APPLICABILITY OF CULTURE PROFILE ON CONSTRUCTION ORGANIZATION

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While dealing with quality and unhealthy competition practices at national level, adaptation of Indonesian construction companies' effectiveness strongly depends on the nature of the corporate culture. The purpose of this paper is to determine the current and preferred culture profiles of sample construction companies in Indonesia. The research has been conducted using the Organizational Culture Assessment Instrument (OCAI) in the construction companies located in North Sulawesi Province. The findings show that, on average, the sample contractors currently function with domination of the Market type of culture, while Clan has been identified as the preferred culture. A matrix has been developed with respect to the applicability of culture profiles as it relates to organizational leadership, organizational effectiveness, human resources management roles, and quality strategies of the respondents' companies. The value of the paper is the novelty of findings regarding the existing and preferred culture profiles, which have the potential to strengthen competitive capabilities, employees' motivation, and customers' needs among the construction companies, and effectiveness of the contractors' performance in the country with rich national culture. These findings should help reinforce the need for Indonesian contractors to end current bad practices, and gain benefits from the values of dominant culture profile as to become a reputable construction industry.

Keywords: *OCAI, Competing Values Framework, Culture Profile, Indonesia.*

1 INTRODUCTION

Current research in culture in construction has revealed the roles of organizational culture that can improve contractors' effectiveness performance (Coffey 2010, Cheung et al. 2011, Nukic and Huemann 2016, Willar et al. 2016). The culture factors, which are integrated into organizational management and policies, play a major role in determining how effectively construction companies operate their business entities. Nevertheless, understanding and measuring the culture of the construction industry is not an easy task (Tijhuis and Fellows 2012). This perspective is equally applicable in the Indonesian scenario, especially while dealing with quality and unhealthy competition practices at national level and tight competition at global markets.

The study of organizational culture in Indonesian construction companies having been done before has been focused on the existing culture profiles of the contractors, which suggest that a Clan typical of a family-type organization is the dominant cultural character within the construction companies (Willar et al. 2016). This current study emphasizes the determination of the current and preferred culture profiles of the sample construction companies in Indonesia, together with finding out whether there has been a culture profile change on the same respondents within a period of six years, while suggesting other aspects of organizations in addition to culture values based on Competing Values Model.

2   CULTURE IN CONSTRUCTION INDUSTRY

By adopting definitions from a number of sources, Coffey (2005, 94) writing specifically about the culture of construction companies, adopts the following definition: "the informal shared values, norms and beliefs that control how individuals and groups in organizations consistently perform tasks, solve problems, resolve conflicts and interact with each other and with others outside the organization." More recently, Tijhuis and Fellows (2012) define the nature of culture in international construction as not being a matter of concerning particular individuals, but something that relates to and concerns groups of people in which the development of culture spirals through time by shaping behaviour which, in turn, shapes culture. Pertaining to the study of culture in construction industry, Willar (2012) defines 'organizational culture' as the shared values and underlying assumptions within the construction organization, which allow the organization to operate effectively.

2.1   Culture Change

With regard to 'culture change' in the construction organization in order to effectively implement quality management system, Low and Teo (2004) point out that the transformation of processes, strategies and beliefs of an organization is needed and this needs to be facilitated by key personnel (McCabe 1998). Yip Robin and Poon (2009) make an additional point that changes in attitudes and practices can be implemented by transforming mind-sets and actions. While Numellin (2006) states that culture change is not just about adopting new systems and methods, but also requires changes in underlying assumptions and values, hence organizational culture; this does not happen easily.

It is commonly argued that the emphasis on making culture change in construction organizations should be due to pressure both from internal and external factors. Tijhuis and Fellows (2012) have commented that in a competitive business environment especially when entering new markets, there is pressure for culture change. An example of this is provided in the Indonesian highway corporation, Jasa Marga, which initiated organizational culture changes in response to technological developments, social and political pressures, and tight market competition (Susanto 2008). Another example of reasons to undertake change is presented by van Marrewijk (2007) who states that a culture in a large infrastructure projects needs to be developed to reflect decision-making processes and uncertainty.

2.2   Culture-performance Relationships

There has been a growing body of literature since the 1990s that has examined organizational culture and its links to different aspects of organizational management and practices. Handy (1993) notes that the customs and traditions of a place are powerful in influencing people's behaviour. Moreover, contemporary studies link organizational culture to the following: innovation (Tijhuis 2010, Abiola Falemu et al. 2010), effectiveness and performance of the organization (Liu et al. 2006, Zheng et al. 2009, Coffey 2010), sustainability in construction (Yip Robin and Poon 2009), which, will be in turn, are the most important element of competitiveness (Cameron and Quinn 2006), and to implementation of quality management systems (Irani et al. 2004, Nummelin 2006, Koh and Low 2008).

