

Predictors for the Success and Survival of Entrepreneurs in the Construction Industry

Regular Paper

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Abstract

A review of entrepreneurship literature suggests that entrepreneurial activities are the most important drivers for economic growth and corporate success, regardless of size, age or industry. Nevertheless, so far, only a few studies, if any, have considered entrepreneurship as a success factor for construction enterprises, although the importance of the construction industry to the nation's economic growth is significant. This paper reports a conceptual framework for formulating the success and survival factors of entrepreneurs in the construction industry. It also integrates four major perspectives in entrepreneurship: entrepreneurial orientation, entrepreneurial organization, entrepreneurial competencies and entrepreneurial environment.

Keywords Construction Industry, Construction Entrepreneur, Business Success, Entrepreneurship

1. Introduction

While the importance of the construction industry to the nation's economic growth and to our daily lives is significant, it also faces poor performance. It can be said that business failure in the construction industry is a real

possibility and the rate of such a failure has increased tremendously [1]. Consequently, construction business failure is not only extremely disruptive to the industry but also, has significant rippling effects on the nation's economy. In previous studies, researchers have attempted to measure the success factors that contribute to construction businesses from the outcome of executed projects. This is because they have strategic implications on the success and profitability of a business [2]. Although this engineering focus has been effective, it has reached the point of diminishing results [3]. An emphasis on this evaluation concept has resulted in an intense focus on project management techniques to improve the efficiency and success of individual projects. However, despite advances in project management processes, tools and systems, project success has not significantly improved [4]. It can be concluded that, in recent decades, vast efforts have been made to enhance the project management culture, but results are still highly unsatisfactory.

The primary objective of this paper is to explore the factors for business success, which are required for construction entrepreneurs to succeed and survive, from the viewpoint of the entrepreneurship theory. Entrepreneurship has been considered as an important driving factor in business success [6]. However, very few studies, if any, have explored the entrepreneurship theory in relation to the

search for the success factors for construction businesses. In most cases, construction management and entrepreneurship literature have evolved separately, with little cross-referencing. It can be argued that too much research attention has been given to imposing a theory of project-related success factors and not enough research has been conducted on corporate issues to determine the overall success of construction businesses. Yet, those studies have evaluated the success factors at a project level, which is a short-term approach.

Projects have been recognized as critical to the success of any project-oriented organization. However, they actually only partially contribute to the overall success of an organization [5]. As of today, construction enterprises are much more vulnerable to the harsh business climate and this trend is likely to continue in the near future [7]. Thus, an emphasis on short-term success objectives for the results of an implemented project should be shifted to long-term objectives, which relate to overall business success.

It has been suggested that successful entrepreneurs should have a detailed knowledge of the key factors that are needed for success [8]. Discovering which factors or practices lead to business success and those which lead to failure is a primary - and as yet, unfulfilled - purpose of business research [9]. Therefore, this paper attempts to fill this gap in construction management literature by identifying the success factors for construction businesses from different dimensions, that is, from the perspective of the entrepreneurship theory.

2. Entrepreneurship

Entrepreneurship refers to the process of creating value by bringing together a unique package of resources to exploit an opportunity [10]. Entrepreneurship is viewed as a multifaceted phenomenon that cuts across many disciplinary boundaries [11]. As noted by many scholars, the boundaries of entrepreneurship have been expanded from "individuals that create a new venture" to a "business concept to run an existing company and individual within that company" [12, 13]. Many scholars have referred to entrepreneurship as a means of economic growth and global competitiveness [6, 14].

Timmons [15] described entrepreneurship as "America's secret economic weapon" and noted that over 95% of the economic wealth in America today has been created by the "entrepreneurial generation" of revolutionaries since the 1980s. Now, one in every three households includes someone who has a primary role in a new emerging business. Similarly, entrepreneurial attitudes and behaviours, such as adaptability, flexibility, speed, aggressiveness and innovativeness, have been seen as key determinants for a firm to survive and prosper in the turbulent environments that confront businesses today [16]. Entrepreneurship literature assumes that an entrepreneur can anticipate and build a credible vision of his

business. In most cases, two series of parameters explain this: a willingness to bear uncertainty and specific cognitive abilities, starting with alertness [17, 18].

