

*Full Length Research Paper*

# **An investigation of marketing strategy, business environment and performance of construction SMEs in China**

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**The research investigates how construction SMEs in China competes for success via the use of marketing strategy in the post-WTO era. The research integrates the environmental management perspective, strategic choice approach and resourced-based view which have emerged in the literature related to marketing strategy. A theoretical framework is developed to examine the relationship among marketing strategy, business environment and performance of construction SMEs in China. The conceptual framework proposes that construction SMEs' performance is critically dependent on three key constructs: competitive marketing strategy, relationship marketing strategy and business environment. Based on data collected from construction SMEs in China, the empirical findings of the study have confirmed the importance of marketing differentiation, innovation and Guanxi to achieve their superior performance. Moreover, there is a negative relationship between competitive pressure and construction SMEs' performance. This research would contribute to the existing academic theory and advance research on SMEs in transitional economy. Similarly, this research has implications for practice. The research findings help SMEs' managers in that the effective use of marketing strategies could help them gain competitive advantage and achieve superior performance.**

**Key words:** SMEs, China, marketing strategy, business environment, performance.

## **INTRODUCTION**

The development of small and medium-sized enterprises (SMEs) was strictly limited under the traditional central planned economy in the early years in modern China. After the Third plenum of the 11th Central Committee of the Chinese Communist Party in December 1978, the government started to provide guidelines for reform and development of the agricultural economic system, which led to the legalization of small market-oriented businesses in the rural areas (Leo, 1999; Anderson et al., 2003). The development of SMEs has increasingly contributed to China's economic growth. SMEs have played an indispensable role in promoting market orientation, improving industry structure, and creating job opportunities

(Chen, 2006). In 2008, the number of SMEs accounted for 99.25% of the total number of enterprises in China. The total value of industrial output for SMEs accounted for 65.45% of the gross output value of China's industrial enterprises. Additionally, Chinese SMEs employed about 77.70% of the workforce in cities and towns (National Bureau of Statistics of China, 2009).

Despite the importance of SMEs in China's economic growth, a lot of attention has been directed towards examining the reform and development of large state-owned enterprises (SOEs) (Luo, 1999; Low and Jiang, 2003; Siu and Bao, 2008). There is a lack of major study conducted to investigate exactly how Chinese SMEs make marketing decisions, maintain competitiveness and manage to grow and succeed (Siu and Liu, 2005). Some SME studies are conducted in the field of economics, and focus on the impact of SMEs on economic growth and industrial development in China (Chen, 2006). Also, some

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management researchers conclude that factors view SMEs as a source of competition, diversity and employment (Biggeri et al., 1999; Anderson et al., 2003); others have come to a negative assessment of their function and performance (Sun, 2000). Especially, Chinese SMEs will face a dynamic and competitive environment in the post-WTO era. Hitherto, little research has been undertaken to systemically analyze the challenge and opportunity posed by such situation, which would give rise to the effective marketing strategy for SMEs to compete in the Chinese market (Chew et al., 2008). This study is conducted in the context of construction SMEs in China. Since the start of China's economic reforms in late 1978, the construction sector has become one of the fastest growing industries in China. Between 1980 and 2008, the total number of firms, number of employees, and output value of China's construction industry increased by 10.77 times, 5.12 times, and 216.21 times, respectively (National Bureau of Statistics of China, 2009). This study examines the association among marketing strategy, business environment and performance of construction SMEs in China. Drawing on the environmental management perspective (Zeithaml and Zeithaml, 1984), strategic choice approach (Porter, 1980; Friend and Hickling, 2005), and the resourced-based view (Barney, 1991), the study focuses on investigating the role of competitive marketing strategy, relationship marketing strategy and business environment in affecting construction SMEs' performance.

### **Theoretical background and development of hypotheses**

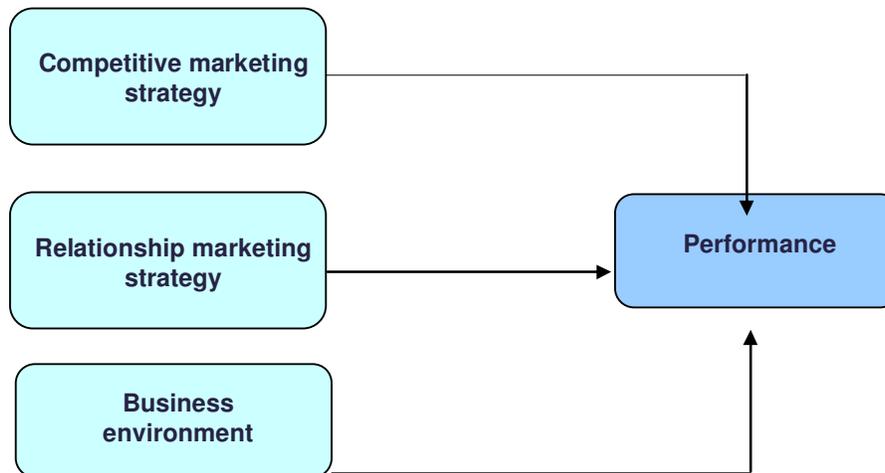
Marketing is a contentious issue among both academics and practitioners in SMEs (Gilmore et al., 2001; Siu and Liu, 2005; Chilya et al., 2009). Marketing theory development in SMEs has been somewhat limited and often relies on the application of classical marketing models to smaller businesses (Chaston and Mangles, 2002). The responsibility for the environmental contact typically is within the domain of marketing management (Kotler, 1991). From an environmental management perspective, environment factors affect the full spectrum of business firms and proxy of the risks related with fluctuations in the level of economic activities (Zeithaml and Zeithaml, 1984). The environmental factors, including economic and competitive conditions, market turbulence, government interference and competitive intensity, are important predictors to an organization's performance (Luo, 2003; Chen, 2006).