In the study of organizational culture and quality management system (QMS) implementation in Indonesian construction companies (Willar et al. 2016), it is found that two different culture profiles, Hierarchy and Market types, have a significant influence on the implementation of

QMS-ISO 9001:2008, with the implementation of the QMS being significantly higher in the Hierarchy type, while in the culture climate relating to the management of employees, the implementation of the QMS was significantly higher in the Market culture. This will then advantage the company in setting up appropriate culture changes from a 'now' Clan culture to a 'future' hybrid Hierarchy-Market culture. As a pragmatic approach, this would be the best-fit culture profile for Indonesian construction companies to effectively implement their QMS and achieve optimal business performance.

3   RESEARCH METHODS

The respondents to the questionnaire for this study were drawn from 19 construction companies in North Sulawesi Province, listed as the largest scale contractors (B2), large scale contractors (B1) and medium scale contractors (M2 and M1). In all, 65 individual respondents who are in the positions as managers, engineers and administratives, provide their answers and thoughts regarding the values and methods of works within their companies. These groups of respondents represented operative management level to decision making management level.

Using the Organizational Culture Assessment Instrument (OCAI) questionnaire, a respondent rated a set of statements that relate to six cultural dimensions, i.e., dominant characteristics, organizational leadership, management of employees, organizational 'glue', strategic emphasis, and criteria of success; the rating level is based on whether these dimensions are similar (or not) with the current situation in a respondent's company and what they prefer to be in the future. This instrument is used to identify the most closely fitted type of culture for the company, i.e., whether it is predominantly a Hierarchy, Market, Clan, or Adhocracy culture. The OCAI model of Cameron and Quinn (2006), is chosen for use as the primary instrument for the collection and interpretation of data for identifying and analysing the organizational culture profiles of Indonesian contractors, since its various indicators constitute the criteria that represent a comprehensive set of all possible measures for organizational effectiveness.

4   RESULTS AND DISCUSSIONS

The core results of this study is analyzed according to the perspectives proposed by Cameron and Quinn's OCAI – CVF model. As seen in Table 1, there are overall culture profiles of the sample construction companies and within the six cultural dimensions, indicating current culture types and culture types that are preferred for the future.

The findings indicate that the current most dominant organizational culture of the sample is Market (36.84%). This is the dominant culture for results-oriented organisations, in which people are pushed to be competitive and productive in a hard-driven and demanding work environment, in which leadership is based on achievement style. 'Winning the competition' is the main criteria for being successful. This finding is different from the research data undertaken on the same respondents in 2010, where most companies were characterized by a Clan type of culture. The change from Clan to Market culture within a period of six years indicates that the companies have started to sufficiently respond to the hard-driving competitive environment. Market identifiable culture also exists in the Finnish contractors (Nummelin 2006), and as a representation type of culture of general world contractors (Cameron and Quinn 2006).

However, the analysis identified Clan (47.37%) as being the most preferred dominant culture type by most of the sample respondents. This is similar to a family-type organisation, because people share values, goals, cohesion, participation and individuality. Leaders and employees are bonded by a strong commitment. The strong characteristic of this culture is that all work is done by the 'team'. Customers are seen as partners, and human resources development and

empowerment are seen as key factors for success. It appears that the Clan culture characters – focused on human factors - are still visible and being concerned through time by the sample contractors. The clan type is also in compliance with the Hong Kongers contractors (Cheng 2005), and as a mixture Clan-Hierarchy culture of Turkish contractors (Oney-Yazici 2007) and Chinese contractors (Zhang and Liu, 2006).

Table 1 also shows the results in the six dimensions of culture. In the current dominant organizational culture, the Adhocracy (52.63%) was most possessed considering the dominant cultural character. The Hierarchy was most emphazised in the leadership style (47.37%) and how employees are managed (36.84%). The Clan (42.10%) was most possessed in bonding mechanisms that hold the organization together. The Market was most possessed in the strategic emphases (52.63%) and the criteria of success (36.84%). For the future, the preferred cultures were, the Market as the dominant cultural character is like (47.37), the character that hold the organization together (47.37%), and the strategic emphases (52.63%). The Clan was most possessed in the managment of employees (36.84%) and how victory is defined (36.84%). Only in the leadership style (47.37), the Adhocracy was most possessed.

Table 1. Dominant organizational culture dimensions of the respondents.

