1. Introduction

The dilemma for global entrepreneurship is that although an entrepreneurial boom has spread around the world, the survival rate for new start-ups remains low (Aldrich and Yang, 2012). Timmons and Spinelli (2009) find that, although entrepreneurship theoretically implies the promise of growth and the building of long-term value, only 40% of small firms survive six or more years, and few achieve growth during the first four years. Delmar, Mckelvie, and Wennberg (2013) also observe that 44% of new firms disappear within five years, from their investigation in Sweden. Survival is the most urgent task for a new start-up, and growth is its vital mission (Gilbert, McDougall, and Audretsch, 2006).

In the organizational lifecycle, there are stages of birth, growth, maturity, revival, and decline during the development and evolution of an organization (Miller and Friesen, 1984). Previous studies on the organizational lifecycle have focused on (1) the characteristics of each stage (Churchill and Lewis, 1983); (2) the growth mechanism (Delmar et al., 2013); (3) management control systems related to lifecycle evolution (Simons, 1995); and (4) the critical transitions between stages (Greiner, 1972). The research achievements of these studies have shown that there are some repetitive, observable, and predictable patterns of organizational behavior throughout the organizational lifecycle. As a firm develops, it faces sets of challenges in each stage. Suitable management control systems are needed to handle new management tasks, and must even be renewed according to different transitions.

While the resource-based view answers the question of why a firm can grow, it must ultimately face the questions of why difficulties accompany that growth and how to deal with them. Therefore, this paper explores the relationship between growth and dynamic capability, in order to address the question of how an evolving combination of organizational capabilities can overcome the growing pains that inhibit the growth of an organization.

The rest of this paper is organized as follows: The next section develops the theory behind this
exploratory study. A research question will be proposed following an overview of organizational lifecycle and dynamic capability theory. The third section presents a longitudinal case study, based on a three-year investigation, that examines the three main dilemmas that hinder a company's growth. The fourth section presents a discussion; referring to Adizes' (1990) model, it analyzes the evolutionary mix of dynamic capability and the transition to organizational capability in the survival and growth stages. The fifth section presents a conclusion and suggests future research.

2. Literature Review and Research Question

2-1. Organizational lifecycle

It is observed that organizations, like living beings, show some common characteristics at corresponding stages of their developmental process. Drawing from the perspective of evolutionary theory, scholars have proposed that there are birth, growth, maturity, and decline stages during the development of an organization (Miller and Friesen, 1984; Churchill and Lewis, 1983; Adizes, 1990). Among numerous studies on this topic, four types of perspectives can be summarized, as follows.

2-1-1. Description and criteria

Some researchers have identified the changing characteristics of organizations over time, and have built models of organizational lifecycles using certain criteria. (Churchill and Lewis, 1983; Quinn and Cameron, 1983). Churchill and Lewis propose that there are stages of existence, survival, success, take-off, and resource maturity during the organization’s existence, in terms of size, diversity, and complexity. Quinn and Cameron focus on organizational effectiveness at every stage, along the dimensions of internal versus external focus, flexibility versus control, and ends versus means. From a three-year case analysis, they propose that each stage is typified by different criteria of effectiveness. For instance, the entrepreneurial stage is typified by an open system, which emphasizes flexibility and resource acquisition, while the formalization and control stage is characterized by the internal process and rational goal model, which emphasizes goal attainment and stability control.

The organization lifecycle is variously divided into three, four, or five stages, according to the focus and subject of the research. However, although the naming and emphases differ, the logic of birth, growth, and maturity is shared among these classifications. The size, age, and functions of an organization provide the main rationale for assigning stages; the basic assumption of these studies is that as the organization’s age increases, its size expands accordingly, and thus, the functions of the organization have to shift for it to master the increasing number of tasks concerning organizational management and strategy. The boundaries between each stage are seldom clear-cut, even though the dimension of business size has been used by many studies. Churchill and Lewis (1983), however, contend that the dimension of business size fails to capture the important early stages of a company’s birth and growth, nor can it reflect other factors such as value, number of locations, complexity of product line, and rate of change in products or production technology.