The strategic choice approach is embedded in strategic management literature and focuses on the central role of strategy as a determinant of firms' performance. According to strategic choice approach (Friend and Hickling, 2005), firms are assumed to be open systems that confront and respond to challenges and opportunities in their environment. Bamber et al. (2004) argue that companies

develop their adaptive strategies based on their perception of environment. Porter (1980) identifies differentiation as one of the two types of competitive advantage, the other being cost leadership. Hence, the different organization types view their environments in different ways, causing them to adopt different strategies. Strategic choice approach is very relevant to construction SMEs because strategies enable them to offset the resource limitations. The resource-based view focuses on the firm's resources and capabilities to understand business strategy and to provide direction to strategy formulation. Resources include financial resources, tangible resources (such as plant, equipment, buildings), and intangible resources (such as patent, know-how, brand) (Wernefelt, 1984; Barney, 1991; Hall, 1993). Capabilities are features of the firm and managerial skills forming organizational routines, which lead to competitive advantage (Hadjimanolis, 2000). Marketing capability attempts to capture a company's ability to market and sell products effectively and efficiently, and achieve marketing performance (Hann et al., 2002). To achieve competitive advantage, construction SMEs should make the most effective use of marketing capability and develop good relationship marketing resources and skills (Jaafar and Abdul Azizi, 2005; Chew et al., 2008). The research integrates these three dominant perspectives based on frameworks that were proposed or adopted in previous studies (Luo, 1999; Jaafar and Abdul Azizi, 2005; Siu and Liu, 2005; Chew et al., 2008). In the study, marketing strategy is broadly classified into two categories: competitive marketing strategy and relationship marketing strategy. The competitive marketing strategy aims to deploy resources and capabilities to compete in the market while relationship marketing strategy attempts to deal with networking and alliance resources. The conceptual framework proposes that construction SMEs' performance is critically dependent on three levels of constructs: competitive marketing strategy, relationship marketing strategy and business environment by highlighting the central role of marketing strategy in determining construction SMEs' performance. Figure 1 describes the theoretical model for this research.

### **Competitive marketing strategy**

In the study of competitive advantages developed by small businesses in operations, researchers have acknowledged that marketing competitive strategy influence the SMEs' performance. Langford and Male (2001) find that focusing on a market segment could make a company to gain exclusive experience of the conditions, and in turn improves its responsiveness. Thus focus strategy may provide SMEs some potential for creating competitive advantage and achieve superior performance. Xu et al. (2008) argue that SMEs adopting innovation strategy would provide the management direction and guidance necessary to ensure the correct



**Figure 1.** Theoretical model of marketing strategy for construction SMEs in China.

focus on customer value. Chen (2006) stress that large firms typically have the advantage due to economies of scale in fiercely competitive situations, differentiation strategy through ancillary intangibles may prove effective to achieve success for small firms in China.

The business risk is higher in the construction industry when compared with other types of businesses (Thorpe and McCaffer, 1991). Marketing competitive strategy is the most common and effective form of business promotion for Chinese construction SMEs (Chew et al., 2008). As such, construction SMEs should rely heavily on developing marketing differentiation, innovation, and focus in order to be sustainable in the industry. Based on these considerations, the hypotheses of this study are:

H<sub>1</sub>: Marketing differentiation is positively related to construction SMEs' performance.

H<sub>2</sub>: Innovation strategy is positively related to construction SMEs' performance.

H<sub>3</sub>: Focus strategy is positively related to construction SMEs' performance.

### Relationship marketing strategy

The achievement of economic development and business benefits requires the development and management of sustainable partnership for SMEs (Onojafe and Ukpere, 2009). With the large number of small and medium-sized firms in the construction industry, Chew et al. (2008) emphasizes that Chinese SMEs must have a strategic outlook, which includes proper marketing resources in finding opportunities that are advantageous to the company. Palmatier et al. (2006) argues that marketing is to manage the firm's market relationship where markets are customers, distributors and suppliers' networks. According to Payne et al. (2005), stakeholders should be

viewed as potential customers. They are also involved in marketing programs and can affect the company's performance. Strategic alliances are viewed as long-term partnerships to achieve strategic objectives that are mutually beneficial to SMEs (Naicker and Saungweme, 2009). Bretherton and Chaston (2005) suggest that SMEs can free-ride on the bigger firms' market development efforts and/or they can form strategic alliances to force accommodation by the bigger rivals.