Dimensions of culture	Now – *n* (%)				Preferred – *n* (%)			
	Clan	**Adhocracy**	**Market**	**Hierarchy**	**Clan**	**Adhocracy**	**Market**	**Hierarchy**
Dominant characteristics	4 (21.05)	**10** **(52.63)**	5 (26.31)	-	3 (15.78)	7 (36.84)	**9** **(47.36)**	-
Organizational leadership	2 (10.52)	6 (31.57)	2 (10.52)	**9** **(47.36)**	2 (10.52)	**9** **(47.36)**	4 (21.05)	4 (21.05)
Management of employees	4 (21.05)	3 (15.78)	5 (26.31)	**7** **(36.84)**	**7** **(36.84)**	1 (5.26)	6 (31.57)	5 (26.31)
Organizational glue	**8** **(42.10)**	3 (15.78)	7 (36.84)	1 (5.26)	7 (36.84)	2 (10.52)	**9** **(47.36)**	1 (5.26)
Strategic emphases	2 (10.52)	4 (21.05)	**10** **(52.63)**	3 (15.78)	2 (10.52)	6 (31.57)	**10** **(52.63)**	1 (5.26)
Criteria of success	3 (15.78)	1 (5.26)	**8** **(42.10)**	7 (36.84)	**7** **(36.84)**	3 (15.78)	6 (31.57)	3 (15.78)
Culture profile	5 (26.31)	3 (15.78)	**7** **(36.84)**	4 (21.05)	**9** **(47.36)**	4 (21.05)	6 (31.57)	-

Two different culture profiles, Market and Clan types are most dominant considered by the construction companies in North Sulawesi Province, Indonesia. The Market and Clan cultures are therefore proposed as the best-fit models of culture profiles for driving the quality performance and competitiveness of the construction companies. The Market profile was highlighted in relation to the company's strategies for gainning global projects markets, while the Clan profile was highlighted in relation to the management of employees, this culture type is also an important driver for all organisational processes within a construction company, since all processes involve individuals and/or groups of employees. Rameezdeen and Gunarathna (2003) state that management style of leaders need to be part of the dominant culture type within any organisation.

In order to utilize the culture traits and typologies of Market and Clan cultures as the culture drivers, there has been a matrix outlining the applicability of the culture profile within the areas of organisational leadership, organisational effectiveness, quality strategies, and human resource management roles. The values and attributes of the applicability of Market-Clan culture, are considered to be an organization's quality strategy, to strengthen competitive capabilities, employees' motivation, and customers' needs among the constructions' corporation, and effectiveness of the contractors' performance in the country with rich national culture. The

applicability matrix of the Market-Clan profile in relation to the four organisational areas, is illustrated in Figure 1.
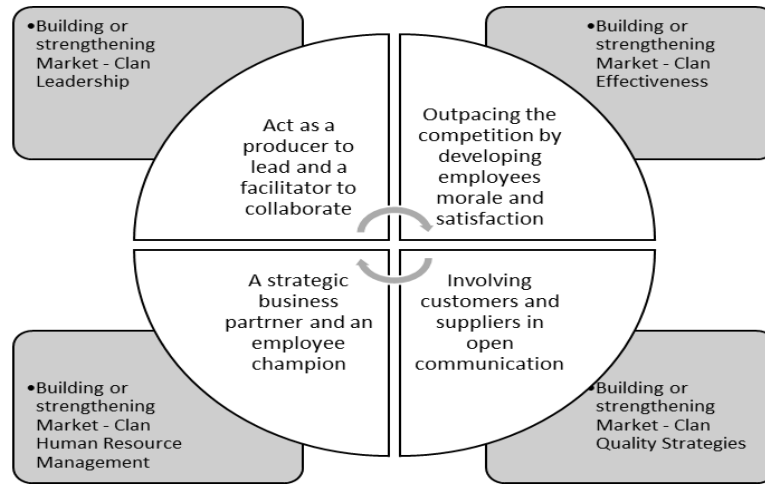

Figure 1. Applicability matrix of Market – Clan culture profile (Source: Cameron and Quinn 2011)

5   CONCLUSION

The aim of the study was to determine the current and preferred culture profiles of sample construction companies in Indonesia, by using Cameron and Quinn's OCAI-CVF. Currently, most of the construction companies have a dominant Market culture type. In fact, there has been a culture change in the sample companies from family-type organizations of Clan to results-oriented organizations of Market culture within a period of six years. With regard to tight competition that has been involving foreign construction companies in the national market, it is good that practically the traits and typologies of Market culture is being visible in the construction organizations. However, in the quest to find the preferred organizational culture type of the sample construction companies, the results indicate that a Clan cultural profile would be more appropriate; concerning human factors that could be stated as the nature of culture in Indonesian construction companies. Additionally, typical of Clan and Market cultures have dominated the cultural dimensions of organizational glue, strategic emphases, and criteria of success. Ultimately, an applicability of Market–Clan culture profiles has been proposed as a strategic culture profile to create a hard competitive workplace while still respecting each other.

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