All business entities can be entrepreneurial-driven corporations that are subjected to corporate culture and guided and directed to create wealth [19]. Looking at the nature of the construction industry, which is compounded with uncertainties, these characteristics seem to be consistent with entrepreneurial activities. In other words, construction entrepreneurs must be more willing to bear uncertainty and more knowledgeable about overcoming this difficulty. Alertness provides entrepreneurs with the ability to detect and exploit early signs of change and then take the necessary action to suit the changes. With this, they take into account the potential impact of anticipated risks and problems. Therefore, construction entrepreneurs aim to create and capture economic value through the exploration and exploitation of construction businesses. Productivity and standards of achievement in construction projects can be improved through entrepreneurial functions [20]. In this view, construction projects may require a host of entrepreneurial competencies, those that can assist stakeholders in construction activities for a successful completion of a project. Furthermore, the nature of a construction business is very challenging. It demands a business owner to work successfully in an environment that is frequently complex and compounded with uncertainties. This represents the activities of corporate entrepreneurship that must take place within a company. Entrepreneurship is considered to be very important for the success and survival of construction businesses [21].

Previous studies have provided evidence to support this view. For example, Zain and Hassan [22] conducted an empirical survey to examine the relationship between corporate entrepreneurship and company performance in holistic business environments of a developing country. Using survey data from 55 Malaysian construction enterprises, a regression analysis revealed that the influence of corporate entrepreneurship on company growth of construction enterprises was highly significant ($F = 8.936$, $p < 0.001$), and explains 72.4% of the variances in company growth. In addition, the study also found that corporate entrepreneurship existed at more than one level within a business organization.

3. Entrepreneurship and Performance

Corporate entrepreneurship is a concept that focuses on organizations, organizational culture and processes, rather than individuals [23]. It has been considered as a holistic view of an organization that infuses creative strategic processes throughout [24]. The strategy literature identifies three types of corporate entrepreneurship [25]: (1) the creation of new businesses within an existing organization, (2) the transformation or renewal of existing organizations and (3) the changes of the "rules of competition" for its industry. However, each type has distinctive characteris-

tics that need separate consideration. Previous studies have provided empirical evidence that justifies the proposition that corporate entrepreneurship leads to superior organizational performance. This will be discussed in the section below.

3.1 Entrepreneurial Orientation

In entrepreneurship literature, entrepreneurial orientation is the most validated and integral construct, which is positively associated with a firm's profitability and growth. To survive in today's turbulent and dynamic business environment, it has been recognized that business owners need to adopt entrepreneurship when formulating their strategies. Many researchers have noted that entrepreneurial attitudes and behaviours are necessary for firms of all sizes to prosper and grow [6, 26].

Entrepreneurial orientation is one way of describing and operationalizing the concept of a firm's strategic position. It is considered as an important predictor of organizational performance [27]. It refers to a firm-level construct that is related to a firm's success. This includes firm-level processes, practices and decision-making styles [28, 29]. Furthermore, it corresponds to the operational basis of entrepreneurial decisions and actions. It is considered as an entrepreneurial strategy-making process that firms create to achieve a competitive advantage [30]. A firm with a higher entrepreneurial orientation is said to achieve a higher business performance. Several dimensions of entrepreneurial orientation have been reported in entrepreneurship literature: risk taking, proactiveness, and innovativeness [29], competitive aggressiveness [31], autonomy [32], corporate venturing, self-renewal [33], and adaptability, flexibility and speed [16].