In the transition economy of China, the principal means of securing contract and sales for small and medium contracting firms are through personal contacts and repeated business. Large amount of resources and information flows through Guanxi (personal relationships) due to institutional and environmental uncertainties (Braendle et al., 2005; Wang, 2007; Liu et al., 2008). Such flows can reduce transaction costs and improve efficiency of resource allocation (Siu and Bao, 2008). Therefore, relationship marketing strategy, which includes Guanxi an strategic alliance, is more likely to help construction SMEs acquire critical resources and contract when they face intensive competition for limited resources. All these lead to the following hypotheses:

H<sub>4</sub>: Guanxi is positively related to construction SMEs' performance.

H<sub>5</sub>: Strategy alliance is positively related to construction SMEs' performance.

### Business environment

The complex industry environment is seen as multidimensional, with numerous and differentiated effects on various organizational characteristics and processes (Luo, 1999). Business environment provides a window to market opportunities and threats, and construction SMEs

are a deliberate response to those dynamics. During economic transition, the business environment in Chinese construction has revealed several characteristics. First, growth in sales and profitability varies markedly due to the industrial policy that allows only some sectors to be privatized and also to the deep-rooted imperfections in industry structure (Anderson et al., 2003). Second, government regulations frequently changed due to idiosyncratic paths of decentralization and government needs for controlling strategically vital industries (Zhang and Si, 2008). Third, competitive pressure varies by the level of equilibrium between market demand and market supply. These characteristics of the environment have a direct impact on the nature of competition and the competitive strategy available to construction SMEs in construction industry. Drawing on the literature, two business environment factors-environment dynamism and competitive pressure would appear to have a strong effect on the construction SMEs' performance. In light of the above, the following relationships are predicted:

H<sub>6</sub>: Environment dynamism is positively related to construction SMEs' performance.

H<sub>7</sub>: Competition pressure is negatively related to construction SMEs' performance.

## METHODOLOGY

### The sample and survey instrument

The survey method used a self-administered questionnaire. The questionnaire survey was conducted in major cities and provinces in China. To control for possible industry effect, the research focused on the fast growing construction industry. The average annual growth rate in the construction industry has been over 10% since 1980. The contribution of the construction industry to the GDP of China increased from 4.30% in 1981 to 5.60% in 2006 (National Bureau of Statistics of China, 2007). According to the SMEs standard published by the State Council in 2003, medium-sized construction enterprises employ between 600 and 3,000 people with annual revenue between RMB 30 million and RMB 300 million, Small enterprises employ less than 600 people with annual revenue less than RMB 30 million (SETC, 2003). The sampling frame consists of SMEs which were selected from the name list of Directory of Chinese Construction Industry Association. The selected construction SMEs met the criterion with registered total turnover below RMB 300 million and employees less than 3,000.

The original English questionnaire was first reviewed and revised by two professors (one in marketing and another in strategic management) with substantial research experience in the subject area in China and then translated into Chinese. The questionnaire survey was conducted in major cities and provinces in China. The questionnaire, together with a cover letter explaining the methodology and objective of the study, was distributed to 1,000 construction SMEs in those areas by mail. A total of 121 effective responses were received, the response rate of this research is 12.1%. This response rate compares reasonably well with the majority of SMEs studies that explore strategy and firm performance (Chandler and Hanks, 1994; Luo, 1999; Aragón-Sánchez and Sánchez-Marin, 2005). Tables 1 and 2 summarize the respondents' particulars and firm size, ownership and age.

### Measurement

Most of the factors in the questionnaire are self-developed to suit the practice in the industry. For those variables that have been employed in previous research, measures are adopted if they satisfied acceptable measurement quality. For those without extant measure, new measures are developed for the study according to the procedures suggested by Churchill (1979) and Nunnally and Bernstein (2004). The instrument has been tested for face-to-face validity on contractors. The factors are categorized into three sets of factors, including competitive marketing strategy-related factors, relationship marketing strategy-related factors and business environment factors. All the variables are measured using 5-point Likert scales and assessed using multiple measures. Such measures are necessary to capture the domain of the constructs adequately and accurately (Churchill, 1979).

Competitive marketing strategy items are factored as three broad concepts- marketing differentiation, innovation, and focus. The competitive marketing strategy variables were measured using 5-point Likert scales ranging from 1 "not at all important" to 5 "extremely important". The measures of marketing differentiation were partly adopted from Chen (2006) and Chew et al. (2008), and included four items: (1) achieving high quality beyond the requirements of clients; (2) adopting bidding strategy with competitive price; (3) delivering constructed facilities ahead of schedule; and (4) developing brand identification. The measures of innovation strategy were drawn from Chew et al. (2004) and Xu et al. (2008). Five items were identified for innovation strategy as follows: (1) technical and managerial expertise, (2) competence in technology and process, (3) IT technology, (4) innovation in finance; and (5) innovation in operation mechanism. Four items were identified for focus strategy as follows: (1) operating in specific construction market segments; (2) offering a limited range of project service; (3) emphasizing on specific construction markets; and (4) serving a specific group of clients.

