



A framework for assessing organisational culture of Chinese construction enterprises

Assessing
organisational
culture

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Abstract

Purpose – In recent years, China is exerting effort to improve the performance effectiveness of its construction industry. This paper aims to report a preliminary study on organisational culture of five selected construction enterprises from different geographical locations in China and to discuss a framework for developing effectiveness measurement criteria for Chinese construction enterprises.

Design/methodology/approach – The research approach focuses on the culture profiles of the selected enterprises which have similar size, number of employees, general reputation (in terms of quality of construction), business type (building works) and tax bracket. The measuring instrument of organisational culture is adopted from previous tested research.

Findings – It is found that the hierarchy culture is dominant in four cases; Shantou in the Special Economic Zone is the exception. The Shantou enterprise has a market culture and Shantou was one of the first regions to embark on economic reform. Further analysis is required of the spread of the culture profiles in terms of geographical regions and developmental stages of the construction enterprises in China.

Originality/value – The result of the five case studies is indicative of the presence of the dichotomy in hierarchy – market culture dominance. Evaluation of operational effectiveness of such organisations must depend on their developmental stages in line with their stated objectives, and a framework for effectiveness measurement is proposed.

Keywords Competitive strategy, Culture, Organizational effectiveness, Construction industry, China

Paper type Research paper

Introduction

Researchers have developed various criteria for organisational assessment to compare and evaluate the effects of development efforts and to determine what characteristics of organisations (such as culture) are causal of organisational effectiveness (e.g. Campbell, 1977; Milgate, 2004). Assessment of effectiveness is seen to reflect one of two

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distinct emphases: survival and goal attainment. From the first perspective, the organisation is effective if it maintains an inflow of essential resources from its environment; then, effectiveness concerns problems of relations with the environment and, particularly, managing the environment in terms of outflows for which there is adequate demand. The second perspective refers to the more classical view of goal attainment. An organisation is effective if it meets or surpasses its goals; often, this means meeting the goals of dominant coalitions within the organisation.

The contractors in China, commonly known as “construction enterprises”, have undergone rapid development in the wake of China’s economic growth and investment expansion. In recent years, government departments are exerting effort to improve the performance effectiveness of the Chinese construction industry by formulating laws, regulations, policies and guidelines to modernise the construction market. For instance, some guidelines focus on analysing the environment to formulate business strategies (Zhu and Dong, 2002); other researchers propose that the construction enterprises should establish sound project management systems (Tang and Cheng, 2001) and review their organisational structures (Yao and Shi, 1998; Chen, 2001). Further suggestions include attention to human resources development (Li, 2001) and wider application of IT to enhance the enterprises’ performance effectiveness (Cong and Hu, 2001). However, many construction enterprises, though ostensibly similar in terms of environment, technology and structure, still differ greatly in performance effectiveness.

As Hofstede (1993, p. 82) states that a number of management theories may not, or only very partly apply, outside the borders of their countries of origin, it is suggested that “different managers and cultures may use different accents”. Hence, for construction enterprises, their organisation culture needs to be investigated in order to enrich the application of appropriate management theories in organisational effectiveness studies. This paper aims to report a preliminary study on organisational culture of five selected construction enterprises from different geographical locations in China and to discuss a framework for developing effectiveness measurement criteria for Chinese construction enterprises.

Culture studies

Organisational culture is gaining support as a predictive and explanatory construct in organisation science. Most of the early work in organisational culture flourished in the fields of anthropology, sociology and organisational psychology. Authors maintain that organisational culture, or parts of it, might be managed, controlled and intentionally changed (Peters and Waterman, 1982), i.e. use culture as a “tool” of management. For instance, Ott (1989) claims that organisational culture provides an emotional sense of involvement and commitment to organisational values and moral codes and strongly affects employee performance and, ultimately, organisational effectiveness.

Under the unifying head of organisational culture is a rich mixture of ideas, theories and frameworks principally from other intellectual traditions, notably anthropology and sociology. For instance, in anthropology, culture is the “complex whole which includes knowledge, beliefs, art, moral, law, custom and any other capabilities and habits acquired by man as a member of society” (Brown, 1998, p. 4). Also broad and direct is the influence of sociology on the study of organisational culture. The features

of organisations, identified by sociologists, such as informal norms, folkways, ambiguity, are all central to the current interest in organisation culture.

According to some scholars (e.g. Denison, 1990; Brown, 1998; Schneider, 2000), the interest in organisational culture also partly developed from the work on organisational climate studies in the 1970s, which referred to the attitudes held by employees about their organisations. As Pettigrew (1990) noted, while culture scholars have been absorbed in trying to decide what culture is, climate researchers have gone out and measured it.

Schneider and Reichers (1990) argue that organisational culture research in the realm of management is going through the stage of evaluation and augmentation where numerous critical reviews examining the concept are published and the clarification and specification of culture as an organisational construct is not well developed in the literature. For instance, there are two anthropological views (Sathe, 1983) in which one perceives culture as observed patterns of behaviour that are exhibited by members of a community (therefore culture is situated outside the individual and is considered as something that is directly observable within the organisation) and the other explains culture as that which is shared in the members' minds, sometimes including the invisible, unstated parts of culture.