Previous studies have provided, in some detail, some empirical evidence regarding the relationship between entrepreneurial orientation and performance. For example, Rauch et al. [29] conducted comprehensive literature reviews and a statistical meta-analysis. Drawing upon an analysis of 51 empirical studies on a total of 14,259 analysed firms, they found a positive relationship between entrepreneurial orientation and firm growth ($r = 0.242$, $p < 0.05$). In a cross-sectoral study in various industries on 310 service firms in Austria, Kraus [6] used three dimensions of entrepreneurial orientation namely, risk taking, proactiveness and innovativeness. This study revealed that entrepreneurial orientation is a highly significant predictor of a company's performance ($\beta = 0.66$, $p < 0.001$). It can be argued that the strength of the link between entrepreneurial orientation and performance has increased over time [34, 35]. This would suggest that the effects of entrepreneurial orientation appear to be long-term and persistent.

The unique role of entrepreneurial orientation in business performance has also been studied in the European Union, see [36]. Three dimensions of entrepreneurial orientation, namely risk taking, proactiveness and innovativeness,

were used in the study. Data was solicited from 1,020 respondents in various industries operating in Estonia, Latvia and Lithuania. From the statistical data analyses, the results revealed a significant correlation between entrepreneurial orientation and performance ($r = 0.18$, $p < 0.001$). Furthermore, the study found that constructive risk taking was rewarded with a higher average of performance. It also found that innovativeness increased the rewards of risk taking and that proactiveness often involved taking risks and therefore, indirectly affected performance through its effect on risk taking. The study concluded that all three dimensions of entrepreneurial orientation have a positive relation with performance, but for different reasons.

3.2 Entrepreneurial Organization

An entrepreneurial organization is described as a consciously coordinated social entity, with a relatively identifiable boundary. This functions on a relatively continuous basis to achieve a common goal or set of goals [37]. It is regarded as one that undertakes innovative activities in order to acquire distinguishing capabilities and abilities [38]. It refers to a strategic direction, which includes renewing products, processes, services and strategies or even an organization as a whole [39]. It is the most influential factor on a firm's productivity [40].

In literature, amongst the most cited elements of entrepreneurial organization are organizational structure and corporate culture [41, 42, 43]. In an organization, structure acts as a blueprint for officially sanctioned expectations and exchanges among internal players (such as executives, managers and employees) and external constituencies (such as customers and clients) [44]. Organization structure is also viewed as the 'anatomy of the organization' [45], and can be considered as the formal framework in which work is divided, grouped and coordinated [46]. The importance of an effective structure is crucial in any business organization in which the success of any strategy heavily depends on its fit with the organizational structure [47]. This is because it is the way that formal roles and responsibilities are assigned and interconnected [48]. Previous studies have provided some evidence on the link between organization structure and entrepreneurship. Drawing on an analysis of 133 respondents from 25 manufacturing companies in Iran, Ooshaksaraie et al. [41] revealed: (1) a positive significant relationship between organizational structure and organizational entrepreneurship ($r = 0.654$, $p < 0.001$); (2) a positive significant relationship between organic organizational structure and organizational entrepreneurship ($r = 0.441$, $p < 0.001$); and (3) a positive significant relationship between mechanic organizational structure and organizational entrepreneurship ($r = 0.450$, $p < 0.001$). A study of 60 respondents of service industry in Kenya, Mokuia and Ngugi [43] found a positive significant correlation between organization structure and corporate entrepreneurship ($r = 0.5180$, $p < 0.05$). The study concludes that the adopted organization structure could enhance an organization's

entrepreneurial activities, leading to performance improvement.

Research in the construction industry has also shown the importance of entrepreneurial organization. A study by Chen and Lee [49], for example, found that the organization structure of an enterprise impacts the performance of specific projects. Furthermore, a high correlation was found between project success and organizational flexibility [50].

Culture is another aspect of entrepreneurial organization. Organizational culture is defined as “the collective programming of the mind, which distinguishes the members of one organization from another” [51]. Culture is something that must be managed actively so as to allow an entrepreneurial firm to grow and innovate more effectively. It must be marketed internally to smooth organizational development by sharing desired values and communicating a useful sense of leadership [52]. In other words, it is about the image of an organization and how it presents itself. The way in which its external environment and internal members perceive it is commonly referred to as its ‘corporate culture’ [53].