Relationship marketing strategy included two variables: Guanxi and strategic alliance, which determine construction SMEs' performance. The Relationship marketing strategy variables were measured using 5-point Likert scales ranging from 1 "least emphasis" to 5 "extreme emphasis". Guanxi, or 'good connection', is an important issue to Chinese business people and can be a source of competitive advantage (Wang, 2007). A four-item scale was partly adopted from Wang (2007) and Liu et al. (2008) as follows: (1) maintaining good relationship with bank; (2) cultivating various personal connections; (3) government relationship networks; and (4) relationship with higher administrative agencies. Strategic alliance presented as an important way of improving construction project performance through the direct benefits accruing to both parties involved (Bresnen and Marshall, 2000). Strategic alliance was measured by four items: (1) subcontractor of a large construction corporation; (2) partnering with customer on a long-term basis; (3) cooperation with reliable suppliers; and (4) cooperation with research institutes and universities.

Business environment items were factored as two broad concepts- environment dynamism and competitive pressure. The scale was a 5-point Likert-type ranging from 1 "not at all important" to 5 "extremely important". The measure of environment dynamism was based on a five-item scale developed by Zhang and Si (2008). Environmental dynamism included five items as follows: (1) economic condition; (2) development of legal system; (3) project/service technology; (4) reform of construction industry; and (5) service efficiency of government department. Competition pressure describes the degree for rivalry among construction firms in the construction industry. The measure was adopted from a modified version of the scale used by Porter (1980) and included four items: (1) government intervention; (2) the rivalry for competitor; (3) impact of local government policy; and (4) the extent of threats from new entrants.

**Table 1.** Respondent's particulars

Respondent's particulars	No. of Respondents	Percentage
<b>Location</b>		
Beijing	10	8.26
Fujian	5	4.13
Guangdong	23	19.01
Hebei	4	3.31
Hubei	3	2.48
Jiangsu	22	18.18
Jiangxi	3	2.48
Shandong	9	7.44
Shanghai	11	9.09
Sichuan	5	4.13
Tianjin	6	4.96
Zhejiang	20	16.53
Total	121	100
<b>Position</b>		
President/general manager	25	20.66
Department manager	32	26.45
project manager	33	27.27
General or senior engineer	31	25.62
Total number of firms	121	100

**Table 2.** Firm size, ownership and age.

Firm age		Firm size by employment		Ownership	
1-10	46	1-100	31	SOEs	23
10-20	40	100-500	44	Collective	36
20-30	17	500-1000	25	Private	42
30-40	14	1000-2000	14	Joint venture	10
40-50	4	2000-3000	7	Foreign-funded	10
Total	121	Total	121	Total	121

### Firm's performance

Firm's performance was the ultimate criterion in the theoretical model. The competitive performance was often measured by the business volume (including sales, profit) (Bartb, 2003; Cheah et al., 2007; Olutunla and Obamuyi, 2008), efficiency (productivity, return on equity, net profit) (Brooksbank et al., 2001; Davies and Walters, 2004), business growth and sustainable growth (Chandler and Hanks, 1994; Fu et al., 2002). In this research, sales growth and profit growth were used for measuring construction SMEs' competitiveness.

## RESULTS AND DISCUSSION

### Correlation analysis

The statistical software, SPSS 12.0, is used to conduct data analysis in the study. Correlation analysis is the

statistical method that can be used to describe the degree to which one variable is linearly related to another. Correlation analysis in the study is used in conjunction with regression analysis to measure how well the least squares line fits the data. Table 3 presents the descriptive statistics and correlations among all variables used in the analysis. As indicated, the correlation analysis has shown that there was significant and substantial level of correlations among variables of the same construct. For example, a medium to high level of correlations from 0.19 to 0.54 was found among the competitive and relationship marketing strategy areas. This could be explained by the fact that they were all sub-constructs of similar behavioral characteristics reflecting a higher-level construct. Cronbach's coefficient  $\alpha$  is used to measure the degree of covariation among competitive marketing strategy, relationship marketing strategy, and business

**Table 3.** Mean standard deviation and correlation of variables.

Variable	Mean	S.D.	1	2	3	4	5	6	7	8	9
1. Marketing differentiation	3.67	0.73	---								
2. Innovation	3.59	0.69	0.28**	---							
3. Focus	3.40	0.65	0.39**	0.39**	---						
4. Guanxi	4.10	0.68	0.03	0.36**	0.34**	---					
5. Strategic alliance	3.26	0.85	0.19*	0.54**	0.52**	0.37**	---				
6. Environment dynamism	2.64	0.66	0.26**	0.56**	0.53**	0.12*	0.45**	---			
7. Competitive pressure	3.39	0.67	0.19*	-0.24**	-0.20*	-0.05	-0.18*	-0.29**	---		
8. Sales growth	3.35	0.71	0.37**	0.50**	0.49**	0.31**	0.38**	0.41**	-0.11**	---	
9. Profit growth	3.04	0.79	0.31**	0.29**	0.32**	0.22*	0.29**	0.24**	-0.01	0.73**	---