In general, it is agreed that organisational culture:

- is a multi-faceted construct (Pettigrew, 1979);
- reflects customary thinking, feeling, and acting that is attributed to a particular group of people as they learn to cope with their environment (Ouchi, 1981; Deal and Kennedy, 1982; Trompenaars and Hampden-Turner, 2000) and involving cognition, affect and behaviour (Ott, 1989);
- is both learned and transmitted (Schein, 1985); and
- is an abstraction from behaviour as well as a product of behaviour (Davis, 1985; Quinn, 1988), this does not provide enough detail for accurate measurement of organisational "culture".

Others have developed cultural dimensions in the conceptualisation of culture types (e.g. Ansari *et al.*, 1982; Hofstede *et al.*, 1990; Chatman and Jehn, 1994).

Hence, there are two basic approaches to studying organisational culture, the typological approach (cultural types) and the trait approach (cultural dimensions). As in the case of conceptualisation of culture, there is little agreement on the way to categorise cultural types. Wallach (1983) develops a useful and measurable typology of culture where three types of organisational culture are distinguished: bureaucratic, innovative and supportive culture. Other categorisation are available (see, e.g. Deal and Kennedy, 1982; Hood and Koberg, 1991; Quinn, 1988) from the domains of risk taking and feedback to centralisation and decentralisation of power. Apart from the conceptualisation of types of culture, there have also been various studies in the dimensions of culture from different perspectives such as socio-psychological (e.g. Ansari *et al.*, 1982), technological (e.g. Chatman and Jehn, 1994) and socio-structural (e.g. Reynolds, 1986; Hofstede *et al.*, 1990). It is found that career success and satisfaction is a function of the fit of a manager's personal orientation with culture in the organisation (Ansari *et al.*, 1982) and that culture can be measured as a multidimensional set of values and practices embraced by the organisation (Hofstede

et al., 1990). Other examples include the models on six dimensions from Bate (1984) of unemotionality, depersonisation, subordination, conservatism, isolationism and antipathy; two dimensions from Albert and Whetten (1985) of holographic and ideographic; three dimensions from Cooke and Lafferty (1987) of constructive, passive/defensive and aggressive/defensive; four dimensions from Denison and Mishra (1995) of involvement, consistency, adaptability and mission; five dimensions from Marcoulides and Heck (1993) of organisational structure, organisational values, task organisation, organisational climate and employee attitudes; ten dimensions from Ashkanasy *et al.* (2000) of leadership, structure, innovation, job performance, planning, communication, environment, humanistic workplace, development of individual and socialisation on entry.

According to Trompenaars and Hampden-Turner (2000), each of us has developed ways of organising our experience to mean something, i.e. a phenomenological approach whereby people perceive (and make sense of) phenomena around them. This phenomenological approach contrasts the traditional studies which are based on the physical, verifiable characteristics of organisations giving a common definition for all people, everywhere, at all times. Hence, researchers in organisational culture look for consistent ways in which cultures affect the perceptions of what people experience.

Effectiveness studies

Assessing organisational effectiveness involves multiple goals and constraints. Organisations are effective if relevant constraints can be satisfied and if organisational results (performance evaluation) approximate or exceed a set of referents (targets) for multiple goals (Pennings and Goodman, 1977; Liu, 1999). Effectiveness evaluation is, therefore, a relative activity, e.g. the closer the organisation approximates (or exceeds) the referent in the goal, the greater the effectiveness.

Assessment is often a value judgement exercise. From modern management perspectives, effectiveness is a function of both the values of the user and the facts of organisational life (see early literature such as Campbell, 1977). Hence, the value judgement concerning what goals the organisations should adopt, and the process by which that judgement is made, can lead to widely differing methods of assessing organisational effectiveness. Often, an organisation can be effective or ineffective on a number of different dimensions/metrics which may be variably independent of one another, hence, organisational effectiveness, as an underlying construct, must have sufficient operational definition to identify the interrelated variables.

There are two approaches in conducting effectiveness studies, the goal-oriented approach and the natural systems approach. The goal-oriented approach makes an explicit assumption that the organisation is in the hands of a group of rational decision makers who have in mind a set of goals that they wish to achieve. Further, these goals are few enough in number to be manageable and so, it is possible to plan the best management strategies for attaining them. Within this orientation, criteria measures are developed to assess to what extents the goals are achieved. Some examples of the goal-oriented model of effectiveness are the industrial/organisational psychology criterion models which employ multivariate analysis of data collected from a large number of observations; and cost benefit analysis (CBA) which develops an "achievement standard" against which the cost benefit ratio of an existing course of action could be compared.

The natural systems approach makes the assumption that the demands placed on an organisation are so dynamic and complex that it is not possible to define a finite number of organisational goals in any meaningful way. Rather, the organisation adopts the overall goal of maintaining its viability, or existence through time, without depleting its environment. Thus, an organisation's effectiveness is determined by whether it is internally consistent, whether its resources are being distributed over a wide variety of coping mechanisms judiciously, and whether it is consuming its resources faster than it should.

