Corporate Culture in Construction Companies

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Abstract

Since the 1980's, research interests in the subject of corporate culture has increased as an important driver for organizational success (Kim 2008). Many corporations have begun to recognize the significance of having a corporate culture in order to increase productivity, growth, efficiency and to reduce employee turnover and other counterproductive behaviour. Nevertheless, there has been no previous research in regards to corporate culture in the construction industry. The purpose of this paper is to identify variables and components that categorize corporate cultures in the construction industry. A thorough literature review was performed first in order to identify the definitions and components of corporate culture in construction. The variables and types of corporate culture were then defined based on a literature review and interviews with industry managers. Finally, a structured survey was conducted with the top 30 Korean general contractors in order to validate the proposed model. Survey results clearly represented four distinct types of corporate culture, and provided a basis for future research in corporate culture for the construction industry.

Keywords: Corporate Culture, Components, Variables, Competing Value Model (CVM), and Construction Industry.

1. Introduction

Every single organization has a unique culture. The inherited and learned culture within a company is a way to represent the distinct characteristics of the corporation. Recently, corporate culture is recognized as the fifth managerial resource in addition to human, capital, materials, and information (Kim 2006). Corporate culture combines in-house members, determines their behavior, and influences management patterns. Corporate cultures also have a remarkable effect on corporation performance and provide tacit directions for decision-making (Lee 2006).

Therefore, corporations recognize the importance of corporate culture that has a significant impact on enterprise-wide operations. Corporations also systematically try to promote and develop existing corporate culture under ever-changing business environments (Cho 2007). Recently, the effects of corporate culture as a source of competition has increased in the growth and development of a corporation, according to the difference between companies which have a similar scale, type of business, and environment. It is noteworthy that

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flourishing corporations have a strong corporate culture. For these reasons, the issue of corporate culture is of great concern for researchers and practitioners. However most of the previous studies on corporate culture were only implemented from the academic aspect of management science and business administration. In this context, the purpose of this paper is to develop and analyze different patterns in corporate culture for the construction industry.

2. Background and Research Objectives

Despite growing interest in corporate culture, there has been no previous research on the construction industry. Moreover, corporate culture regards as only aspect of human relationship or welfare rather than enterprise-wide aspect in Korea. Research on corporate culture in the construction industry would facilitate to understand the patterns of construction business management. These researches can also provide companies with valuable implications for increasing managerial effectiveness through formulating clear objectives. The purpose of this paper is 1) to define the meaning of the corporate culture for the construction industry, 2) to identify its variables and components, and 3) to classify the types of corporate culture in the construction industry.

In this study, an extensive literature review was performed first in order to identify the variables and components of corporate culture in construction. A definition and types of corporate culture were then defined based on the literature review and interviews with industry managers. Finally, a structured survey was conducted with the top 30 Korean general contractors in order to validate the proposed model. The survey results clearly revealed distinct types of corporate culture for the Korean general contractors.

3. Corporate Culture in the Construction

In order to understand corporate culture in the construction industry, it is necessary to explore the fundamental meanings and components of corporate culture by reviewing the literature from the aspect of business administration and corporate management. Based on a thorough literature review, this paper defines four different categories of corporate culture for the construction industry including *'advanced technology', 'forced-growth', 'internal stability', and 'specialization'* as depicted in Figure 1. Five consequential components of corporate culture, including *'corporate culture', 'organizational structure', 'shared value', 'management pattern', and 'informal network'* are also identified in order to quantify the four patterns of corporate culture (Table 1).

3.1 Definition of Corporate Culture in Construction

Corporate culture differs from organizational climate or atmosphere; it is more complex and creative (Park 2004). The meaning of corporate culture can vary depending on different analytical perspectives or researcher's academic backgrounds. Based on the literature review with a strong emphasis on the distinct characteristics of the construction industry, corporate culture in construction is defined in this study as "*the shared values and beliefs among in-house members those affect the distinctions between other corporations in terms*

of corporate strategy, organizational structure, and management patterns of entire enterprise.

The components of corporate culture are also vary widely according to the different views of researchers; it has been formed over a long time by combining several relevant components rather than abruptly formed into single component (Lee 2006).