Previous research has also explored the link between organizational culture and performance. In the UK, for example, Ogbonna and Harris [54] found that innovative culture and competitive culture were positively linked to performance, with total effects of 0.32 and 0.34, respectively. In a recent study, Turró et al. [55] examined the moderating effect of cultural values on corporate entrepreneurship. The study analysed data from the Global Entrepreneurship Monitor database 2004-2008 of 62 different countries. Amongst the main finding of this study was that entrepreneurial culture appeared to be positively significant and have a direct effect on corporate entrepreneurship ($\beta = 0.122$, $p < 0.001$).

In contrast, organizational culture is judged by many as one of the key factors of construction industry performance. This is the case in the context of trustworthiness and inter-project knowledge sharing [56], international strategic alliances [57], industry mentality [58] and conflict amongst stakeholders [59].

3.3 Entrepreneurial Competencies

Competencies mean the capability of an entrepreneurial organization to acquire, use and develop successful resources for its business purpose, in the specific context in which the firm operates [60]. It is about the knowledge, skills and attributes that differentiate high performers from average performers [61]. Many scholars believe that entrepreneurial competencies are important factors in a firm’s performance and competitiveness [62], as well as in business success and growth [63, 64]. Research and practice related to competence is typically driven by aspirations to achieve superior performance and the potential for, in turn, economic gain or business success [65]. Indeed, it has been

suggested that competent behaviour is a result of a variety of factors such as personality traits, skills and knowledge [62]. Moreover, they can be viewed as an aggregate of the capabilities and abilities of entrepreneurs in order to perform the entrepreneurial role successfully. They are associated with the birth, survival and growth of newly founded enterprises [66, 67].

Some authors have suggested that entrepreneurial competencies are needed to start a business [67], while managerial skills are needed to grow a business [68]. Having said this, competence in entrepreneurship requires competencies in both areas [62]. In contrast, many previous studies have found that the majority of business failures were due to a lack of management skills or competencies. For example, Bruno et al. [69] studied 10 failed high-technology firms and concluded that there were three major reasons for the failure: financial difficulties, product market problems and managerial problems. Hence, entrepreneurs who have the necessary competencies, especially in the areas of operation, finance, marketing and human resources, as well as the management skills that are required for business, are more likely to be successful [70, 71].

In contrast, many researchers have empirically studied the influence of entrepreneurial competencies on business performance. For example, drawing upon 450 respondents from Spanish entrepreneurs, Sánchez [72] found that entrepreneurial competencies appeared to have a direct impact on a firm’s performance. This study was measured by relative performance, growth and efficiency (chi-square = 82.24, 107.43, and 99.47, respectively). The entrepreneurial competencies of female entrepreneurs who are committed to the growth of their business have also been recently studied. Mitchelmore and Rowley [73] used a principal component analysis of data from 210 female entrepreneurs and revealed four main clusters of competencies relating to business growth. These were: (1) personal and relationship competencies (explained 14% of the total variance); (2) business and management competencies (explained 13% of the total variance); (3) entrepreneurial competencies (explained 10% of the total variance) and (4) human relations competencies (explained 10% of the total variance).

In the context of construction businesses, Shigang [74] empirically investigated the link between core competency and the performance of Chinese construction SMEs. Drawing upon data from 121 construction enterprises, he conducted a regression analysis to determine the degree to which selected independent variables were able to predict the performance of construction SMEs. The overall results revealed that entrepreneur capability ($\beta = 0.33$, $p < 0.01$), relationship marketing ($\beta = 0.31$, $p < 0.01$) and project management ($\beta = 0.26$, $p < 0.01$) had significantly positive relationships with overall performance (measured by the average sales and profit growth rates). Some other reported competency dimensions, which link to the performance of construction firms, include personal

competency [75], marketing competencies [76], business and management competencies [77] and project management competency [78].

