MANAGEMENT STUDIES OF THE CHINESE CONSTRUCTION INDUSTRY: WHICH FIELD OF THEORIES?

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Rich development of knowledge within the strategic management regime has provided ample course of contentions among academicians over the merits of disparate schools of thought and theoretical fields. Given the broad aspects of management, it is perhaps more legitimate to assume that no single field stands to dominate. An open mindset would go a long way in matching theories to circumstantial evolvement in the real world. This philosophical construct is even more appropriate in the case of the Chinese construction industry. With China continuing to steal the limelight as a major growth engine and destination for foreign investments, assessment of this issue is timely when researchers embark to develop analytical frameworks related to competition among construction enterprises in China. In this paper, a brief review of the characteristics, strengths and weaknesses of common schools of thought in strategy is first presented. Subsequent examination of the general business and operating environment in China suggests that each theoretical field potentially structures part of the overall corporate strategy of Chinese construction enterprises. The findings bear subtle implications on the focal points that construction management researchers should ruminate in future studies of corporate management issues in China.

Keywords: China, construction industry, corporate strategy, strategic management.

INTRODUCTION

China’s emergence as a “new” global economic power has attracted not only foreign investments and media attention. In recent years, it appears that publications related to China have also substantially increased in the academic world especially within the management field. While there may be (little) room to debate on the importance of management studies related to China, it is not difficult to conclude that a congruence of insights provided by these numerous publications is lacking. With disparate observations stemming from personal experience, interviews and empirical findings, the fruits of these studies require some form of consolidation.

When research in management studies of the Chinese construction industry begins to bloom, it is important for researchers to locate their premises and map out their assumptions on the greater landscape. This would help to avoid the trap of adopting too narrow a mindset in shaping their scope of study or drawing conclusions from the associated findings. Based on this objective, this paper considers specifically the field of corporate strategy. By referencing to a taxonomic classification of general strategic theories, the suitability of each theoretical field to be applied to the context of the

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Chinese construction industry is first examined. Emphasis is given at the end of this paper on the necessity to adopt an open mindset when one embarks on management research in the Chinese construction industry since the market itself is very dynamic.

**GENERAL LANDSCAPE OF STRATEGIC THEORIES**

As a matter of fact, strategy is hard. Its intellectual foundations are drawn from various primary disciplines including finance, economics, organizational sociology, political science and cognitive psychology, all of which continue to grow at their own pace (Rumelt *et al* 1994). For example, the development of game theory not only expands the frontier of economics, but also contributes to strategic management through its application in structuring competitive strategies for oligopolies. In addition, the actors and audience of strategy are diverse, ranging from academicians to managers and consultants focusing on different industries and sectors.

Naturally, the heterogeneous composition of disciplines and players ensures that consensus can only be sought in a few broadly based directions which often provide conflicting views on strategy. Some researchers in strategic management mainstream have classified the various schools of thought based on their perceptions of the *content* of strategy, the *process* of strategy development, and the *context* (both corporate and environmental) that influence the two former aspects. A good overview of these various typologies is given by Elfring and Volberda (2001). The following lists some of the prominent ones that commonly appear in literatures:

- Miles and Snow’s (1978) classification of firms as *Defenders, Prospectors* and *Analyzers*
- Rouleau and Séquin’s (1995) four types of strategic discourse: *Classical, Contingency, Socio-political* and *Socio-cognitive* forms
- Mintzberg *et al*’s (1998) ten schools of thought which can largely be separated into two groups: prescriptive versus descriptive in character
- Whittington’s (2001) four perspectives of strategy: *Classical, Evolutionary, Processual* and *Systemic*

The list of typologies obviously does not end here; the intention has never been a (futile) comparison of merits and flaws among these different categorizations. Nevertheless, a referencing framework will be helpful in streamlining subsequent discussions in this paper. For that matter, a couple of considerations are taken into account:

