultural contexts, providing further attention on the strategy integration processes, and uncovering additional integration mechanisms associated with achieving firm ambidexterity.

Appendix I: Sample Confidentiality Form

Startup Strategy Research Study Confidentiality Form

Jan 1, 2019

You are being invited to participate in a research study about startup strategy. This research project is being conducted by University of Michigan Ross School of Business. The objective of this research project is to attempt to understand how startups implement and integrate strategies to stay competitive in the market. The survey is being given to current employees all these startup companies.

There are no known risks if you decide to participate in this research study, nor are there any costs for participating in the study. The information you provide will help me understand how best to satisfy the needs of organizations and the needs of employees. The information collected may not benefit you directly, but what I learn from this study should provide general benefits to employees, companies, and researchers to the relevant field.

This survey is anonymous. If you choose to participate, do not write your name on the form. No one will be able to identify you, nor will anyone be able to determine which company you work for. No one will know whether you participated in this study. Nothing you say in this study will in any way influence your present or future employment with your company. Your participation in this study is voluntary. If you choose to participate, please send your completed form to the researcher.

If you have any questions or concerns about completing the form or about being in this study, you may contact me at (904) 294-0719 or at [4](#).

References

Ahlstrom, D., & Ding, Z. (2014). Entrepreneurship in China: An overview. *International Small Business Journal*, 32(6), 610–618.

Baumol, W.J. (2007). *Macroeconomics: Principles and policy*. Mason, OH: South-Western.

Christensen, Clayton M. (1997). *The Innovator's Dilemma: When New Technologies Cause Great Firms to Fail*. Boston: Harvard Business School Press.

Corbin, J., & Strauss A. (1990). Grounded Theory Research: Procedures, Canons, and Evaluative Criteria. *Qualitative Sociology*, 13, 3-21.

Eisenhardt, K. M., & Graebner, M. E. (2007). Theory Building From Cases: Opportunities And Challenges. *Academy of Management Journal*, 50(1), 25-32.

Harding H (1987) *China's Second Revolution: Reform after Mao*. Washington, DC: Brookings Institute.

Hofstede, G. (1998). Attitudes, Values and Organizational Culture: Disentangling the Concepts. *Organization Studies*, 19(3), 477–493.

Huang Y (2008) *Capitalism with Chinese Characteristics*. Cambridge: Cambridge University Press.

Ireland, R.D., Hitt, M.A., Camp, S.M., & Sexton, D.L. (2001). Integrating entrepreneurship with strategic management actions to create firm wealth. *The Academy of Management Executive*, 15(1), 49-63.

Kirzner, I.M. (1979). *Perception, opportunity and profit: Studies in the theory of entrepreneurship*. Chicago: The University of Chicago Press.

Kshetri, N. (2007). Institutional Changes Affecting Entrepreneurship In China. *Journal of Developmental Entrepreneurship*, 12(04), 415-432.

Li H (ed.) (2006) *Growth of New Technology Ventures in China's Emerging Market*. Cheltenham: Edward Elgar.

Li, C. (2013). Top Management Team Diversity in Fostering Organizational Ambidexterity: Examining TMT Integration mechanisms. *Innovation: Management, Policy & Practice*, 3181-3224.

Luo, J.-D. (2005). Particularistic trust and general trust: A network analysis in Chinese organizations. *Management and Organization Review*, 1(3), 437-458.

Nataf, E. (2018, January 19). Education technology is a global opportunity.

O'Reilly, C. A., & Tushman, M. L. (2008). Ambidexterity as a dynamic capability: Resolving the innovators dilemma. *Research in Organizational Behavior*, 28, 185-206.

O'Reilly, C. A., & Tushman, M. L. (2011). Organizational Ambidexterity in Action: How Managers Explore and Exploit. *California Management Review*, 53(4), 5-22.

O'Reilly, C. A., & Tushman, M. L. (2013). Organizational Ambidexterity: Past, Present, and Future. *Academy of Management Perspectives*, 27(4), 324-338.

Ott, T. E., Eisenhardt, K. M., & Bingham, C. B. (2017). Strategy Formation in Entrepreneurial Settings: Past Insights and Future Directions. *Strategic Entrepreneurship Journal*, 11(3), 306-325.

Puffer, S. M., McCarthy, D. J., & Boisot, M. (2010, May). Entrepreneurship in Russia and China: the impact of formal institutional voids. *Entrepreneurship: Theory and Practice*, 34(3), 441+.

Santos, F. M., & Eisenhardt, K. M. (2009). Constructing Markets and Shaping Boundaries: Entrepreneurial Power in Nascent Fields. *Academy of Management Journal*, 52(4), 643-671.

Taylor, A., & Helfat, C. E. (2009). Organizational Linkages for Surviving Technological Change: Complementary Assets, Middle Management, and Ambidexterity. *Organization Science*, 20(4), 718-739.

Tse, E. (2016). Chinas disruptors how Alibaba, Xiaomi, Tencent and other companies are changing the rules of business.

Tsui, A. S., Wang, H., & Xin, K. R. (2006). Organizational Culture in China: An Analysis of Culture Dimensions and Culture Types. *Management and Organization Review*, 2(03), 345-376.

Wan, F., Williamson, P., & Yin, E. (2014, June 21). Antecedents and implications of disruptive innovation: Evidence from China.

Wiegmann, T. (2017, October 26). Organizational change needs the right management in China.

Wong PK, Ho YP, Autio E (2005). Entrepreneurship, innovation and economic growth: Evidence from GEM data. *Small Business Economics* 24(3): 335–350.

Wright M, Liu X, Buck T, . (2008) Returnee entrepreneurs, science park location choice and performance: An analysis of high-technology SMEs in China. *Entrepreneurship, Theory and Practice* 32(1): 131–155.

Xavier SR, Kelley D, Kew J, . (2013) *Global Entrepreneurship Monitor, 2012 Global Report*. London: Global Entrepreneurship Research Association.

Xin, K. R., Tsui, A. S., Wang, H., Zhang, Z., & Chen, W. (2002). Corporate Culture in State-Owned Enterprises: An Inductive Analysis of Dimensions and Influences. *The Management of Enterprises in the People's Republic of China*, 415-443.