

CHANGING ORGANIZATIONAL CULTURE OF UNIVERSITY IN A LEAST DEVELOPED COUNTRY

R. Niraula¹⁾, S. Kusayanagi²⁾ and H. Shima³⁾
^{1), 2), 3)} Kochi University of Technology, Japan

Abstract: This study based on competing values model provides organizational culture in the Institute of Technology of Cambodia, Cambodia. The clan culture is dominant in the current situation however more innovative, stability and control have been preferred. The underlying activities in the current culture were investigated through interview with faculties from civil engineering department. In order to transform to the preferred culture AIA (A- external Adaptation, I- internal Integration and A- Adoption) model has been proposed.

Keywords: Organizational culture, human resources, technology.

1. Introduction:

Organization culture is a pattern of shared basic assumptions that the group learned as it solved its problems of external adaptation and internal integration that has worked well enough to be considered valid (Schein, 1992). Moreover, organization culture encompasses values, underlying assumptions, expectations, collective memories and definitions present in an organization. People are unaware of their culture unless it is challenged, until they experience a new culture, or until it is made overt and explicit (Cameron and Quinn, 1999).

Theoretical knowledge imparting rather than satisfying the industrial demands for appropriate human resources and technology has been still the norms in universities in least developed countries like Nepal and Cambodia. Faculties have been engaged in delivering the minimum contents, which are usually updated at the interval of 10 years, fixed by the curriculum management and in satisfying the fragmented needs. The individual competence remained fragmented and has been deployed for satisfying the individual needs. Such culture of

university has made the faculties to bear low responsibility in fulfilling the industrial needs for human resources and technology. As a result, least developed countries are suffering from the acute shortage of qualified human resources and appropriate technology.

Many researchers have studied the organizational culture issues and the concept of organizational culture in higher education especially as it relates to ways of perceiving the governance of the colleges and universities. However, this study aims at investigating the cultures and actual practices inside university culture which influence the performance of university in least developed countries. The Institute of Technology of Cambodia, Cambodia was chosen for the study to represent one of least developed countries in the Asia. The organizational culture assessment instrument (OCAI) by Cameron and Quinn, 1999 was used for the measurement of organization culture. The interviews with faculty members were done to investigate the actual practices inside the culture. This paper further discusses the issues in civil engineering education and the construction industry based on Cambodian

university culture and practices, and provides a practical way to change university culture in order to fulfill the demands for human resources and technology for domestic infrastructure development.

2. The Competing Values Framework of Organizational Culture

The competing values model (Quinn and Rohrbaugh, 1983) was developed to explain differences in the values underlying organizational effectiveness model. Quinn and Rohrbaugh found that models of organizational effectiveness could be distinguished on the three dimensions that define the competing values framework: i) differing organizational focus (emphasis on people vs. the organization), ii) differing preferences about structure (stability and control vs. change and flexibility), and iii) differing foci of important organizational process and outcomes (means and ends) (Zammuto, F.R. et al 1991). The four cultural types and their predicted relationships in two dimensional forms are shown in figure 2.1.

2.1 The four major Culture Types

The *clan* culture is characterized as having high flexibility, individuality, and spontaneity as well as internal emphasis. The primary leadership style is that of a mentor or facilitator. The *adhocracy* culture, like the clan culture, emphasizes flexibility, individuality, and spontaneity, but unlike the clan culture, it is characterized by an emphasis on external positioning, a long term time frame, and achievement-oriented activities. Similarly, the *market* culture shares an emphasis on external positioning, long-term frames, and achievement-oriented activities with adhocracy culture but differs in its valuing of stability, control and predictability. The leadership style is that of the producer or hard-

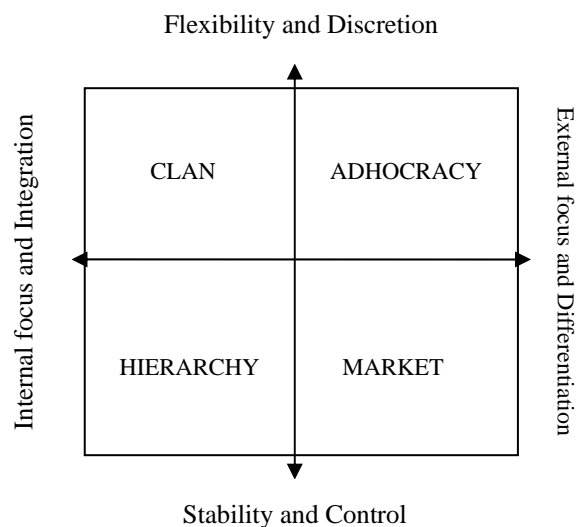


Figure 2.1: The Competing Values Framework (Adapted from Cameron and Quinn 2006)