3.2 Pattern of Corporate Culture in Business Administration

Categorizing corporate culture requires comprehensiveness in order to encompass the overall characteristics of culture (Park 2004). The competing value model (CVM) is recently utilized to analyze the corporate culture, to classify the variables of organizational effectiveness (Quinn & Rohrbaugh 1981), and to apply the leadership and total quality management (TQM) concept (Kim 2002). Corporate culture based on the CVM is composed of the four different types along with two dimensions; "group culture, developmental culture, hierarchy culture, rational culture". The four types of corporate culture vary widely according to the different views of researchers. However each type of corporate culture have similar attribute. The first dimension (the horizontal axis in Fig 1a) is related to organizational focus, from an emphasis on internal to an emphasis on external. One end of this dimension represents a focus on integration and buffering to sustain the existing organization, while the other represents a focus on competition and interaction with the environment (Denison 1991). The second dimension (the vertical axis) is related to organizational structure, from an emphasis on stability to an emphasis on flexibility.

In the most often cited study by Quinn and Kimberly (1984), "group culture" in the upper left section places a great deal of emphasis on flexibility and internal focus. This culture concerns human relations and emphasizes cohesiveness and interaction through teamwork. The "developmental culture" in the upper right section places much emphasis on flexibility and external focus. This culture emphasizes growth, creativity, and adaptation to the external environment. The "hierarchy culture" in the lower left section places a lot of emphasis on control and internal focus. This culture emphasizes internal efficiency, uniformity, order, rules, and regulations. The "rational culture" in the lower right section places a great deal of emphasis on control and external focus. This culture emphasizes productivity, goal fulfillment, efficiency, and achievement (Quinn and Kimberly 1984).

3.3 Pattern of Corporate Culture in Construction

The fundamental objective in studies on corporate culture is to enhance long-term performance. These performances can be increased through active adaptation to the changing business environment and through continuous development of advisable corporate culture. These two processes should be closely linked in between strategy and structure (Shin 2008). Corporate culture in construction involves the existing types and means of corporate culture. Based on this rationale, this paper proposes four categories of corporate culture classified the by two dimensions for the construction industry; and include four categories, which are 'advanced technology', 'forced-growth', 'internal stability', and 'specialization' as depicted in Fig 1. The two dimensions are 'corporate strategy' and
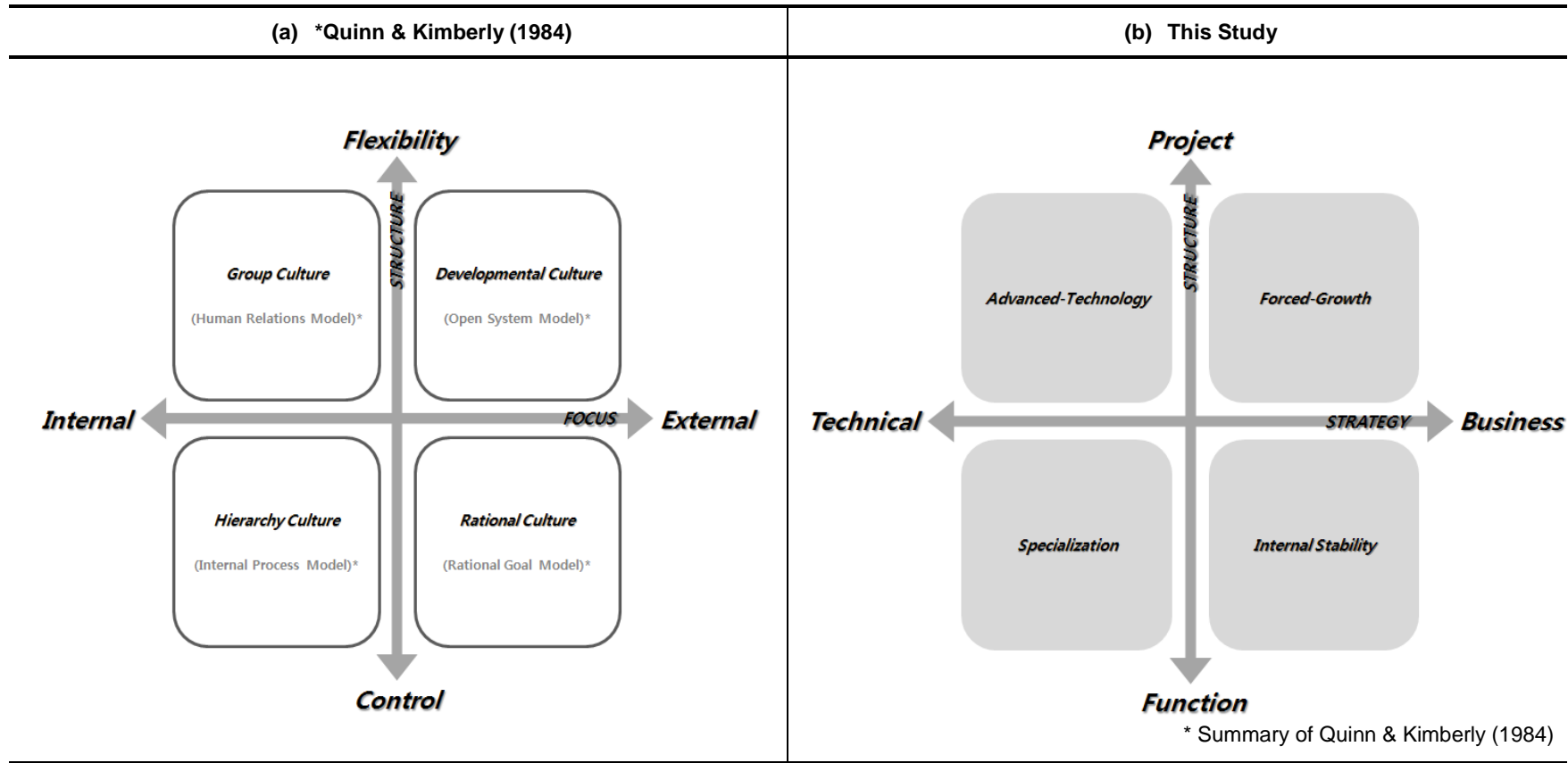
	(a) *Quinn & Kimberly (1984)	(b) This Study