2-1-2. Management control systems and the organizational lifecycle

As a firm grows and evolves, its structure, strategy, and decision model change and daily management tasks become more and more complex. By studying large companies, researchers have explored the characteristics of management
control systems at different organizational lifecycle stages (Simons, 1995; Davila, 2005; Fukushima, 2011). Simons defines management control systems as the formal, information-based routines and procedures that managers use to maintain or alter patterns in organizational activities (1995, p. 5). He proposes four sub-systems for implementing strategy effectively: Beliefs systems are used to inspire and direct the search for new opportunities. Interactive control systems are used to stimulate organizational learning and the emergence of new ideas and strategies. Boundary systems are used to set limits on opportunity-seeking behavior. And, diagnostic control systems are used to motivate, monitor, and reward achievement of specified goals. Simons argues that these four levers create the opposing forces—the yin and yang in Chinese philosophy—of effective strategy implementation. The former two levers create positive energy (yang) while the latter two create negative energy (yin). These countervailing forces can provide a firm with effective control.

In a survey of technology-oriented start-ups in Silicon Valley, Daliva (2005) finds that size is consistently presented as a key driver of the emergence of control systems. Based on Simons’ (1995) framework, Fukushima (2011) investigates how management control systems evolve as organizations progress from growth to maturity to restoration, through a survey of public firms in Japan, and finds that control systems are used less during the growth stage than in other stages. In the mature stage, companies are inclined to use diagnostic control and interactive control systems. In the meantime, beliefs and boundary systems are being formed and are operating as companies develop. Such studies have indicated the interactive relation between management, strategy, and the organizational lifecycle.

2-1-3. Growth mechanism

Why can firms grow? Penrose (1959/1995) answered this basic question with the hypothesis that a firm is basically a pool of resources. A firm grows while it is accumulating resources by exploiting and coordinating its bundle of productive resources through the use of the administrative framework that exists in the firm.

Studies on the growth path of firms have examined the criteria for growth, including the increase of sales, assets, profits, staff, and market value (Delmar et al., 2003; Diambeidou and Gailly, 2011; Coad et al., 2013; Delmar et al., 2013). Delmar et al. (2003) find that firm growth is not a unidimensional phenomenon, but rather a multidimensional one, by analyzing the growth patterns of the population of all firms in Sweden. By tracking the first six years of new firms in the U.K., Coad et al. also confirm that there is not a regular growth path for firms—firms grow randomly. They also point out that growth enhances the survival prospects of the new firm, since the survival of firms depends on their stock of resources at start-up or as accumulated during growth. Delmar et al. (2013) find that profitability enhances both survival and growth, since profitability may provide both necessary positive cash flow and access to resources, fueling growth.

Lack of resources is a problem for survival; however, an increasing stock of resources may limit the firm’s growth as well. According to Penrose (1959/1995), once a firm expands rapidly in one time period, it may stagnate in subsequent time periods because of the limitations of managerial services. A firm is not likely to be able to increase its managerial resources in a timely fashion in order to deal with the increased organizational complexity. Consequently, the current stock of managerial resources is no longer as efficient as in the rapid growth period. Even if the firm employs new managers, they will still take time to learn and adapt to the new environment. This "Penrose’s Effect" has been shown to exist in different firms (Thompson, 1994; Tan and Mahoney,
2005). In terms of resources, a firm confronts different challenge in survival stage and growth stage. The strategic and timely development of managerial resources during an expansion of resources is a challenge to growth.

2-1-4. Crucial transition
Although prior studies focusing on the development process of start-ups often arrange the stages in a natural order, the stages are not necessarily strictly sequential, nor can they be dealt with in isolation (Low and MacMillan, 1988). The developmental process of a start-up will actually follow a ragged and jagged line, with many ups and downs (Timmons and Spinelli, 2009). Each phase has an iterative and non-linear process of development because there may be the need for a start-up to revisit some of their earlier decisions and activities (Vohora et al., 2004).