driver. The *hierarchy* culture is similar to clan culture in terms of internal emphasis, a short-term oriented and an emphasis on smoothing activities, but differ in their emphasis on stability, control and predictability. The dominant leadership style in hierarchy culture is that of the coordinator or organizer, rules and policies are the primary bonding mechanism (Smart, J.C. 1996).

3. Assessment of Organizational Culture in Institute of Technology of Cambodia (ITC), Cambodia

The organizational culture assessment instrument in the form of questionnaire recommended by Quinn was used to measure the organizational culture in ITC. Only 4 among 5 regular faculties from the department of civil engineering could be contacted and interviewed although 20 questionnaires were distributed to various departments of ITC. Thus the following profiles do not necessarily represent the whole departments of ITC. However, the underlying practices observed in various departments during the interviews as discussed later indicates that the culture of civil engineering department can help

predict the cultures of other departments too. Respondents were asked to score the extent to which their institutions evidenced attributes associated with four ideal culture types along four dimensions: institutional character, institutional leadership, institutional cohesion and institutional emphases. The score for each respondent on each of the four cultures was obtained by averaging their rating for each culture type across the four dimensions. The current and preferred cultures in the civil engineering department of ITC are shown in figure 3.1-3.4. As cited by Zammuto, R.Z. et al 1991, “no organization is likely to reflect only one culture” the combinations of various cultures in dominant characteristics, institutional leadership, institutional cohesion and strategic emphases were found in the ITC.

The Clan culture was seen as a dominant culture in the Civil Engineering department of ITC. The necessity of sharing of time and resources among the faculties to fulfill the official duty at ITC and to do private business outside as discussed below has formed the clan culture. However, the representative faculties preferred other cultures to be dominant at the ITC and are discussed in subsequent chapters below.

3.1 Underlying Practices in the Current Cultures

The Institute of Technology of Cambodia (ITC), Cambodia was transformed from the then “Institut Technique Superier de l’Amitie Khmero-Sovietique (ITSAKAS) established in 1963. The institute was