\* P&lt;0.05; \*\* P&lt;0.01

**Table 4.** Variables and their reliability.

Variables	Retained number of items	Reliability (Cronbach's $\alpha$ )
Marketing differentiation	4	0.80
Innovation	5	0.78
Focus	4	0.72
Guanxi	4	0.82
Strategic alliance	4	0.65
Environment dynamism	5	0.77
Competitive pressure	4	0.70

environment variables. In early stages of basic research, it has been suggested that reliabilities of 0.50 and 0.60 should suffice (Churchill, 1979; Nunnally and Bernstein, 2004). Thus, 0.60 was set as the minimum acceptable value for this study. As shown in Table 4, the resulting values range from 0.65 to 0.82 indicating an acceptable level of internal consistency (Nunnally and Bernstein, 2004).

### Empirical test

Multiple regression analysis is used to determine the

degree to which selected independent variables are able predict construction SMEs in China. The measure of "overall performance" is given by the average of sales and profit growth rates (Cheah et al., 2007). Model "A" investigates the impact of competitive marketing strategy, relationship marketing strategy and business environment on sales growth, Model "B" examines the impact of the three dimensions on profit performance. Model "C" refers to the impact of the three dimensions on overall performance. The equations for competitive strategy take the following forms:

$$\text{Model A: Sales growth} = \beta_0 + \beta_1 \text{MD} + \beta_2 \text{IN} + \beta_3 \text{FO} + \beta_4 \text{GX} + \beta_5 \text{SA} + \beta_6 \text{ED} + \beta_7 \text{CP} + \text{Error}$$

$$\text{Model B: Profit growth} = \beta_0 + \beta_1 \text{MD} + \beta_2 \text{IN} + \beta_3 \text{FO} + \beta_4 \text{GX} + \beta_5 \text{SA} + \beta_6 \text{ED} + \beta_7 \text{CP} + \text{Error}$$

$$\text{Model C: Overall performance} = \beta_0 + \beta_1 \text{MD} + \beta_2 \text{IN} + \beta_3 \text{FO} + \beta_4 \text{GX} + \beta_5 \text{SA} + \beta_6 \text{ED} + \beta_7 \text{CP} + \text{Error}$$

Where: MD= Marketing differentiation, IN= Innovation, FO= Focus, GX= Guanxi, SA= Strategic alliance, ED= Environment dynamism and CP= Competitive pressure.

The results are presented as standardized regression coefficients in Table 5. As indicated, For Model C, the independent variables explain 32% of variance in the construction SMEs' overall performance ( $R^2=0.32$ , Adjusted  $R^2=0.28$ , F value=7.63). These adjusted  $R^2$  are

consistent with studies of SMEs by Chandler and Hanks (1994), Luo (1999), Lerner and Almore (2002), Sadler-Smith et al. (2003) and Chew et al. (2008). For example, Chandler and Hanks (1994) examine the relationship among market attractiveness, capabilities and SMEs' performance and report adjusted  $R^2$  are between 8 and 22%. The adjusted  $R^2$  reported by Sadler-Smith et al. (2003) is 12%. Thus, the values of adjusted  $R^2$  in this case could be deemed acceptable for evaluating Model.

**Table 5.** Competitive marketing strategy, relationship marketing strategy and business environment on construction SMEs' performance

Independent variable	Dependent variable		
	Model a (Sales growth)	Model b (Profit growth)	Model c (Overall performance)
Marketing differentiation	0.19**	0.26**	0.25**
Innovation	0.30**	0.13*	0.22**
Focus	0.08*	0.06	0.08
Guanxi	0.29**	0.17**	0.23**
Strategic alliance	0.11*	0.07	0.10
Environment dynamism	0.09	0.12*	0.11
Competitive pressure	-0.10*	-0.15*	-0.14*
R <sup>2</sup>	0.38	0.21	0.32
Adjusted R <sup>2</sup>	0.35	0.17	0.28
F value	10.04	4.37	7.63

\* P&lt;0.05; \*\* P&lt;0.01

The results state that marketing differentiation has positive relationship with overall performance with a coefficient of 0.25 at 0.01 levels, indicating that H<sub>1</sub> is supported. Innovation strategy is positively related with overall performance ( $\beta=0.22$ ,  $p<0.01$ ). H<sub>2</sub> is also supported. Focus strategy is not positively related to construction SMEs' performance with  $p>0.05$ , H<sub>3</sub> is not supported. As for relationship marketing variables, Guanxi is positively related to construction SMEs performance with coefficients of 0.23. Thus H<sub>4</sub> is supported. However, strategic alliance is not significantly related to construction SMEs' performance with  $p>0.05$ , H<sub>5</sub> is rejected. As for environmental variables, environment dynamism is not positively related to construction SMEs' performance with  $p>0.05$ , H<sub>6</sub> is rejected. Competitive pressure is negatively related to construction SMEs with a coefficient of -0.14, H<sub>7</sub> is supported.