It has been proposed that there is a "crucial transition" (Greiner, 1972; Wright, Clarysse et al., 2007; Timmons and Spinelli, 2009) that constrains firms' continued development when organizations progress from one stage to the next. Greiner posits that each stage in the organizational lifecycle begins with a period of evolution, containing steady growth and stability, and ends with a revolutionary period of substantial organizational turmoil and change. In order to successfully negotiate every crucial transition of the revolutionary period, companies should find a new set of organizational practices that will become the basis for managing the next period of evolutionary growth. Creativity and flexibility, for instance, are the drivers of growth in the birthing stage of organizations. However, they may also result in management confusion, and so call for strong leadership. Strong leadership helps a firm survive its first phase by making the organization more formalized and institutionalized. It also results in a revolution which emerges from a crisis of autonomy. When organizational structures become more complex as the organization grows, lower-level managers should be delegated more authority and responsibility from the top-level managers who had previously been successful by being directive.

These research achievements have shown that there are some repetitive, observable, and predictable patterns of organizational behavior during its lifecycle. As an organization develops, it faces different challenges in different stages. We thus come to the questions of why company growth is accompanied by struggle, and how to remove such struggle.

2-2. Growing pains and dynamic capability

2-2-1. Growing pains
From the perspectives of evolutionary theory, the behavior of an individual is determined primarily by past events and experiences, rather than

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| Organization   | 1. People feel that "there are not enough hours in the day."
                | 2. People spend too much time “putting out fires.”
                | 3. People feel that “I have to do it myself if I want it done correctly.”
                | 4. When plans are made, there is very little follow-up, so things just don’t get done.
                | 5. People are not aware of what other people are doing.
                | 6. Most people feel that meetings are a waste of time. |
| Personnel      | 7. There are too few good managers.
                | 8. Some people feel insecure about their place in the firm. |
| Strategy       | 9. People lack understanding of where the firm is headed.
                | 10. The firm continues to grow in sales, but not in profits. |

Source: Original contents extracted from Flamholtz and Randle (2007, p. 1); reworked by the author.
by what lies ahead. Flamholtz and Randle (2007) argue that, in the growth process, the experience of success by an organization in an earlier stage may become the cause of failure in a latter stage. This study focuses on the growing pains that occur when an entrepreneurial firm develops into a professionally-managed firm. By studying different cases, it has summarized the ten most common organizational growing pains (see Table 1). These can be broadly classified as problems of organization, personnel, or strategy. While an organization is expanding, more organizational problems emerge, such as unclear roles and responsibilities, overlapping responsibilities, centralization of authority, and poor communication. These organization problems may cause the personnel and strategy problems to occur.

Adizes (1990) developed a comprehensive model to address the question of why corporations grow and die. Reflecting that of a living organism, he divides the corporate lifecycle into courtship, infancy, go-go, adolescence, prime, stable, aristocracy, early bureaucracy, bureaucracy, and death stages. Adizes argues that sets of problems and challenges emerging in each stage are unavoidable. The question is whether such problems are normal or abnormal, and whether corporations have the ability to address them or not. Thus, the growth or aging of corporations depends on a tension between flexibility and controllability, not the size or age of a firm. Growth indicates that corporations are more flexible and less rigid, and their capability to deal with complex problems is enhanced. On the other hand, aging indicates that corporations are more rigid and less flexible, and that their capability to address problems is declining.

Hence, both Adizes (1990) and Flamholtz and Randle (2007) imply that different combinations of organizational capabilities may be essential for organizations to evolve from one stage into another.

2-2-2. Dynamic capability

The resource-based view proposes that the exploration and exploitation of resources lead to the growth of firms. Firms accumulate stage-specific resources during their lifecycles; therefore, their resource stocks are heterogeneous and imperfectly mobile across firms. On the contrary, resource stocks can also be critical obstacles to the growth of a firm. Resource stocks that are embedded in a particular stage may become inert, and leave the firm hesitant to explore new resources when moving into a new stage (Pan, 2013).

In this sense, dynamic capability is considered to be significant as part of the organizational lifecycle. While these resources are regarded as factor inputs, organizational capabilities provide the mechanism to convert them into an output of products and services. Capability is “the key role of strategic management in appropriately adapting, integrating, and reconfiguring internal and external organizational skills, resources, and functional competencies to match the requirements of a changing environment” (Teece and Pisano, 1994, p. 515). Dynamic capability emphasizes the ability to renew competencies so as to achieve congruence with the changing business environment (Teece and Pisano, 1994; Teece, 2012); it is a change-oriented capability that helps organizations systematically generate and modify their operating routines (Zollo and Winter, 2002).