1. The theme of strategic management still attracts relatively less attention among construction management researchers. An excessively detailed classification framework such as Mintzberg *et al*’s would appear to be ‘hair-splitting’ and the underlying distinctions may not be appreciated.
2. Most forms of classifications are derived in a general context, while the focus of this paper is on construction. At the very least, the industrial context is ‘fixed’. As such, a detailed classification scheme may not be necessary since the distinctions among certain categories would bear less significance. Beyond these considerations, the rest is mainly a matter of preference. Whittington’s classification is chosen as it is deemed insightful and his four perspectives are easily distinguishable. The next section provides a brief summary of the characteristics of these four perspectives before determining which perspective is specifically more relevant to the context of the Chinese construction industry.
A REVIEW OF WHITTINGTON’S FRAMEWORK

In his framework, Whittington (2001) finds that the distinct schools of thought can essentially be mapped along two axes: outcomes of strategy and the processes by which it is made. The two combined continua are as shown in Figure 1. In the figure, the vertical axis examines the degree of variation of strategic intent and outcomes produced. This may represent profit maximization per se at one extreme, or accommodation for other complex priorities such as social responsibilities at the other end of the spectrum. The horizontal axis considers whether such outcomes are derived through deliberate planning, calculation and formulation, or simply as an emerging product of accidents, chance, and social and organizational inertia. The radically different implications on strategy are hence read off from the relative positions along the two axes in the diagram. This essentially leads to four basic conceptions of strategy.

Classical Approaches

The Classicists believe in the superiority of rational planning methods and objective decision-making processes. Some prominent works/players classified under this quadrant include Chandler (1962), Ansoff (1965) and Porter (1980, 1985). An inherent assumption applied in Classical models is that profitability is the ultimate and supreme goal of businesses and individuals – a key notion in many economic theories since Adam Smith’s era. The premise that corporate decision-makers will act as ‘rational economic men’ (Hollis and Nell 1975) also forms the philosophical core of Classicists’ theories.

Classical theories often imply a top-down planning process and a hierarchical command system. In particular, they signify a separation between strategy formulation and implementation. It is assumed that the determination of long-term goals and strategy falls under the regime of top executives. Once the strategic plan is formed, actual execution is presumed to be carried out smoothly through cascading actions of the middle level and operating core of the organization as dictated by the plan. In this approach, internal complexities within an organization tend to be ignored. Essentially, strategy begets structure. All these characteristics stem from the historical origin of military concepts and early studies of large, diversified corporations.
Evolutionary Perspective
Unlike the Classicists, Evolutionary theorists think that deliberate planning is futile since the general environment is constantly changing. Their belief is founded on Darwinism and the biological principle of natural selection (Alchian 1950), whereby only the ‘fittest’ will survive under hostile and turbulent environment. In other words, market does its selection of survivors, rather than firms selecting the most profitable market and optimal configuration of operation going by the Classicists’ view. As aptly commented by Aldrich (1979), environmental fit more likely arises due to luck – not deliberately planned actions.
The constant struggle for survival thus requires firms to remain lean and cost-effective in corporate functions. Accordingly, sustainable differentiation is regarded as elusive since it requires expensive investments and will eventually be undercut by other lean producers. Market is simply too efficient to preclude sustainability in this manner. Hannan and Freeman’s (1988) notion of ‘organizational ecology’ and Williamson’s (1975, 1991) focus on market and inter-organizational transaction costs are related to the Evolutionary line of argument.

Processual Approaches
Based on the notion of ‘bounded rationality’ (Cyert and March 1963), Processualists purport that cognitive limits placed on rational thinking substantially compromise the effectiveness of strategic planning, analysis and projection that rely on such thinking – thus limiting the role of Classicists’ ‘rational economic men’. The Processual school tends to focus on human behavior and micro-politics within the organization (see, for example, Pettigrew 1973) with individuals bargaining their way out to develop joint goals that often extend beyond mere profit maximization. Contrasting the Evolutionary perspective, it is believed that market is less ‘cruel’ and there is room for incremental improvement (Quinn 1980) and learning for corporations (Senge 1994). In essence, strategy is discovered in action at the operational level, and a ‘bottom-up’ strategic evolvement is more sensible. This forms an inextricable link between strategy formulation and implementation, which renders Classicists’ recommendation of their separation unrealistic.
The Processual school gained its popularity particularly in the 1990s when researchers proposed alternative arguments to highlight aspects of organizational behavior that were unsatisfactorily explained by Classical models. These include the now widely-known resource-based view (e.g. Wernefelt 1984, Grant 1991, Peteraf 1993) and Hamel and Prahalad’s (1994) theory of core competence.