To assess effectiveness, the goal-oriented approach requires the principal power centres (dominant coalition) in the organisation to state their objectives. Once the goals are defined, criterion variables are developed to measure goal attainment. Goals are not criteria. A goal is a desired end state and a criterion is an operationalised continuum representing the degree to which the desired end state is being met. The natural systems analysis focuses on the degree of conflict among work groups, the nature of communications, the percentage of jobs that are filled by people with the appropriate skill levels, the job satisfaction of the employees and the like. The analysis is concerned with the overall viability and strength of the system equipped with some a priori notions of the characteristics of a strong system and centres on investigation of those characteristics. Some examples of the systems model of effectiveness are:

- the operations research (OR) approach which uses multiple models to represent different parts of the system and considers only those variables that appear to be related to a readily measured criterion outcome directly, and that can be manipulated by management, i.e. OR methods are aimed at the control problem of organisations rather than the humanisation problems;
- the organisational development (OD) models which are concerned with the human resources of an organisation, new forms and methods of organising; and
- the Likert model (Likert, 1967) in which the basic variable (in system 4) is the degree to which subordinates participate in making the decisions that affected them.

Ideally, the two analytic approaches should converge, i.e. the goal-oriented analysis seeking to explain the organisation's success or lack of success in meeting its goals will develop a need to investigate the system variables which are mostly focused on people. The natural systems analysis will have to identify the tasks on which performance should be assessed to determine how various system characteristics affect task performance. Since organisational assessment is dependent on value judgements; subjectivity in such judgements cannot be eliminated entirely. The value judgements are based not only on the individual's personality and experience but also on the cultural background.

Hofstede (1980, 2001) and others (Evans *et al.*, 1989; Lachman *et al.*, 1994; Limaye and Victor, 1991) have studied the transferability of culture between different countries but more room should be allowed for the inclusion of value judgement exercise – an important aspect of culture (Winch, 1990; Garfinkel, 1984). It is argued, therefore, that the assessment of operational effectiveness of organisations in China should be set against the values inherent in their culture. To facilitate such an evaluation, a framework must be established for further development of assessment criteria.

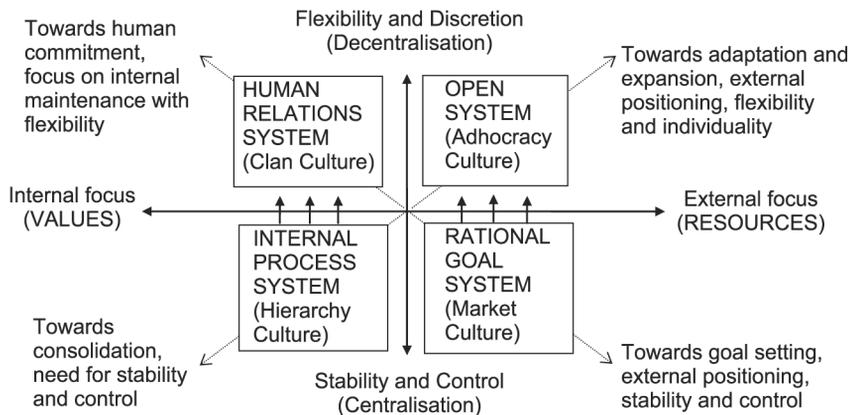
Towards an assessment framework

Since there are various ways to procure construction projects, the question of “how to organise” is fundamental to the issue of effectiveness. Any construction enterprise has to consider resource allocation and interests judgements (each individual has an unconscious set of values). The systems approach views effectiveness as the ability to acquire scarce resources that enables the organisation to survive and preserve its integrity. The goal approach views effectiveness as the degree to which the organisation attains ideal end states. The systems approach emphasises functional complementarity among the parts of an organisation and stresses the need for maintenance; the goal approach sees organisations as rational systems that enable the various parties involved to accomplish certain objectives. Theoretically, the systems approach (Kast and Rosenzweig, 1972) emphasises adequate resources to avoid undue strain on the system and the goal approach (Cyert and March, 1963) stresses the preferences of interest groups. The dominant coalition proposed by Pennings and Goodman (1977) incorporates both the systems view and the goal approach to combine the open systems notion of complex organisations with the assumption that organisations represent a political arena of different interest groups:

- organisations are seen as open systems having exchange relationships with their environment and with subsystems that render a contribution to the whole and to each other;
- organisations also comprise internal interest groups, or constituencies, with members that share distinct values and interests who make claims on the organisation; and
- the dominant coalition comprises a direct and indirect representation or cross-section of horizontal constituencies (subunits or departments) and vertical constituencies (employees, management, owners) with different and, possibly, competing expectations and values.

Knox (1992) argues that the major goals for any pursuit of organisational effectiveness/performance are to ultimately aid in improving performance and productivity. Although research in this field takes different perspectives, the research focus has been shifting to the organisational culture paradigm in the past 20 years with a strong belief held by scholars, as well as by practitioners, that the effectiveness of organisations is attributable, at least in part, to organisational culture. Because expectations and values tend to be implicit, most individuals are unaware of their possessing an ideal set of preferences about organising, nor are they aware that there may be advantages to be gained in having directly opposite preferences. The contradictory nature of values led Quinn (1988) to develop a competing values model for studying organisational effectiveness and organisational culture. The two factors of resources (external focus) and values (internal focus) in a context of organisational development over time give rise to the framework (developed from Quinn, 1988; Cameron and Quinn, 1999) adapted for assessment of China’s construction enterprises in Figure 1.