In light of organization lifecycles, this study proposes that “dynamic” might mean the flexible combination of capabilities required by each stage. Growth might be the manifestation of the
combination of organizational capabilities. How are pains generated in the growing process? How does the combination of capabilities reform and reconfigure in order to remove such pains? A case study will be conducted as follows to investigate these questions.

3. Case Study

This investigation involved a longitudinal study of a growing small company over a three-year period. There are two main reasons for the initial choice of a qualitative research methodology. Firstly, organizational progression from one stage into another is a dynamic process, requiring careful observation of the pains the firm endures. Secondly, capability is hard to measure accurately and is idiosyncratic in different stages. We observed and tracked five Chinese companies in the service industry, and eventually selected the most representative. With the cooperation of the management team, we discussed the problems currently confronting the company, at monthly meetings with the entrepreneurial team or the managers of different departments.

The organization selected was an engineering consulting company, offering project consulting services that cover the whole project process, including investment planning, project feasibility reports, cost consulting and management, and project implementation and management. The engineering consulting industry is newly-developing in China; previously, these services were only offered by state-run institutions or state-owned companies. Market-oriented reform was not carried out until the twenty-first century. The Chinese government itself no longer offered these services, and private companies meeting the Grade A or B qualification[23] were allowed to enter the market. By the end of 2011, there were only 6,493 cost control consultancy and management companies, of which 31.5% have Grade A qualifications (Forward, 2013). The company under study was founded in 2006 with registered capital of RMB 6 million. In 2010, this company was upgraded from B to A-grade qualification, and despite its small size, has become one of the foremost and well-known engineering consulting companies in its area.

3-1. The lifecycle stage

The three members of the entrepreneur team once worked as engineers at the largest local state-owned engineering company. All of them tired of the bureaucratic system, so they quit their jobs and founded this company. Eight years later, Entrepreneur A, the team leader, worked as executive manager, and Entrepreneur B was responsible for both operations and market exploration, while Entrepreneur C, who joined the team one-and-a-half years in, was in charge of the technical department. Under their leadership, the company has grown from 3 to 43 staff members, with subsidiaries and partners now throughout China. The firm has grown rapidly, particularly in the most recent three years. Meanwhile, the entrepreneurial team came to feel that there were some obstacles constraining their growth.

Based on Adizes’ (1990) organizational lifecycle model and Flamholtz and Randle’s (2007) questionnaire on growing pains, we conducted interviews with the entrepreneur team and the five other main managers of the company. For half a year, we administered questionnaires monthly to these eight core managers, dealing with the problems they were facing.

All of the managers agreed that the company had arrived at the critical transition from the survival (or go-go) stage to the growth (adolescence) stage. According to their answers, the company had already built stable and high-quality services,
and gained a rapidly growing income. Its brand in the industry had been established. The company was therefore not only surviving, but flourishing. However, they also stated that though their services were growing, there were obstacles constraining growth. They felt slightly unsure if such obstacles could be surmounted. Table 2 summarizes the normal and abnormal problems that the company was confronting.

3-2. Growing pains

3-2-1. High growth rate vs. low profitability

During its whole growth process, the company explored its business domain and established its strategy through trial and error. Initially, like most companies, it accepted all kinds of requests from its customers related to engineering consulting services, because the firm lacked cash, and moreover, the entrepreneur team was not sure which business domain was the best choice for them. There was no clear division of work among the entrepreneur team members. All worked as marketers in the daytime and undertook the projects at night as technicians. Entrepreneur A also had to learn how to manage a company, recruit needed staff members, keep records of essential accounts, and the like.