(a) *Quinn & Kimberly (1984)

Flexibility

STRUCTURE

Group Culture

(Human Relations Model)*

Developmental Culture

(Open System Model)*

Internal ← → External   FOCUS

Hierarchy Culture

(Internal Process Model)*

Rational Culture

(Rational Goal Model)*

Control

(b) This Study

Project

STRUCTURE

Advanced-Technology

Forced-Growth

Technical ← → Business   STRATEGY

Specialization

Internal Stability

Function

* Summary of Quinn & Kimberly (1984)

Figure 1: Categories of Corporate Culture for the Construction Industry

Table 1. Components of Corporate Culture for the Construction Industry

	Component	Definition	Remarks
Tangible	Corporate strategy	Determination of directions for projects and enterprise-wide operations	Business-oriented
			Technical-oriented
	Organizational structure	Foundation for established strategy and interrelation of members	Project-oriented
			Function-oriented
Intangible	Shared value	Shared goals, beliefs of the in-house members	-
	Management pattern	Management skills by business functions of an organization	-
	Informal network	Informal means or processes of communication within an organization	-

Table 2. Variables and Measures of Corporate Culture for the Construction Industry

Component	Variables	Measures
Corporate strategy	Technical capability (Organizational)	Number of techniques (e.g. patent, officially listed new technology)
	Technical capability (Individual)	Number of professional qualifications / Number of entire staff
	Ratio of engineering staffs	Number of engineers / Number of entire staff
	Expenses for technical training	Training expenses per capita
Organizational structure	Sales per capita	Total revenue / Number of the entire staffs
	Distribution of Employees (HQ vs. Site)	Number of site employees / Number of entire staff
	Specialization of product	Deviation of specialization distribution

'organizational structure', which are selected from among five candidates for corporate culture components as listed in Table 1. The two dimensions are tangible and measurable in comparison with other corporate culture components.

The first dimension (the horizontal axis) is related to corporate strategy, from an emphasis on technical-oriented to an emphasis on business-oriented. This is not simply limited to strategy; it involves the meaning of "maintenance or competition" by Quinn & Kimberly (1984). The second dimension (the vertical axis) is related to organizational structure, from an emphasis on function-oriented (e.g. design, estimating, scheduling, etc.) to an emphasis on project-oriented. Again, this dimension is not simply limited to the distinction of the organization; it also implies the "control or flexibility" of the actual organizational structure by Quinn & Kimberly (1984).

The culture of 'advanced technology' in the upper left section places a great deal of emphasis on project-oriented and technical-oriented. The 'forced-growth' in the upper right section places much emphasis on project-oriented and business-oriented. The 'specialization', in the lower left section places a lot of emphasis on function-oriented and technical-oriented. Finally, the 'internal stability' in the lower right section places a great deal of emphasis on function-oriented and business-oriented.