Given a transition period from a command to a (socialist) market economy in China, the two interesting conflicting forces to consider are the hierarchy culture (which is internally-focused and concerning with stability and control) and market culture (which is external focus but wanting stability). In the days of the command economy,



Source: Adapted from Cameron and Quinn (1999)

Figure 1.
Competing values model

one might expect Chinese enterprises to be of the hierarchy or clan culture. The clan culture (which is internal focus but wanting flexibility) emphasises loyalty and tradition where “commitment is high . . . The leaders are considered to be mentors and, perhaps, even parent figures” (Cameron and Quinn, 1999, p. 87). Both the hierarchy and clan cultures are internally-focused. The hierarchy culture is a “very formalized and structured place to work. Procedures govern what people do. The leaders pride themselves on being good coordinators and organisers . . . Formal rules and policies hold the organisation together. The long-term concern is on stability and performance with efficient, smooth operations. Success is defined in terms of dependable delivery, smooth scheduling, and low cost. The management of employees is concerned with secure employment and predictability” (Cameron and Quinn, 1999, p. 87).

In Cameron and Quinn (1999) model in Figure 1, the north-south directions of conflicting forces are the “flexibility and discretion” vs. “stability and control”. The market culture depicts an organisation “that focuses on external positioning with a need for stability and control”, which means it is a “results-oriented organisation” whose major concern is with getting the job done. People are competitive and goal-oriented. The leaders are hard drivers, producers, and competitors. The long-term focus is on competitive actions and achievement of measurable goals and targets. Success is defined in terms of market share and penetration. Competitive pricing and market leadership are important” (Cameron and Quinn, 1999, p. 87). The cultures which incorporate the stability and control elements are the hierarchy and market cultures. China has been cautious in its transition to the market economy as it slowly relinquishes the tight grip on formal control while adjusting “national economic goals” in her five-yearly plans.

In the evolution of organisation theories, it is increasingly recognised that instead of being rational entities, organisations often are, in fact, irrational, hypocritical, uncoordinated, and highly political miniature societies (Cameron and Ettington, 1988). It thus seems plausible that once the irrationality, ambiguity and unpredictability of organisations are understood, their performance and effectiveness would be greatly improved by undergoing appropriate culture change and adopting better organisational design.

The model in Figure 1 provides a framework to develop approaches for investigating the relationships of organisational culture and organisational effectiveness. Organisational culture is one of the areas in which theorists led practitioners in identifying crucial factors that affect organisational performance (Cameron and Quinn, 1999) and many practitioners also claim to have successfully mastered and harnessed their organisational culture for improved effectiveness. Following from the competing values model (Figure 1), the relationship of organisational culture and organisational effectiveness may be examined in order to investigate if a particular organisational culture profile is predominantly contributory to organisational effectiveness in the Chinese construction enterprises. Since researchers (Hofstede, 1993, Trompenaars and Hampden-Turner, 2000) emphasise that culture must be the background against which management theories are to be applied and caution others against the one best theory approach, organisational culture and effectiveness studies must be examined and interpreted within stated domains, e.g. national/ethnic cultural boundary.

In order to operationalise the measurement of organisational culture in the Chinese construction enterprises, the organisational culture assessment instrument (OCAI) of Cameron and Quinn's (1999) may be adopted to measure the four cultures (clan, hierarchy, adhocracy and market) by means of 24 questions. Due to the nature of the construct of organisational effectiveness, how to operationalise and measure effectiveness is more problematic (Bartram *et al.*, 2002) and has not been addressed in this paper. Here, it is postulated that possible organisational effectiveness indicators to be considered are:

- employee satisfaction (human relations system);
- quality of construction projects (open system);
- timely completion of construction projects (internal process system); and
- productivity and profitability (rational goal system).

Each of the above factors affects the measurement criteria of operational effectiveness. The measurement criteria can be set only after the developmental stage of the organisation is identified (e.g. whether entrepreneurial stage – growth and resource acquisition as criteria, or collectivity stage – commitment and leadership as criteria) and, the evaluators have stated their objectives in that particular stage of organisational development.

Case study of construction enterprises

By the year 2001, the total number of construction enterprises in China reached 96,374, the number of persons employed is over 28 million, and the gross output value amounts to nearly 2001 billion RMB yuan (China National Statistics Bureau, 2002). Under the prevailing macro economic environment and legal framework, the construction enterprises effect gradual organisational change in trying to re-define their formal business goals and production procedures in response to the changing political and economic environment. However, the performance effectiveness of the construction enterprises is relatively low. Yao and Shi (1998) compare the top contractors from China, Japan and USA and allegedly found that China's construction

enterprises are much less effective than those of Japan and USA in terms of annual turnover, contract volume and profit – Table I reflects China’s world market share.

This paper reports the findings of a preliminary study on culture profiles of selected construction enterprises in China. Rather than operationalising both organisational culture and organisational effectiveness measurements, this study only focuses on the culture profiles and effectiveness is being “controlled” as much as the limitations of this study allow. In the case studies, the comparable construction enterprises are selected for size, number of employees, general reputation (in terms of quality of construction), business type (building works) and tax bracket.

Five construction enterprises are selected on the basis that they are:

- enrolled in the list of Chinese first-class construction enterprises;
- engaged in building construction, and similar in size; and
- from different regions since China is exposed to various impact of “open door policy” in different geographical regions which may influence the culture profiles of organisations.

These five enterprises are from the cities of Beijing, Tianjin, Langfang (in Hebei province), Gezhouba (in Hubei province), and Shantou (in Guangdong province).