After five years, the company had explored and established a clear landscape of business, including three main segments—cost control consultancy and management, engineering design and management, and project planning and feasibility reporting. The former two segments were considered traditional services in the engineering consulting industry, while the last was an innovative and high value-added service. From 2007 to 2013, services in cost control consultancy and management grew rapidly; the number of those contracts was the largest for the business. However, the average contract value of the line was the smallest. At the same time, while the number of contracts in the other two areas was smaller, they contributed more value to the company. As a result of that dilemma, since 2007, the company has grown at an average rate of 60% every year, but in recent years, its profitability has gone lower and lower.

3-2-2. High salary vs. high turnover rate

In general, the labor turnover rate in China is high, particularly for small and medium-sized enterprises. How to attract, stimulate, and retain talent is the bottleneck constraining start-up development. The same problem challenged this company.

Table 3 summarizes basic information about the company’s staff. As of October 2013, there were 43 employees, averaging 30 years old. The
company might be considered “big” and young in terms of its number of staff and its income in the engineering consulting industry. However, the average working years of the staff, including the founders, was only 2.5. Worse still, the average length of time that both core managers and employees had been working at the company was only 26 months.

According to research done by the human resources department manager, salaries offered by the company were slightly higher than at their competitors. The core managers were mainly recruited from other large companies, so that the firm had to offer a much higher salary to attract them. In the founders’ company philosophy, human resources were their most significant assets. Hence, they tried to provide their employees with compensation and benefits comparable to those at other big companies. For instance, workers were offered on-the-job training opportunities—something not frequently seen at small and medium-sized Chinese enterprises. This also resulted in a high cost for human resources.

The founders recognized that a lack of brilliant technicians and experienced managers was the biggest obstacle to the company’s sustainable development. The dilemma was that even although they provided higher salaries and an employee-friendly environment, the turnover rate was still high. This resulted in lower efficiency and profitability.

### 3-2-3. Individual ability vs. organizational capability

The process that a start-up develops is also the road along which its entrepreneurial team grows, since they have to learn and increase their ability to master a bigger and bigger organization. Entrepreneur A, as both a technician and manager, took various courses on management. Early on, he had to undertake both trivial and important tasks, including finance, personnel, operations, marketing, and so on. This forced him to develop strong leadership, to take the uncertain conditions under his control. Consequently, authority and resources have gradually accumulated and concentrated in Entrepreneur A.

This led to an organizational dilemma. Entrepreneur A also recognized the problem—that it was too risky to rely entirely on himself. He attempted to establish a comprehensive and strict management system to run the company. However, authority stuck to him. Even although the organizational structure became more formal as the company grew, decision-making authority was still concentrated in Entrepreneur A. This made entrepreneur A feel continually overwhelmed, while other core managers felt that they had power more in name than in reality, since they did not have enough effective authority to successfully accomplish their work.

### 4. Discussion

The case showed that the managerial limitation developed while the firm evolved from the survival stage to the growth stage. To some extent, it confirmed the Penrose Effect. The expanding
business, increasing staff, and more complex organizational structure made what had been an effective combination of dynamic capability lose its effectiveness and moreover become a liability to the company. A lack of periodic enhancement and reconfiguration of capabilities may result in weakening performance. The evidence of this case agreed with our hypothesis that an organization should reconfigure its combination of dynamic capabilities in light of its developmental stage.

4-1. The evolutionary combination of dynamic capability

Adizes (1990) proposed that a combination of the four abilities of production, administration, entrepreneurship, and integration is the DNA of an organization. Different combinations of them promote the development of the corporation. For instance, in the go-go stage, the entrepreneurial ability to seek out new opportunities and the production ability to attain short term results are the two more important energies to fuel the development of a firm. When a firm progresses from its go-go stage into adolescence, the administrative ability to minimize waste in ongoing activities becomes more and more important, while entrepreneurial ability becomes less important. The previously sales-driven go-go strategy should be refashioned into a focus on streamlining procedures. When a firm enters its prime, the ability to integrate and coordinate shared attention and identification become as important as all the rest. The balance of the four abilities helps organizations create a flexible and controllable structure.