Systemic View
The Systemic view has the most outward-looking nature in considering the external environment, especially political, regulatory, social and (non-corporate) cultural issues. Missions, goals and strategies are not purely owed to economic rationales, while people’s and organization’s economic behavior are influenced by the social systems that they are embedded (Granovetter 1985). As part of the social groups, firms are donned with other social responsibilities or even political agendas, as commonly observed for state-owned firms. To justify their presence, they ought to suit local criteria, cultural norms and social contexts which may be coterminous with the national agenda. By and large, the Systemic view still values planning but thinks the focus should be more externally oriented beyond the corporate boundary. Insights provided by the Systemic perspective help to explain behavioral differences between firms across various regions including ownership structure (e.g. dominance of the role of banks in German and Japanese firms) and their raison d’être (e.g. ...
increasing shareholders’ value versus preserving stakeholders’ welfare). These range from the studies of *chaebol* in South Korea and *keiretsu* in Japan, to the understanding of the institutional framework in China and the lively presence of small and medium enterprises in Taiwan. It is not hard to conclude that the Systemic view is the most diverse among the four as it is very contextual in nature.

**IMPLICATIONS OF THE FRAMEWORK**

With reference to Whittington’s framework, the four perspectives have different strengths and weaknesses in their application to study corporate strategy. Some of these points are summarized in Table 1 from the authors’ viewpoint.

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<th>Generic Perspectives</th>
<th>Strengths</th>
<th>Weaknesses</th>
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<td>Classical</td>
<td>• Objective assessment and methodology straightforward to apply&lt;br&gt;• Long-term concern conforms to corporate mission and overcome short-term, myopic views&lt;br&gt;• Analytical tools and theories are abundant especially from allied disciplines such as finance and economics</td>
<td>• Ignorance of ‘soft’ issues and internal mechanisms within firms&lt;br&gt;• Naïve separation of strategy formation and implementation&lt;br&gt;• Models generally do not apply to small organizations especially during the Internet era</td>
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<td>Evolutionary</td>
<td>• Enunciates the brutality of competitive and environmental forces which demands for constant strategy renewal</td>
<td>• Overly passive, indirectly challenging the intellectual foundation of academic theories and managerial functions&lt;br&gt;• Succumb to short-term view&lt;br&gt;• Ignorance of market complexity and heterogeneity</td>
</tr>
<tr>
<td>Processual</td>
<td>• Add a ‘human’ side to strategy&lt;br&gt;• Tackle ‘soft’ issues that are largely ignored by Classical theorists&lt;br&gt;• Enunciates the importance of internal mechanisms within firms</td>
<td>• Lack of control, transparency and objective measures to compare effectiveness of strategy adopted</td>
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<tr>
<td>Systemic</td>
<td>• Add the all-important external environmental factors to corporate strategy&lt;br&gt;• Provide intellectual linkages to explore the impact of public policies&lt;br&gt;• Provide plausible explanations on the impact of firms’ origins</td>
<td>• Primarily adopting a macro view point, relegating the importance of inter-company competition in certain industrial environment&lt;br&gt;• Needs to be complemented by studies of firms’ behavior especially for cross-border competition</td>
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Not surprisingly, contentions exist over the relative merits of each perspective or approach. The debate between Mintzberg (1990, 1991) and Ansoff (1991) on learning versus planning is one example, which radically stems from the differences between the Processual school of thought and the Classical approach. Even individual streams attract controversial views concerning their applicability to varying industrial contexts. In construction management, we have witnessed differences in opinions between Betts and Ofori (1992, 1993) and Fellows (1993) on the application of Porter’s (1980, 1985) analysis to construction.