3.4 Variables for Categorizing Corporate Culture in Construction

As four categories with two dimensions of corporate culture for the construction industry were classified, variables for each dimension were then identified and elaborated. The 'Corporate strategy' dimension (the horizontal axis) consists of organizational 'technical capability of organization', 'technical capability of individuals', 'ratio of engineering staff', and 'expenses for technical training'. As the scores for these variables were higher, corporate strategy is closed as technical-oriented rather than business-oriented. The variables of organizational structure (the vertical axis) include three factors; it consists of sales per capita, distribution of employees, and specialization of product. As the scores of sales per capita and number of site employees are higher and the scores of specialization of product is lower, organizational structure is closed project-oriented rather than function-oriented. The variables and measures to evaluate these two dimensions for categorizing corporate culture are defined in Table 2.

4. Case Study with Korean General Contractors

A structured survey was conducted with the top 30 Korean general contractors in order to validate the proposed model. More than 30% (10 corporations) of the questionnaires were returned. The scores of variables were normalized first; where 100 is the exact median and average. Fig 2 shows the distributions of 'corporate strategy' and 'organizational structure' scores from the responding corporations. As the score in graph is higher, corporate strategy (Fig 2a) is close to technical-oriented and organizational structure is close to project-oriented (Fig 2b). By combining these two dimensions, the types of corporate culture for the Korean contractors are clearly categorized as shown in Fig 3.
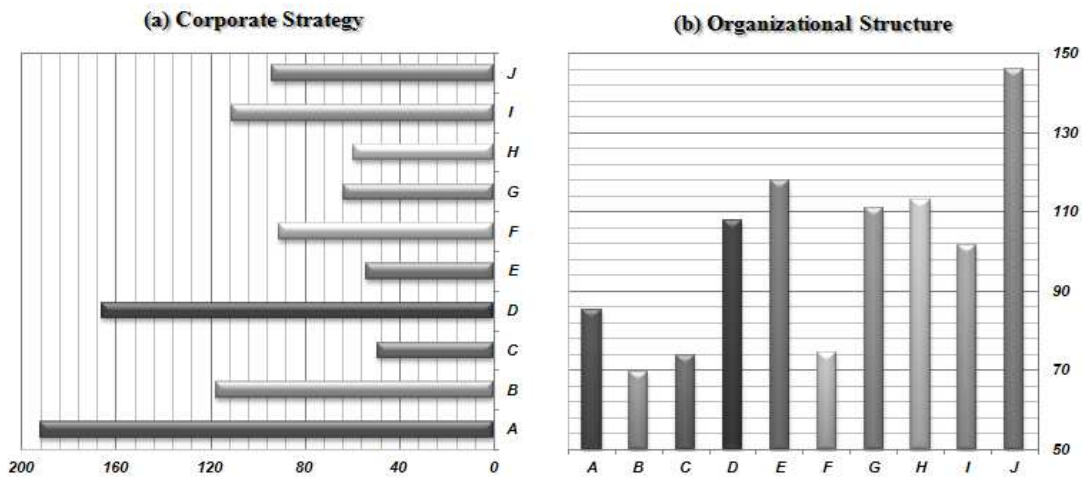
Fig 2. Survey Results from 10 Responding Companies