3.4 Entrepreneurial Environment

Entrepreneurship theory implies that the essence of entrepreneurship is the ability to detect, as well as a willingness to pursue and exploit opportunity in the marketplace [14, 19]. Environmental characteristics provide sources of entrepreneurial opportunities [79], regardless of the industry that the enterprise operates, and despite offering products or services - whether it is profit or non-profit organization, or a corporate or SMEs [80]. An entrepreneurial environment is sometimes known as a business environment, which has a combination of external factors that play an important role in the entrepreneurship development but beyond the influence and control of the organization [81]. It refers to the overall economic, political, financial, technological and legal position of an organization [82, 83].

The relative importance of both entrepreneurship and success would appear to be strongly influenced by environmental turbulence. Here, business activities include processes, systems and strategies. In this sense, if they are to survive, organizations must adapt to their environment. For this reason, a firm's external environment needs to be taken into account when considering the relationship between corporate entrepreneurship and firm performance [84, 85]. This is because the external circumstances that organizations confront are likely to have an important impact on their outcomes [86].

Alkali and Isa [87], for example, conducted an empirical study to assess the influence of the external environment on business performance. Drawing upon 302 respondents from manufacturing enterprises in Nigeria, they revealed that capital access ($\beta = 0.03$, $p < 0.05$) and government support ($\beta = 0.00$, $p < 0.05$) are positively significant to business performance. The moderating role of an external environment on business performance has also been tested in previous studies. For example, Jabeen and Mahmood [88] investigated the moderating role of the external environment on a relationship between entrepreneurial orientation and business performance of SMEs in Pakistan. A hierarchical regression analysis was conducted on data that were solicited from 220 SMEs. The results revealed that the moderating effect of external environment on entrepreneurial orientation and business performance was positively significant ($\beta = 0.159$, $t = 2.437$, $p < 0.01$). In addition, previous literature has also reported that the role of external environment is linked to performance, in terms of prospects of success [89], motivation [90], foreign direct investment inflows [91], growth and competitiveness [81].

In the context of the construction industry, it was reported that external environment uncertainties are squeezing the profit of construction enterprises. This is due to several

factors such as, excessively low price bidding for engineering projects among enterprises, the drastic fluctuation of raw material price, the low entry barrier and very high entry cost, and the fierce entry of foreign construction enterprise, all of which make the industry more competitive [92]. A recent study that was conducted within the Malaysian construction industry found that environmental factors (such as, forming joint venture, availability of financial resources, open economic policy, government assistant, political stability and peaceful environment) were amongst the key factors associated to a firm's growth (RII = 0.7976) [93].

4. Construction Entrepreneurial Business Success – A Conceptual Framework

Understanding the success factors and hence, identifying those factors, has been an important issue for construction businesses. It has led to an increase in research efforts, which have contributed to this research area. However, the nature of the construction industry's business environment, which has long been perceived as one of the most dynamic industries [94], has become a highly critical issue for any construction enterprise in being successful and surviving. Achieving success in construction businesses should be based on many factors, which have a direct impact on the performance of organizations [95]. Nevertheless, there is no single-accepted definition of business success [96]. In the simplest way, success can be defined as a company's ability to survive [96, 97].

In order to survive in today's dynamic business environment, which the construction industry faces, construction enterprises must respond to changes and adopt the best business practices that are conducive in order to more effectively make use of the available resources [98]. The new approach of business behaviour, which has been successfully adopted in most business sectors outside of the construction sector, is entrepreneurship. In entrepreneurship theory, an entrepreneurial mindset is a vital requirement for any business to gain success. A resurgence of interest is occurring in the importance of entrepreneurial management for the success of construction entrepreneurship, as proven by other bodies of knowledge outside of construction management.