Furthermore, the phenomenon of environmental demand shift reminds us about the dynamism of the real world and transitory effects. Characteristics that are plausibly explained using theories from a specific school of thought may not be valid after changes have taken place. In turn, a different perspective might have replaced previous arguments in providing new insights to the problem. For example, firm’s core competencies (a Processual thought) may turn into ‘core rigidities’ as observed in some multinational organizations (Bartlett and Ghoshal 1998). This phenomenon may be explained from an institutional (Systemic) standpoint which perceives longevity of resources as a sign of cumulative cognitive sunk costs (DiMaggio and Powell 1991) – when organizational inertia may now cause much harm in preventing a firm to react swiftly to the new environmental demand shift.

**STRATEGIC MANAGEMENT STUDIES OF THE CHINESE CONSTRUCTION INDUSTRY**

The real world is thus more complex than what could be analyzed through static reliance on a single field of theory. Whether it is Whittington’s four perspectives or Mintzberg’s ten schools of thought, the various theoretical fields within each classification framework should be viewed as complementary rather than mutually exclusive. For one, Oliver (1997) has combined both institutional and resource-based views to derive a series of interesting propositions concerning sustainable competitive advantage. An open mindset would thus go a long way in matching theories to circumstantial evolvement in the real world. This philosophical construct is even more appropriate in the case of the turbulent environment of the Chinese construction industry.

Kang et al (2004) proposed a structured top-down approach by segmenting the analysis of the Chinese construction industry into three levels: (1) China’s macroeconomic environment; (2) general factors of the construction industry; (3) detailed industrial structure and rivalry among firms. Although not explicitly shown in this setting, all three levels are inextricably linked to internal corporate issues as firms’ strategy formulation and implementation issues cannot be isolated from these external aspects.

**Macroeconomic Environment**

At the macroeconomic level, the business environment in China does not fare too positively when it is compared to either developed countries with a similar scale of GDP or other smaller developing countries, according to the Business Environment Report 2003 released by the Political & Economic Risk Consultancy Ltd in Hong Kong. For example, Kang et al suggested that poor legal and regulatory systems in China are primarily attributed to three aspects:

- Lack of a matured and developed system
- Excessive administrative procedures and diverse regulations, both among regions and levels of administrative hierarchy
• Lack of legal enforcement and supervision

Obviously, the situation is constantly changing since China’s accession to the WTO in 2001. In any case, it is suggested that issues at this level are most closely associated with the Systemic view.

**General Factors of the Construction Industry**

Kang *et al* also briefly studied six general factors related to the Chinese construction industry. These factors include demand (indicated by output growth), taxation, labour productivity, quality, industry fragmentation (indicated by number of enterprises within each region), and asset turnover. Using cross-sectional data of thirty-one geographical regions in China, statistical tests were conducted to examine the correlation between these factors and the average pre-tax profitability of construction enterprises as reported in the China Statistic Yearbook 2002. They found no statistically significant relationship (at 95% confidence level) between taxation/productivity/fragmentation/asset turnover and average profitability. Perhaps more surprisingly, they found a statistically significant negative correlation between quality control and average profitability – this controversial finding may be explained by the increased cost of maintaining good quality on one hand and the lack of premium granted by some clients to encourage high quality efforts on the other hand. Overall, the mixed findings at this level suggest that actions deriving from the Classical (e.g. plans to overcome fragmentation, increase turnover), Processual (e.g. core competencies in quality and productivity) and Systemic (e.g. “normalizing” impact of taxes across different regions) streams should be studied collectively before committing to the aggregate corporate strategy.