For classifying the 'corporate strategy' in corporate culture, the most influencing item among the four variables in Table 2 were 'organizational technical capability' and 'expenses for technical training'. For classifying the 'organizational structure', influencing variables among the three variables were the 'specialization of product' and 'distribution of employees'. As results from the survey show, companies with a similar pattern can be categorized into four groups as depicted in Fig. 3. As for D company belonging to 'advanced technology' group, the score for 'specialization of product' and 'distribution of employees' are both higher than other companies. This means that the companies positioned in the upper-left quadrant (advanced technology group) in Fig 3 are flexible and project-oriented in terms of 'organizational structure'. The company also has higher scores for the 'technical capability' and 'expenses for technical training'.
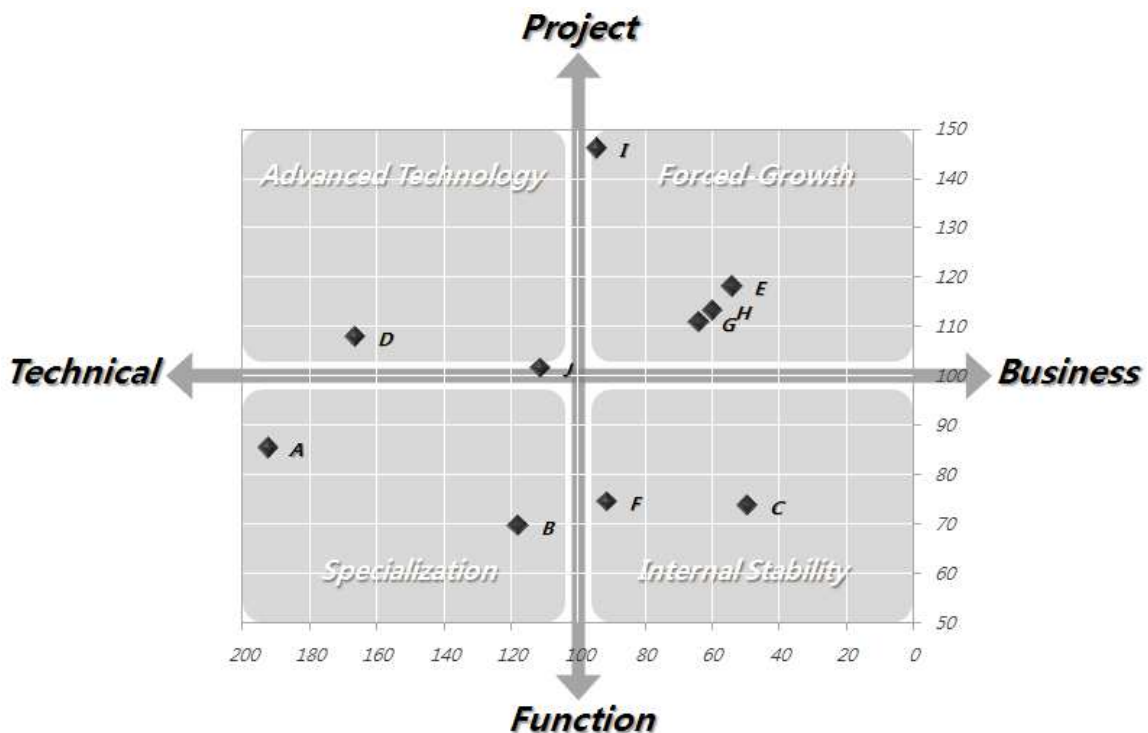

Fig 3. Categorizing Corporate Culture of General Contractors

Companies in the '*specialization*' group have relatively larger functional organization in their head offices in order to be a specialized firm. It is found that companies in this quadrant also ranked high scores in technical variables. In other words, specialized companies have more patents, in-house developed new technologies, and higher expenditures for technical training. Companies in the upper-left quadrant (forced-growth) are focusing diversified portfolio encompassing housing, buildings, industrial plant, and infrastructure civil construction. A higher ratio of site engineers is a distinct characteristic of this group. Finally, the lower-left quadrant (internal stability) is the group where rationality is emphasized in both organizational structure and corporate strategy.

5. Conclusion

Each construction corporation has unique and easily recognizable culture; these cultures have a direct impact on the project and affect the performance of the corporation. Despite growing interest in corporate culture, no previous research was performed for the construction industry. In this context, the definitions and components of corporate culture were identified in this study in order to vitalize the corporate culture for the construction industry. This paper defines the five components of corporate culture as that of 'corporate strategy, organizational structure, shared values, management pattern, and informal network'.

The types of corporate culture for the construction industry are classified by two dimensions; the first dimension (the horizontal axis) is related to corporate strategy, the second dimension (the vertical axis) is related to organizational structure. This paper developed four different types of corporate culture for the construction industry that included '*advanced technology', 'forced-growth', 'internal stability', and 'specialization'*. The variables effectively illustrate different categories of corporate culture in construction companies.

The survey results provide distinct groups of corporate cultures for the Korean general contractors. The most influencing variables are found to be the 'organizational technical capability' and 'expenses for technical training' in corporate strategy and the 'specialization of product' in organizational structure.

The authors of this paper believe that categorizing the types of corporate culture needs to be strongly encouraged in order to accelerate future practical corporate culture studies for the construction industry. Additional variables such as types of the CEO and sister companies were also studied and are now under evaluation. These findings would facilitate to understand the patterns of construction engineering and business management.

6. Acknowledgements

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