Drawing upon existing theories that are found in entrepreneurship literature, as previously discussed, we develop our theory by identifying four knowledge areas that could contribute to the success and survival of construction entrepreneurs. These are: entrepreneurial orientation, entrepreneurial organization, entrepreneurial competencies and entrepreneurial environment.

First, due to the nature of construction businesses, which are compounded with high competition and uncertainties, construction entrepreneurs must focus on entrepreneurial orientation. With this, they will be guided to the operational basis of entrepreneurial decisions and actions. Further-

more, this area refers to the entrepreneurial strategy-making processes that construction enterprises must have in order to achieve a competitive advantage.

Secondly, success cannot be gained without appropriate entrepreneurial organization. This provides the fundamental strategic direction to achieve a common goal or set of goals. In this sense, a construction enterprise must adapt an appropriate organizational structure and culture because the effectiveness of any strategy can only be achieved if it fits with them. The assumption is that, if the structure and culture are appropriate, then all of the processes and relationships within an organization will occur effectively.

Thirdly, entrepreneurial competencies need to be considered by construction enterprises. These are the capabilities of a construction organization to acquire, use and develop successful resources for its business purpose, in the specific context in which a firm operates. The existence of construction business is mainly related to three primary functions: getting the work/project, doing the work/project and accounting for the work/project [99]. In other words, it involves the processes of marketing to acquire the project, operating to execute the project and administration to manage all of the processes. The importance of these primary functions should not be overlooked as they recognize the multidimensional aspects of construction businesses. Therefore, the fundamental competencies that a construction entrepreneur must have are: (1) marketing competencies in order to acquire the projects because without a project, construction organization does not exist; (2) technical competencies, such as project management as a tool to execute a project successfully, because without project success, construction organization does not survive; and (3) management competencies in order to manage all of the processes within an organization, including strategic management, risk management, human resource management, financial management and so on.

Finally, a construction entrepreneur must aggressively scan his external environment to detect and exploit opportunity in the marketplace. Environmental turbulence is seen to strongly influence business activities, including processes, systems and strategies. Although the external environment is beyond the influence and control of an organization, it actually provides opportunities. For example, a construction entrepreneur can take advantage of new policies, such as the government's infrastructure plan, and set a strategy to acquire available projects. Therefore, a construction entrepreneur must suit his strategies according to the external environment.

Given the importance of these elements to construction business performance, we argue that, to be successful and survive, a construction entrepreneurial enterprise should focus on entrepreneurial orientation. This is enabled by appropriate entrepreneurial organization, driven by entrepreneurial competencies, and foundation by the capability to absorb the entrepreneurial environment.

Therefore, the business success of a construction enterprise is the integration of said theories, as shown in Figure 1.

Nevertheless, when the cumulative evidence is considered, as previously discussed, there is some agreement, at least at a broad conceptual level, that entrepreneurial orientation, entrepreneurial organization, entrepreneurial competencies, and entrepreneurial environment could have impacted the business success of a construction enterprise. These elements can be expressed as a formulation:

$$BS = f[EO, EOrg, EC, EE] \quad (1)$$

Where: BS represents construction entrepreneurial business success; EO refers to entrepreneurial orientation, which is related to strategic postures in which a construction entrepreneur must focus on; EOrg is entrepreneurial organization, which acts as the foundation for entrepreneurial activities; EC refers to entrepreneurial competencies, which are the drivers for construction entrepreneurial success; and EE represents entrepreneurial environment, which is a source of opportunity for construction entrepreneurs.