## DISCUSSION

The statistical analysis of marketing competitive strategy shows that marketing differentiation and innovation strategy are key competitive marketing strategies used by construction SMEs in the post-WTO era. The study's findings mesh with strategy research which suggests that differentiation and innovation are appropriate strategies in dynamic environments (Luo, 1999; Chew et al. 2008). Specially, it appeared that construction SMEs could develop the institution mechanism and adopt new technology and process as important means to achieve competitive advantage and success. The construction industry has its unique features, which include the nature of the final products, the fragmented nature of construction processes. Demand for the construction industry's products and or services are geographically dispersed, as natural a response to this phenomenon. Thus the instability of

demand makes construction SMEs adopting focus strategy unacceptable, since such a strategy constrains construction SMEs into a specific segment of the market and increases their dependency on this narrow market, which in turn makes construction SMEs more vulnerable to local market fluctuations.

This study extends previous work by demonstrating that relationship marketing strategies are important dimensions adopted by construction SMEs. The significance of Guanxi has been emphasized in the construction industry in China (Florence et al., 2005). Guanxi, as a tool for resource acquisition, is more likely to help construction SMEs achieve competitive advantage in the market. For instance, construction SMEs seeking to establish relationships with government officials may attain better institutional protection and extend their market into other regions. For construction SMEs, the use of strategic alliance attempts to satisfy the needs of market expansion through covering multiple market segments. On the positive side, strategic alliance results in improved client focus and satisfaction as well as better responsiveness to changing market conditions. Thus construction SMEs may expand its market position and lead to output growth. On the negative side, pursuing strategic alliance involves high costs to develop and sustain the resource to support the strategy. Given the limited resources of construction SMEs, gains in market position may adversely effect the profitability.

Furthermore, the study investigates the impact of environment factors on Construction SMEs' performance. Contrary to the prediction in the research, environment dynamism is not related to construction SMEs' performance. A plausible explanation is that, the success of construction SMEs is largely attributed to top managers' ability to develop effective strategies that are compatible with environmental conditions. Small business managers may face dynamism environment that is unclear and that

presents few well-alternatives and few clear evaluations criteria by which to select among alternatives (Luo, 1999). Competitive pressure challenges the competitive positions achieved by incumbent firms and reinforces dependence on other firms. Because construction industry in China resides in growing stage, the growth in the number of firms in an industry exacerbates existing as well as incoming competition. High competitive pressure may create more chaos in the market including the appearance of extensive pseudo- and inferior projects and escalating prices. The chaos may lower customers' loyalty to products and thus increase the costs for using marketing strategies.

## Conclusion

As an important force in the construction market, construction SMEs in China are faced with the tasks of keeping themselves competitive, which concern their survival and future growth. The research integrates the environmental management perspective, strategic choice approach, and the resource-based views which have emerged in the literature related to the marketing strategy. A theoretical framework for construction SMEs is built up through organizing the existing theories and findings in studying construction SMEs. The framework states that construction SMEs performance was critically dependent on competitive marketing strategy, relationship marketing strategy, and business environment. Based on data collected from 121 construction SMEs in China, this study has confirmed the importance of marketing differentiation, innovation and Guanxi to achieve their superior performance. Moreover, there is a negative relationship between competitive pressure and construction SMEs' performance.

## Implications of the research

The study has implications both for existing academic theory and advances research on SMEs in transitional economy.

The study provides a more accurate and less biased picture of the determinants of construction SMEs' performance, than is possible when investigation within each field was constrained by disciplinary boundaries. Such a flexible model may capture the dynamic nature of marketing strategy that evolves over time. The academics can find value in the identification of statistically reliable measures that will be used in further research designed to develop theoretical foundations that will explain the success of SMEs. As most early studies in SMEs have focused on the context of advanced market economy, small business development in transitional economy remains by and large an unexplored and important agenda (Anderson et al., 2003; Chen, 2006).

Researchers call for the study to examine the critical factors influencing small business's competitive advantage in China (Siu and Liu, 2005; Chew et al., 2008). This study, based on a comprehensive literature review in the marketing management areas and field interviews of managers in the construction SMEs in China, proposes that construction SMEs' performance could be affected by competitive marketing strategy, relationship marketing strategy and business environment.

Though not exhaustive, empirical results of the study show that these dimensions do exist in construction SMEs. The classification of marketing strategy further establishes the base for investigating the impact of the interactions between these two dimensions on construction SMEs' performance.

The findings of this study also have implications for marketing management practice. Although China's economy is undergoing a transition from planning economy to market one, construction SMEs should direct their efforts at creating differential advantage, implementing innovation and building good relationship with banks, clients and government. Increasingly, construction SMEs that have marketing resources and skills and effectively implement marketing strategies are more likely to achieve success in the construction market. The lesson for marketing managers in construction SMEs is that the effective use of marketing strategies could help them gain competitive advantage and achieve superior performance. Although Guanxi plays a key role in achieving business success in China, construction SMEs' entrepreneurs and marketing managers who tend to focus only on Guanxi should be aware of their limitations in the marketing area and build up a marketing orientation in their firms.