**Industrial Structure and Rivalry among Firms**

Studies dealing with industrial structure and firms’ rivalry are often filled with models that are developed by industrial economists, thus possessing a strong Classical flavour. Planning, analyzing, and strategizing go hand-in-hand, as manifested by game theory, Porter’s (1980, 1985) five forces model, market segmentation matrix and value chain analysis, corporate benchmarking, and many others. Application of these models to China’s context is problematic, or at least immature. The crux of the problem lies with their static nature, when only a snapshot of a scenario is taken, and the boundary and constraints are thereby frozen. Numerical measures are often sought to represent the picture so that they can serve as desirable input to the model, but these are hard to come by in a country that is still progressing to adopt a fully developed and open market system.

More successful studies to date have proclivities toward softer and intangible aspects such as organizational behavior that play a big part in China’s cultural and economic development. In a way, the most commonly studied topic at this level is probably the “guanxi” phenomenon. The basic form of guanxi involves reciprocal exchange of favours (Yang 1994). Establishment of guanxi from personal through inter-organizational levels essentially result in a network that helps to lower external dependence on key resources. This is particularly critical in the face of external uncertainty prevailing within the turbulent business environment in China. As Nohria and Eccles (1992) have noted even in the Western markets, network is important for resource and risk sharing, knowledge transfer, and legitimacy in the larger social context.

Externally, guanxi helps to reduce market transactional costs (Williamson 1975) – a reliable network not only lowers the searching costs, but also the risk premium that firms would otherwise factor in when dealing with parties at arms-length. For
example, exit strategy is limited in China since there are usually substantial hurdles in ownership transfer (Boisot and Child 1988). Guanxi eliminates some of these hurdles by finding the ‘right’ buyer and aligning the interests of the parties prior to the sale (e.g. buyer agreeing to retain majority of the staff to maintain social stability). Similarly, with informal ties forming across layers within an organization, guanxi also alleviates internal bureaucratic costs.

However, not all points about guanxi are necessarily positive. Guanxi can be inherently problematic as it produces an inertia that operates against implementing internal change to spur performance (Park and Luo 2001).

In summary, the third level again potentially absorbs insights from different theoretical fields. On the topic of guanxi alone, the cultural and social aspects are Systemic, the issue of market transaction costs has an Evolutionary origin, while the development of nexus within an organization is Processual in spirit.

Further Thoughts
Discussions in the previous sections centre upon the three levels of a top-down approach as defined by Kang et al and utilize Whittington’s four perspectives of strategic theories. The fact that these are merely referencing frameworks cannot be overemphasized. As strategy is dynamic, another researcher will adopt a different framework and approach to organize her arguments.

Sticking with the framework presented here for the Chinese construction industry, it is fair to comment that the current focus of market research and generic strategic management studies on China largely extends beyond the corporate boundary, therefore leaving the impression of a significant bias toward Systemic viewpoints. Obviously, the nature of these studies has been grounded on very pragmatic reasons:

(1) The fate of most enterprises in China is still broadly dictated by trends of economic development, political agenda, social baggage, cultural legacy etc. – all of which lie beyond the corporate walls (some may even argue whether such walls technically exist).

(2) Linked to the first, data and observations of individual firms are either difficult to obtain, unreliable, or not meaningful.

Nonetheless, one should not hasten to discard Western theories and practices, among which the Classical approaches may at first seem to be the most inapplicable. With China moving away from a centrally planned to a market-oriented economic system, the business environment will gradually resemble that of a matured, stable, and developed economy. This implies a less turbulent environmental setting that would render the use of Classical planning tools useful and relevant.

CONCLUSIONS
Strategic management thinking and its associated theories have been classified in different ways by its mainstream researchers. Its application to construction has been limited when most construction management researchers traditionally focus on project-level issues. This paper provides a brief overview of the strategic management regime. With reference to Whittington’s four perspectives, the strengths and weaknesses of each are discussed. These are subsequently linked to the context of the Chinese construction industry, where it is demonstrated that no single school of thought should totally dominate a specific area. The importance of flexibly matching theoretical insights with different industrial contexts during the course of corporate strategy development is evident. Construction management researchers venturing into industrial- and corporate-level studies related to the Chinese construction industry
should benefit by adopting an open mindset as both the industry and the country continue to evolve and mature.

REFERENCES


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