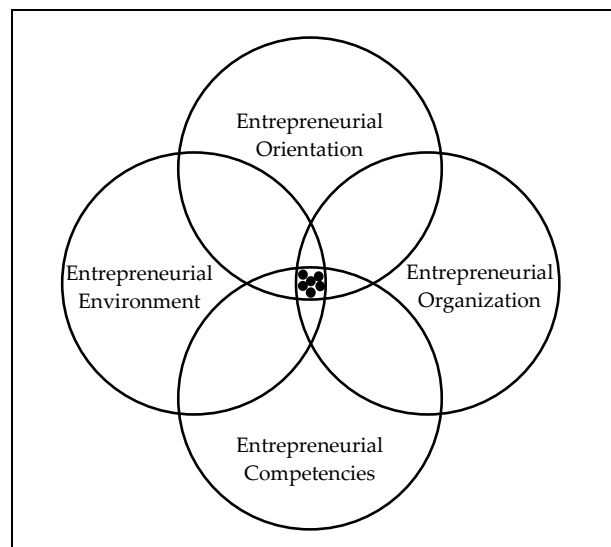


Figure 1. Relevant knowledge domains for the construction business success

The basic assumption of this formulation is that the business success factors of construction entrepreneurship cannot be studied exclusively from a single frame of reference, such as the organization or the individual. Instead, it must adopt a more holistic approach. Moreover, previous studies have proven that business success must be considered as a multidimensional construct. In this view, construction entrepreneurs' success and survival may result from the interrelationship of the four elements of entrepreneurship. More importantly, though, the specified relationships are directly concerned with the current issues that relate to the short-term and long-term performance of a construction enterprise business.

As earlier discussed, all of these factors have been explored in many previous studies and may have some validity on their effect to organizational performance. For example, entrepreneurial orientation [6, 22, 29, 32, 34, 36], entrepreneurial organization [41, 43, 50, 54, 55, 59], entrepreneurial competencies [62, 69, 72, 73, 74, 75] and entrepreneurial environment [82, 83, 88, 90, 92, 93].

Furthermore, based on our experience of more than 30 years in the construction industry, we believe that this model is an appropriate tool for assessing the success factors for construction businesses in today's fiercely business environment. This model was also piloted to some construction industry practitioners and the results were satisfactory (Cronbach's alphas > 7). Therefore, this model is assumed to have some validity.

5. Conclusion

Success and survival are the foremost-targeted objectives for all business entities including construction enterprise.

To gain success and survive, construction enterprises must continually improve their performance. One way that they can sustain competition in this industry is to identify their success factors. This may have a direct impact on business success, not only in the short-term but also, the long-term. In other words, construction enterprises need to balance their short-term success and their long-term success in order to succeed.

It is suggested that entrepreneurial-oriented construction enterprises are able to position themselves to take advantage of market opportunities. Our model suggests that the success and survival of a construction business can be achieved through corporate entrepreneurship. Rather than viewing construction business success from the results of executed projects, we hypothesized that predictors for success and survival of entrepreneurs in the construction industry can be derived from entrepreneurial activities, which are implemented within an organization.

Our paper highlights the vital dimensions of corporate entrepreneurship and suggests that entrepreneurial orientation, entrepreneurial organization, entrepreneurial competencies and entrepreneurial environments are the keys elements to predict the success and survival of construction entrepreneurs. We argue that, to succeed, a construction entrepreneurial enterprise should focus on entrepreneurial orientation, which is enabled by appropriate entrepreneurial organization, driven by entrepreneurial competencies, and is the foundation of the absorptive capacity of an entrepreneurial environment. We noted that no construction business success factors can be comprehensively described, nor can its complexity be adequately accounted for, unless all of its four dimensions are investigated. This is because these dimensions are the primary functions of a construction business' existence, and an attempt will be made to discover how the variables from

each dimension interact with the variables from other dimensions.

Therefore, to succeed and survive, a construction entrepreneurial enterprise should focus on entrepreneurial orientation, which is enabled by appropriate entrepreneurial organization. It should be driven by entrepreneurial competencies and its foundation should stem from entrepreneurial environments. Few, if any, empirical studies focus upon all of these elements and attempt to investigate how they jointly influence business success for construction entrepreneurs. Future studies are necessary to investigate the factors that are depicted in the conceptual framework. It would also be interesting to compare the findings between construction and other industries using the developed comprehensive framework. A comparison between nations is another area that warrants future research attention.

6. References

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