## Limitations and directions for future research

The study has several limitations, which merit some consideration when evaluating the empirical findings. The research has limitation in data collection. Although no significant non-response bias was found in this study, the relatively low response rate had resulted in the smaller than expected sample size, which was less desirable for the statistical precision and confidence of the study. A somewhat larger sample would obviously permit firmer conclusions to be drawn from the results of the statistical analysis. The research has limitations as an operationalization of variables. With the transition of China's economy from the highly centralized planning mode to a market orientation, process variables and organization structure variables also influence the operation of construction SMEs.

Future research should address this issue in order to better interpret the relationship between organizational behavior and construction SMEs' performance.

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## REFERENCES

- Anderson AR, Li J, Harrison R, Robson PJA (2003). The increasing role of small business in the Chinese economy. *J. Small Bus. Manag.*, 41(3): 310–316.
- Aragón-Sánchez A, Sánchez-Marín G (2005). Strategic orientation, management characteristics, and performance: a study of Spanish SMEs. *J. Small Bus. Manag.*, 43(3): 287–308.
- Bamber GJ, Lansbury RD, Wailes N (2004) 'Introduction'. In Bamber, G.J., Lansbury, R.D. and Wailes N. (eds) *International and Comparative Employment Relations: Globalisation and the Developed Market Economies*, Sydney: Allen and Unwin.
- Barney JB (1991). Firm resources and sustained competitive advantage. *J. Manag.*, 17(1): 99–120.
- Bartb H (2003). Fit among competitive strategy, administrative mechanisms, and performance: a comparative study of small firms in mature and new industries. *J. Small Bus. Manag.*, 41(2):133-147.
- Biggeri M, Gambelli D, Phillips C (1999). Small and medium enterprise theory: Evidence for Chinese TVEs", *J. Int. Dev.* 11(2):197-219.
- Braendle UC, Gasser T, Noll J (2005). Corporate governance in China—Is economic growth potential hindered by Guanxi. *Bus. Soc. Rev.*, 110(4): 389–405.
- Bresnen M, Marshall N (2000). Partnering in construction: a critical review of issues, problems and dilemmas. *Construct. Manag. Econ.*, 18(2): 229-237.
- Bretherton P, Chaston I (2005). Resource dependency and SME strategy: an empirical study. *J. Small Bus. Enterp. Dev.*, 12(2):274 – 289.
- Chandler GN, Hanks SH (1994). Market attractiveness, resource-based capabilities, venture strategies and venture performance. *J. Small Bus. Manag.*, 12(1): 27-35.
- Chaston I, Mangles T (2002). *Small Business Marketing Management*, Palgrave Publishers, Basingstoke, UK.
- Cheah CYJ, Kang J, Chew DAS (2007). Strategic analysis of large local construction firms in China. *Construct. Manag. Econ.*, 25(1): 25 – 38.
- Chen J (2006). Development of Chinese small and medium-sized enterprises. *J. Small Bus. Enterp. Dev.*, 13(2):140 – 147.
- Chew DAS, Yan S, Cheah CYJ (2004). Creating and sustaining competitiveness of small and medium-sized construction enterprises in China. *Proceedings of International Symposium on Globalization and Construction*, 17-19 November, 2004, pp.25-34.
- Chew DAS, Yan S, Cheah CYJ (2008). Core capability and competitive strategy for construction SMEs in China. *Chin. Manag. Stud.*, 2(3):203-214.
- Churchill GA (1979). A paradigm for developing better measures of marketing constructs. *J. Market. Res.*, 16 (February): 64-73.
- Davies H, Walters P (2004). Emergent patterns of strategy environment and performance in a transition economy. *Strat. Manag. J.*, 25(4): 347-364.
- Florence YYL, William IC, Javier CC (2005). Entry and business strategies used by international architectural, engineering and construction firms in China. *Construct. Manag. Econ.*, 23(5): 509-520.
- Friend J, Hickling A (2005). *Planning Under Pressure: The Strategic Choice Approach*, Butterworth-Heinemann, UK.
- Fu TW, Ke MC, Huang YS (2002). Capital growth, financing source and profitability of small businesses: evidence from Taiwan small enterprises. *Small Bus. Econ.*, 18(4): 257-267.
- Chiliya N, Herbst G, Roberts-Lombard M (2009). The impact of marketing strategies on profitability of small grocery shops in South African townships. *Afr. J. Bus. Manage.*, 3(3): 70-79.
- Gilmore A, Carson D, Grant K (2001). SME marketing in practice. *Market. Intell. Plann.*, 19,(1): 6-11.
- Hadjimanolis A (2000). A resource-based view of innovativeness in small firms. *Tech. Anal. Strat. Manag.*, 12(2): 263-281.