The measuring instrument, OCAI, developed by Cameron and Quinn (1999) is adopted in this study. The OCAI questionnaire of 24 questions measuring four types of organisational culture, namely, clan, adhocracy, market, and hierarchy, are sent to 464 respondents covering 50 per cent of all the management staff and professionals in the five enterprises. A total of 193 returns are collected and the valid number is 159 with a response rate of 34.3 per cent. The alpha coefficients are generally compatible to that found in Quinn and Spreitzer (1991), Yeung *et al.* (1991), Zammuto (1984). Four out of the five enterprises, with the exception of Shantou, generally share similar culture profiles. The mean scores that are above three are italicised in Table II. Shantou is the only one with a predominantly market culture and with an apparent lack of a strong hierarchy culture.

Difference exists between the culture profiles of Shantou and the other four cities located inland in China as shown in Figure 2. The nature of the challenge facing an

Country/region	Nos of contractors	Contract turnover (billion US\$)	Market share (%)
USA	73	24.9628	21.5
Canada	5	0.1964	0.2
UK	7	9.1828	7.9
Germany	11	18.1626	15.7
France	7	15.9916	13.8
Italy	10	3.4372	3.0
Netherlands	2	4.5224	3.9
Other European countries	19	17.1240	14.8
Japan	21	8.8016	7.6
PRC	35	5.3838	4.6
Korea	7	3.6118	3.1
Others	7	4.5323	3.9
Total	225	115.9075	100

Source: Liu (1999)

Table I.
International
construction market
shares by country/region
(2000)

enterprise is likely to be the determining factor for the culture profile of the enterprise (Keng, 2001). Some organisations, for example, face circumstances where survival depends on flexibility, innovation, creativity, and entrepreneurship. Coordination and control are much less influential in determining successful performance. A strong market culture may be most appropriate, as in the case of the enterprise in Shantou.

While the result of five case studies may not be appropriately adopted to generalise the patterns of culture profiles being represented in different regions in China, it is nevertheless indicative of the presence of the dichotomy in hierarchy – market culture dominance. The findings, thus, lend to the support of pursuing further analysis of the spread of the culture profiles, at least, in terms of geographical regions and developmental stages of the construction enterprises in China.

Discussion

In transitional economies, such as China’s, a few provinces/regions are often chosen as pioneers for economic reform (Wong, 2004). Identifying a number of testing grounds has been a standard practice for the Chinese authorities to introduce new policy programmes, e.g. Guangdong has been a laboratory and testing ground for various market reform policies since 1979. Although conservatives within the Chinese leadership often expressed their reservations regarding the reforms in the special economic zones, Guangdong’s proximity to Hong Kong and its strong overseas Chinese connections led the Chinese leadership to identify the two provinces of Guangdong and Fujian to take the lead in opening China to the outside world. At the beginning of the market reform, Shantou was granted the title of “Special Economic Zone” (SEZ)

Table II.
Culture scores of
construction enterprises

Enterprise/culture type	Beijing	Langfang	Tianjin	Gezhouba	Shantou	Average	<i>n</i>	Cronbach alpha
Clan	2.8326	2.9717	3.0240	3.2614	2.3952	2.9391	182	0.79
Adhocracy	2.0088	1.8468	1.7070	1.7100	2.8590	1.9462	185	0.86
Market	3.2280	3.0319	2.1667	2.2105	3.4102	2.7084	171	0.88
Hierarchy	3.5746	3.4667	3.5323	3.0738	2.3513	3.3441	178	0.84
Respondents (<i>n</i>)	38	35	56	38	26			
Response rate (%)	37.6	39.3	47.5	37.2	48.1			

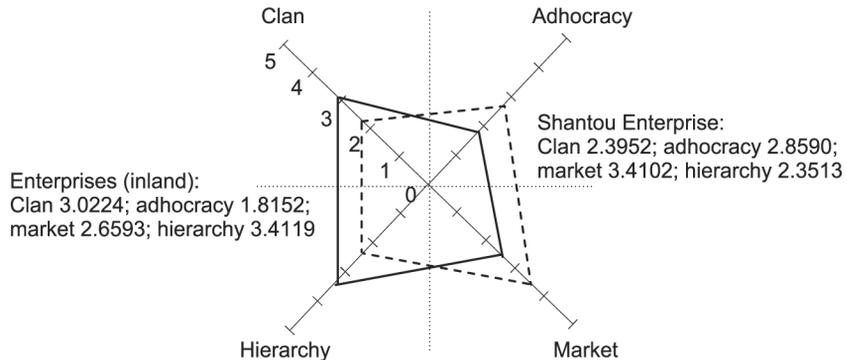


Figure 2.
Organisational culture
profiles

together with the cities of Shenzhen, Zhuhai, Xiamen, and the province of Hainan. All five areas were agriculturally dominant and industrially underdeveloped with minimal investment from the country (He, 1994).

The SEZs were subject to special economic policies and allowed flexible management approaches. For instance:

- the SEZs were experimented with the functions of market regulations under the central government plan;
- relatively more autonomy was granted to the SEZ local governments and enterprises;
- favorable tax rates were granted to the enterprises and the foreign investors in the SEZs; and
- financial incentives were given to the SEZ enterprises, e.g. “the more the government gets, the more the enterprises can keep for their further development”.