The phenomena in this case were partly consistent with Adizes' model. In the survival (go-go) stage, the firm attempted to exploit potential business opportunities and commercialized them as quickly as possible. The combination of innovation and production ability was important. The problem of high growth with low profitability indicates that this company was short of the ability to administrate. From the perspective of control systems, one can also find that, during a firm's early stage, it is apt to build beliefs systems and interactive control systems that create positive and inspirational forces (yang), while however, ignoring the establishment of boundary systems and diagnostic control systems that create constraints (yin) and ensure compliance with orders. In this case, the firm had only the positive forces (yang) at work, but lacked the negative forces (yin) that it could have used as countervailing controls to achieve a dynamic tension, allowing the effective control of growth (Simons, 1995).

On the other hand, the dilemma of a high salary and high turnover rate indicates that not only did this company lack the administrative ability to cut down on personnel costs, but also that it needed social and cultural cohesiveness. From in-depth interviews with the eight core managers, the seemingly counterintuitive fact emerged that no one really noticed their corporate culture, nor could they communicate the company’s philosophy. Thus, integrative ability affects a company from its start-up period. As the firm develops, the lack of integrative ability allows organizations to degenerate into mechanically-interrelated collections of functionally-isolated individuals, and moreover conceals the risk of serious deterioration if key persons leave one day.

4-2. The transition of organization capability

It is normal that, in the early stages of a start-up, "the founder is the company and the company is the founder," meaning that the founder and the company are growing together. Resources and capability are located in the founder rather than in the organization. This may become the root of crisis, possibly leading to the founder's trap, in which the growth of the company exceeds that of
the founder (Adizes, 1990). Although he/she is no longer capable to lead the company, he/she often holds his/her position until a crisis has taken place.

This case revealed a similar crisis. Entrepreneur A himself was working hard to grow as rapidly as his company, but the company’s authority was concentrated in him all the while, so that other core managers were likely to feel less motivated. The formal organizational structure could not actually solve this problem of centralization. An aggressive leader could easily act in excess of his responsibility and authority. Fortunately, both Entrepreneur A and the other core managers recognized that this problem resulted in low efficiency and low morale. Under the pressure of crisis and an aspiration for growth, they attempted to build a learning organization. The core managers have been provided with chances to enhance their management ability together. External assistance was also introduced to the organizations, in order to help transfer individual capability into organizational capability.

5. Conclusion

Although an entrepreneurial boom has spread all over the world, the survival rate for new start-ups remains low and few of them experience growth. What constrains firm growth? In order to address the question, this paper explores the relationship between growth and dynamic capability, through the findings of a longitudinal case study.

Based on theories of organizational lifecycle and dynamic capability, this paper argues that a time-specific resource stock that contributes to firm growth in an earlier stage may also become a critical obstacle to evolution in a later stage because of the embeddedness of that resource stock. In light of organizational lifecycles, this study proposes a new explanation of “dynamic capability.” It argues that growth might be the manifestation of the combination of organizational capabilities. For sustainable growth, the combination of dynamic capabilities should evolve along with the organizational lifecycle. Countervailing forces of positive and negative systems should be used to achieve a dynamic tension that allows the effective control of growth. In the survival stage, a combination of entrepreneurial ability and production ability are the main energies that fuel firm growth. In the growth stage, administrative ability becomes more important, particularly for minimizing waste in ongoing activities, while entrepreneurial ability seems less important. It is also argued that integrative ability, coordinating shared values and identification, is not of periodic value, but is a fundamental influence that enhances organizational development over the whole lifecycle. Finally, this study points out that the vague relationship between the capability of the founder (individual) and the organizational capability may become the root of crisis. It is important to transfer individual capability into the organization as the firm progresses from survival to growth stages.

This study has renewed organizational lifecycle theory, by drawing on the perspectives of a resource-based view and dynamic capability theory. It offers a new opportunity to improve our understanding of the phenomenon of firm growth. However, in order to confirm the robustness and stability of these findings, a deeper investigation of different samples is indispensable. The configuration of dynamic capabilities should also be further analyzed.

[Notes]
(1) This study was supported by both the Fundamental Research Funds of Humanities and Social Science at Shenzhen University, and Project “GD14XGL32” of Guangdong Planning Office of Philosophy and Social Science.
(2) There are strict licensing conditions for companies
who wish to offer services in cost control consulting and management, involving both the quality and quantity of professional staff and the scale of the company.

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