- Hall R (1993). A framework linking intangible resources and capabilities to sustainable competitive advantage. *Strat. Manag. J.*, 14(8):607-618.
- Jaafar M, Abdul Aziz AR (2005). Resource-based view and critical success factors: a study of small and medium contracting enterprises (SMCEs) in Malaysia. *The Int. J. Construct. Manag.* 5(2): 61-77.
- Kotler P (1991). *Marketing Management: Analysis, Planning, Implementation, and Control*, 7<sup>th</sup> ed. Englewood Cliffs, N.J. Prentice-Hall.
- Langford D, Male S (2001). *Strategic Management in Construction*, Oxford: Blackwell Science.
- Leo PD (1999). Small business as a supplement in the People's Republic of China (PRC). *J. Small Bus. Manag.* 37(3): 76–80.
- Lerner M, Almor T (2002). Relationships among strategic capabilities and the performance of women-owned small ventures. *J. Small Bus. Manag.*, 40(2): 109-125.
- Liu Y, Li Y, Tao L, Wang Y (2008). Relationship stability, trust and relational risk in marketing channels: Evidence from China. *Ind. Market. Manag.*, 37(4):432-446.
- Low S P, Jiang H B (2003). Internationalization of Chinese construction enterprises. *J. Construct. Eng. Manag.*, 129(6):589-598.
- Luo Y (1999). Environment-strategy-performance relations in small business in China. *J. Small Bus. Manag.*, 37(1):37-52.
- Luo YD (2003). Industrial dynamics and managerial networks in an emerging market: the case of China. *Strat. Manag. J.*, 24(13):1315-1327.
- Naicker V, Saungweme P (2009). Strategic alliance governance in Zimbabwe policy and strategy. *Afr. J. Bus. Manag.* 3(8): 325-332.
- National Bureau of Statistics of China (2007). *China Statistical Yearbook on Construction*, Beijing: State Statistics Bureau Press.
- National Bureau of Statistics of China (2009). *China Statistical Yearbook on Construction*, Beijing: State Statistics Bureau Press.
- Nunnally JC, Bernstein I (2004). *Psychometric Theory (3rd)*, New York: McGraw-Hill.
- Olutunla GT, Obamuyi T M (2008). An empirical analysis of factors associated with the profitability of Small and medium - enterprises in Nigeria. *Afr. J. Bus. Manag.* 2(11): 195-200.
- Ojojaefe D, Ukpere W (2009). Partnership and the e-commerce initiative of small businesses. *Afr. J. Bus. Manag.* 3(12): 855-861.
- Palmatier RW, Dant RP, Grewal D, Evans KR (2006). Factors influencing the effectiveness of relationship marketing: A meta-analysis. *J. Market.*, 70(4): pp.136-153.
- Payne A, Ballantyne D, Christopher M (2005). A stakeholder approach to relationship marketing strategy: The development and use of the "six markets" model. *Eur. J. Market.*, 39(4): 855 – 871.
- Porter M (1980). *Competitive Strategy: Techniques for Analyzing Industry and Competitors*, The Free Press, New York.
- Sadler-Smith E, Hampson Y, Cboston I, Badger B (2003). Managerial behavior, entrepreneur style, and small firm performance. *J. Small Bus. Manag.*, 41(1):47-67.
- State Economic and Trade Commission (SETC) (2003). Tentative classification standards on the small and medium-sized enterprises, the 143th joint ordinance of the State Economic and Trade Commission, the State Development Planning Commission, Ministry of Finance and National Statistics Bureau, 19 Feb 2003.
- Siu W, Liu Z (2005). Marketing in Chinese small and medium enterprises (SMEs): The state of the art in a Chinese socialist economy. *Small Bus. Econ.*, 25(4): 333-346.
- Siu W, and Bao Q (2008). Network strategies of small Chinese high-technology firms: A qualitative study. *J. Prod. Innovat. Manag.*, 25(1): 79–102.
- Sun L (2000). Anticipatory ownership reform driven by competition: China's township-village and private enterprises in the 1990s. *Comp. Econ. Stud.*, 42(3): 49-75.
- Thorpe T, McCaffer R (1991). *Competitive Bidding and Tendering Policies*, in Male, S. and Stocks, R. (Eds), *Competitive Advantage in Construction*, Butterworth-Heinemann, Oxford, London.
- Wang CL (2007). Guanxi vs. relationship marketing: Exploring

- underlying differences . *Ind. Market. Manage.*, 36(1) :81-86.
- Wernefelt B (1984). A resource-based view of the firm. *Strat. Manage. J.*, 5(2): 171-180.
- Xu Z, Lin J, Lin D (2008). Networking and innovation in SMEs: evidence from Guangdong province, China. *J. Small Bus. Enterprise Dev.*, 15(4):788-801.
- Zeithaml CP, Zeithaml VA (1984). Environmental management-revising the marketing perspective. *J. Market.*, 48(1): 46-53
- Zhang Y, Si C (2008) . The impacts of external factors on the growth of Chinese entrepreneurial enterprises: An empirical study. *J. Small Bus. Enterprise Dev.*, 15(4):689 – 703.