Compared to the inland enterprises, Shantou has faced a more dynamic and unpredictable environment for decades. The inland situation had been relatively stable and uniformity in products and services were mostly maintained. While the SEZs were spearheading towards market reform, those inland enterprises were focusing on the internal process systems’ standardised rules and procedures.

The preliminary study of the five enterprises has provided encouraging results to sustain greater effort in pursuing a future major survey of large scale (first class) construction enterprises when the spread of the culture profiles can be examined by cluster analysis. From the results of the five case studies, postulations can be made for directing further research.

The postulation regarding the organisational development process in terms of the model in Figure 1 is that construction enterprises have originated from a stage of centralisation which is represented by the left lower quadrant of the internal process system, i.e. hierarchy culture. There have been many rules and restrictions imposed on construction enterprises by the Chinese government. Externally, they were made to follow national pre-set goals while internally, processes and procedures for operations were set. The roles of the construction enterprises in the construction industry are well defined by a set of rules and standards as envisaged by the Ministry of Construction. The organisational members in the construction enterprises are governed by established procedures which aim for control and stability. In line with economic development as well as the construction industry’s advancement, more autonomy has been given to the construction enterprises to “run their own business” – a decentralisation process has begun. As foreign investments increase, changes in the Chinese construction industry become inevitable. The roles of the construction enterprises have adapted to and evolved under these changes. The changes have been carried out as a response to the environmental changes external to the organisation. In time, decentralisation will occur, therefore, the external focus of the construction enterprises will shift from the internal process system (of hierarchy culture) to the open system (of adhocracy culture). More emphasis will be placed on adaptation to the external environment in order to survive, compete and expand. In turn, the internal focus will shift from the internal process system, which dictates rules and procedures,

to the human relations system, which emphasises commitment, participation and self-development.

However, the human relations system, in its preliminary form, is more focused on cohesion, participativeness and a sense of “us”, i.e. the clan culture. Arguably, the developed form of clan culture may encompass many positive aspects, e.g. teamwork, employee development, empowerment of employees, commitment and loyalty. However, the postulated shortcomings in a (very) strong clan culture in Chinese enterprises would be over reliance on “guanxi” and “old boys network” to the extent of allowing “operations in a black box” in order to look after in-group benefits (of those in the clan) at the expense of all out-group interests.

In the case of the construction enterprises, it is postulated that the human relations systems, clan culture would develop towards the market culture (rational goal system) whereby the organisations begin to focus more on the external environment performance aspects of competitiveness and productivity through a strong emphasis on external positioning and control. In time, organisational development tends towards the open systems approach (of an adhocracy culture) when the construction enterprises are ready to be innovative and pioneer initiatives that lead to new products and services, i.e. an emphasis on “creating a vision of the future organised anarchy and disciplined imagination” (Cameron and Quinn, 1999, p. 38).

The Chinese construction industry is undergoing fundamental changes. Due to the necessity for the construction enterprises to obtain work in an environment which is moving towards being a competitive, open market, the construction enterprises must become increasingly external-focused, rather than adopting the internal focus as promoted under the command system. A second facet is the need for the enterprises’ operations to become more flexible, as manifested in their broadening of scope of activities to encompass advice in feasibility study and to extend into project management consultancy. The resultant vector moves the construction enterprises in a “north easterly” direction towards adaptations and expansions in an increasingly open system of operation in Figure 1.

As Quinn’s (1988) progression of organisational development was derived from observing organisations in market economies, it requires re-examination when considering organisations’ adapting from command to market economies. For instance, do construction enterprises in China adopt the progression sequence of formalisation, elaboration, entrepreneurial and collectivity? Under the command economy, both work and resources available to construction enterprises were allocated by government; individual values were subjugated to those of the state. In the transition to a market economy, work and resources increasingly are obtained through competitive bidding (including in international competition) and the values used to formulate operational goals are becoming subject to the prescriptions of market operation but retaining the overlay of requirements of the state; as yet, individuality does not feature strongly. Evaluation of operational effectiveness of such organisations must depend on their developmental stages in line with their stated objectives. In transition, clues are given in the five-year plans announced by the State (National Peoples’ Congress) but flexibility and (certain extent of) autonomy given to municipals in different regions must be taken into account in all further analyses.

Conclusion

Culture is regarded as a shared system of meanings that organises values into “mental” programmes which guide the behaviours of people within organisations. While studies in the 1970s showed that the effectiveness of certain methods does depend on the environment in which the organisation operates, more recently, studies have asked how the major structures of the organisation vary in accordance with major variables in the environment, e.g. if the environment is essentially simple and stable, then steep hierarchies survive; but in a complex and turbulent environment, flatter hierarchies may be more profitable. However, the fact that certain corporations engage in very turbulent environments with much steeper hierarchies has not been adequately addressed (e.g. Japanese corporations at the turn of the millennium), the organisation and its structures remain, thus, more than objective reality, i.e. they comprise fulfilments or frustrations of the mental models held by real people.

Therefore, rather than there being “one best way of organising”, there can be several ways – some are more culturally appropriate and effective than others. With globalisation, the understanding of organisational cultures (overlaid with national cultures) is an important element of any business enterprise, and organisational culture research in the construction management field ought to take its steps forward.

References

- Albert, S. and Whetten, D.A. (1985), “Organizational identity”, *Research in Organizational Behaviour*, Vol. 7, pp. 263-95.
- Ansari, M.A., Baumgartel, H. and Sullivan, G. (1982), “The personal orientation-organisational climate fit and managerial success”, *Human Relations*, Vol. 35 No. 13, pp. 1159-78.
- Ashkanasy, N.M., Broadfoot, L.E. and Falkus, S. (2000), “Questionnaire measures of organizational culture”, in Ashkanasy, N.M. (Ed.), *Handbook of Organizational Culture & Climate*, Sage Publications, Inc, Thousand Oaks, CA.
- Bartram, D., Robertson, I.T. and Callinan, M. (2002), “Introduction: a framework for examining organizational effectiveness”, in Robertson, D., Callinan, M. and Bartram, D. (Eds), *Organizational Effectiveness: The Role of Psychology*, John Wiley & Sons, New York, NY, pp. 1-12.
- Bate, P. (1984), “The impact of organization culture on approaches to organizational problem-solving”, *Organizational Studies*, Vol. 5, pp. 43-66.
- Brown, A.D. (1998), *Organizational Culture*, 2nd ed., Financial Times/Pitman Publishing, London.
- Cameron, K. and Ettington, D.R. (1988), “The concept foundation of organizational culture”, in Smart, J.C. (Ed.), *Higher Education: Handbook of Theory and Research*, Springer, New York, NY, pp. 356-96.
- Cameron, K.S. and Quinn, R.E. (1999), *Diagnosing and Changing Organizational Culture-Based on the Competing Values Framework*, Addison-Wesley, Reading, MA.
- Campbell, J.P. (1977), “On the nature of organisational effectiveness”, in Goodman, P.S. and Pennings, J.M. (Eds), *New Perspectives on Organisational Effectiveness*, Jossey-Bass., San Francisco, CA.
- Chatman, J.A. and Jehn, K.A. (1994), “Assessing the relationship between industry characteristics and organisational culture: how different can you be?”, *Academy of Management Review*, Vol. 37 No. 3, pp. 522-53.

- Chen, J. (2001), "Adjusting and Perfecting the organizational forms of the construction industry for entry into WTO", *Construction Economics*, Vol. 228, pp. 3-6 (in Chinese).
- China National Bureau of Statistics, Department of Investment and Construction Statistics (2002), *China Statistical Year Book on Construction*, China Statistics Press, Beijing (in Chinese).
- Cong, Y. and Hu, Y. (2001), "How the construction enterprises should be faced with the entry into WTO", *Construction Enterprises Management*, Vol. 3, pp. 7-8 (in Chinese).
- Cooke, R.A. and Lafferty, J.C. (1987), *Organizational Culture Inventory*, Human Synergetics, Plymouth, MI.
- Cyert, R.M. and March, J.G. (1963), *A Behavioural Theory of the Firm*, Prentice Hall, Englewood Cliffs, NJ.
- Davis, S.M. (1985), "Culture is not just an internal affair", in Kilmann, R.H., Saxton, M.J. and Serpa, R. (Eds), *Gaining Control of the Corporate Culture*, Jossey-Bass Publishers, San Francisco, CA.
- Deal, T.E. and Kennedy, A.A. (1982), *Corporate Cultures: The Rites and Rituals of Corporate Culture*, Addison-Wesley Co, Reading, MA.
- Denison, D.R. (1990), *Corporate Culture and Organizational Effectiveness*, John Wiley & Sons, New York, NY.
- Denison, D.R. and Mishra, A.K. (1995), "Toward a theory of organizational culture and effectiveness", *Organizational Science*, Vol. 6 No. 2, pp. 204-23.
- Evans, W.A., Hall, K.C. and Salli, D. (1989), "A cross-cultural comparison of managerial styles", *Journal of Management Development*, Vol. 8 No. 3, pp. 5-13.
- Garfinkel, J. (1984), *Studies in Ethnomethodology*, Polity, Cambridge.
- He, J. (1994), "Economic characteristics in the Shantou special economic zone", *Strategy*, Vol. 12, pp. 34-6 (in Chinese).
- Hofstede, G. (1993), "Cultural constraints in management theories", *Academy of Management Executive*, Vol. 7 No. 1, pp. 81-94.
- Hofstede, G., Neuyen, B., Ohayv, D.D. and Sanders, G. (1990), "Measuring organisational cultures: a qualitative and quantitative study across twenty cases", *Administrative Science Quarterly*, Vol. 35, June, pp. 286-316.
- Hofstede, G.H. (1980), *Culture's Consequences*, Sage, Newbury Park, CA.
- Hofstede, G.H. (2001), *Culture's Consequences: Comparing Values, Behaviors, Institutions, and Organizations Across Nations*, 2nd ed., Sage Publications, Thousand Oaks, CA.
- Hood, J.N. and Koberg, C.S. (1991), "Accounting firm cultures and creativity among accountants", *Accounting Horizons*, September, pp. 12-19.
- Kast, D. and Rosenzweig, J.E. (1972), "General systems theory: applications for organisation and management", *Academy of Management Journal*, Vol. 15 No. 4, pp. 447-65.
- Keng, C.W.K. (2001), "China's future economic regionalization", *Journal of Contemporary China*, Vol. 10 No. 29, pp. 587-611.
- Knox, W.B. (1992), *Effective Organizational Change: The Strategic Planning Process*, ICAN Press, San Diego, CA.
- Lachman, R., Nedd, A. and Hinings, B. (1994), "Analysing cross-national management and organisations: a theoretical framework", *Management Science*, Vol. 40 No. 1, pp. 40-55.
- Li, L. (2001), "Achievements and problems in the Chinese construction industry", *Construction Enterprises Management*, Vol. 4, pp. 6-11.

-
- Likert, R. (1967), *The Human Organisation: Its Management and Value*, McGraw Hill, New York, NY.
- Limaye, M.R. and Victor, D.A. (1991), "Cross-cultural business communication research: state of the art and hypotheses for the 1990s", *Journal of Business Communication*, Vol. 28 No. 3, pp. 277-99.
- Liu, A.M.M. (1999), "A research model of project complexity and goal commitment effects on project outcome", *Engineering Construction and Architectural Management*, Vol. 6 No. 2, pp. 105-11.
- Marcoulides, G.A. and Heck, R.H. (1993), "Organization culture and performance: proposing and testing a model", *Organizational Science*, Vol. 4, pp. 209-25.
- Milgate, M. (2004), *Transforming Corporate Performance: Measuring and Managing the Drivers of Business Success*, Praeger, Westport, CT.
- Ott, J.S. (1989), *The Organisational Culture Perspective*, Brooks/Cole, Pacific Grove, CA.
- Ouchi, W. (1981), *How American Business Can Meet the Japanese Challenge*, Addison-Wesley, Reading, MA.
- Pennings, J.M. and Goodman, P.S. (1977), "Toward a workable framework", in Goodman, P.S. and Pennings, J.M. (Eds), *New Perspectives on Organisational Effectiveness*, Jossey-Bass, San Francisco, CA.
- Peters, Y. and Waterman, R. (1982), *In Search of Excellence: Lessons From America's Best-Run Companies*, Warner Books, New York, NY.
- Pettigrew, A.M. (1979), "On studying organisational cultures", *Administrative Science Quarterly*, Vol. 24, December, pp. 570-81.
- Pettigrew, A.M. (1990), "Organizational climate and culture: two constructs in search of a role", in Schneider, B. (Ed.), *Organizational Climate and Culture*, Jossey-Bass, San Francisco, CA.
- Quinn, R.E. (1988), *Beyond Rational Management. Mastering Paradoxes and Competing Demands of High Performance*, Jossey-Bass, London.
- Quinn, R.E. and Spreitzer, G.M. (1991), "The psychometrics of the competing values culture instrument and an analysis of the impact of organizational culture on quality life", *Research in Organizational Behaviour*, Vol. 5, pp. 115-42.
- Reynolds, P.D. (1986), "Organisational culture as related to industry, position, and performance: a preliminary report", *Journal of Management Studies*, Vol. 23, May, pp. 334-45.
- Sathe, V. (1983), "Implications of corporate culture: a manager's guide to action", *Organisational Dynamics*, Vol. 12, Autumn, pp. 5-23.
- Schein, E.H. (1985), *Organisational Culture and Leadership*, Jossey-Bass Publishers, San Francisco, CA.
- Schneider, B. (2000), "The psychological life of organizations", in Ashkanasy, N.M., Wilderon, C.P.M. and Peterson, M.F. (Eds), *Handbook of Organizational Culture & Climate*, Sage Publications, Thousand Oaks, CA.
- Schneider, B. and Reichers, A.E. (1990), "Climate and culture: an evolution of constructs", in Schneider, B. (Ed.), *Organisational Climate and Culture*, Jossey Bass, San Francisco, CA.
- Tang, W. and Cheng, H. (2001), "How the construction enterprises establish project management system", *Construction Economics*, Vol. 226, pp. 13-15 (in Chinese).
- Trompenaars, F. and Hampden-Turner, C. (2000), *Riding the Waves Culture: Understanding Cultural Diversity in Business*, Nicholas Brealey Publishing, London.
- Wallach, E.J. (1983), "Individuals and organisations: the cultural match", *Training and Development Journal*, Vol. 37 No. 2, pp. 29-36.

- Winch, P. (1990), *The Idea of Social Science and its Relation to Philosophy*, 2nd ed., Routledge & Kegan Paul, London.
- Wong, L. (2004), "Market reforms, globalization and social justice in China", *Journal of Contemporary China*, Vol. 13 No. 38, pp. 151-71.
- Yao, B. and Shi, J. (1998), *On Modern Construction Enterprises*, China Construction Industry Press, Beijing (in Chinese).
- Yeung, A.K.O., Brochkbank, J.W. and Ulrich, D.O. (1991), "Organizational culture and human resource practices: an empirical assessment", *Research in Organizational Change and Development*, Vol. 5, pp. 59-81.
- Zammuto, R.F. (1984), "A comparison of multiple constituency models of organizational effectiveness", *Academy of Management Review*, Vol. 9, pp. 606-16.
- Zhu, H. and Dong, Yu. (2002), "An analysis of the external environment for the development strategies of the Chinese construction enterprises", *Research on Construction Project Management*, Vol. 3 (in Chinese).

Further reading

Trompenaars, A. (2004), *Managing People Across Cultures*, Capstone, Chichester.

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