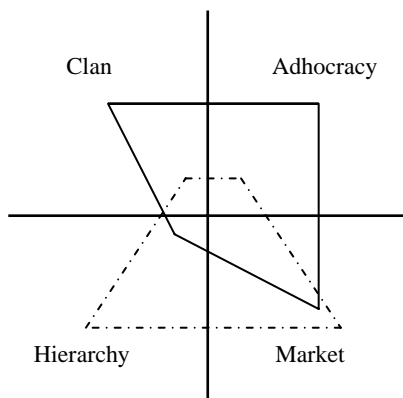


Figure 3.1: Profile- Dominant Characteristics
 — : Current - - - : Preferred

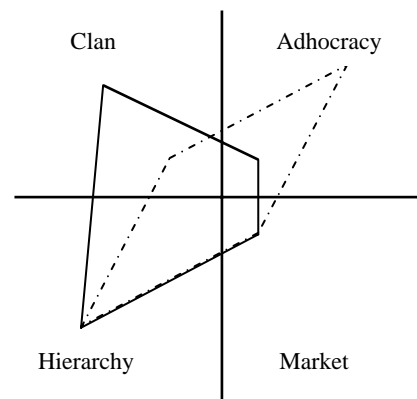


Figure 3.2: Profile- Institutional Leadership
 — : Current - - - : Preferred

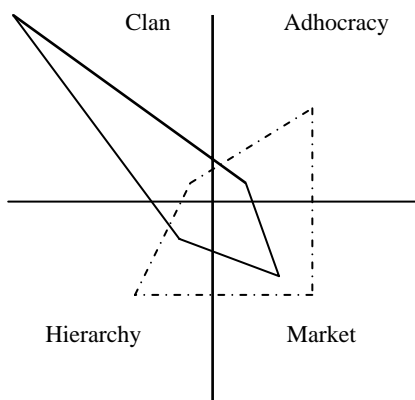


Figure 3.3: Profile- Institutional Cohesion
 — : Current - - - : Preferred

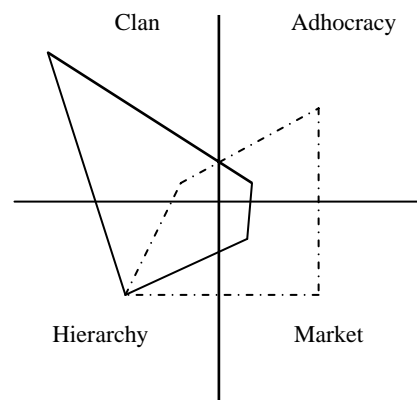


Figure 3.4: Profile- Strategic Emphases
 — : Current - - - : Preferred

initially supported by cooperation between the Cambodian government and the former Soviet Union. The former USSR supported the ITC until 1991 excluding the political unrest and war period. Then the UNDP and UNESCO extended support to make the ITC to run until 1994. The Agence Universitaire de la Francophonie (AUF) has been supporting the ITC since 1994. The major management functions of the institute have been controlled by the donors. The influence of the donors' management system was also seen in the language of instruction and lecture hours for a course. For example, the Russian was the teaching language until 1994 and since then the French has become the medium of instruction in the institute as the AUF started to support. Further, the instruction hour for French language occupies the largest among any other engineering and social science subjects. Thus, the ITC has been experiencing the controlled environment which has made the institute unable to grow and expand her services especially in civil engineering field in order to fulfill the demands for human resources and technology required for the development of the nation.

The salary and other incentives for the employees in the public sector in Cambodia are very low. As a result many public employees are involved in private business to earn livable income for his/her family. In addition, there are a few doctorate degree holders in university, and most of the faculties are one degree-graduate. Almost all faculties from ITC use to teach in private universities in parallel. Senior faculties usually show little presence in the university. The substitute teaching is a common practice in the public as well as private institutions. Private universities have attracted senior teachers from public universities/institution and industry people by offering the program in the morning and/or evening. Thus, the demand of the teachers from the public

universities was created by the private universities which are business oriented. The faculties were used not for the new capacity but to deliver the same lectures as in the public institutions. Thus there was no production of any special human resources from the private institutions rather than providing departmental store type education for large number of pupils at higher cost. The private institutions are exploiting public resources indirectly. The faculties are thus involved in delivering same knowledge at various institutions rather than advancing their knowledge and doing researches. The faculties considered these activities are natural because of the incentive from one organization is not sufficient to sustain their families' life. This has created low feeling of responsibility and liability to the parent organization. Thus the quality of education remained unimproved and researches in universities are non-existent.

Industry practitioners in Cambodia believe that the ITC has been producing better quality graduates than from private institutions. However, some of the respondents told that the graduates from ITC were superior to those from private civil engineering university not because of the faculties but due to the students themselves as better students prefer to enter ITC. Since nearly all faculties from the department of civil engineering use to teach in private university which indicates that quality of faculties throughout the universities are almost the same.

3.2 Preferred Cultures and their Relevancy to the Cambodian Construction Industry

The preferred cultures have indicated that the Civil engineering department needs transformation of existing cultures to more on adhocracy, market and hierarchy as well. Many of the faculties were aware of the lacking of technological and management

innovation in the Cambodian construction industry and some of them were willing to contribute to the industry meaningfully. For this, the institutional leadership needs to be more innovative which could visualize the needs and development of the Cambodian construction industry. For instance, approximately 50 percent of the total numbers of bridges in Cambodia are in need of immediate rehabilitation. The Cambodian construction industry has been dependent to foreign companies on technology and technical manpower for major bridge construction and rehabilitation. Had the local universities and construction industry involved in research and developed appropriate technology for bridge rehabilitation there would not be such a large number of bridges remained to be rehabilitated, and local construction industry would not be dependent on foreign human resources for its domestic infrastructure development. In addition, there were many other basic infrastructures remained either to be built or rehabilitated for the socioeconomic development. However, neither university nor the construction industry was involved in research and technology development, and therefore current situation was obvious. The organizational cultures in the universities therefore need to be changed in order to address the technological needs of least developed countries.

4. A Practical Way of Changing Organizational Cultures in University

Strong adhocracy cultures, as well as strong clan cultures are among the most effective in terms of student academic development, student educational satisfaction, and system openness and community interaction (Smart, J.C. et al 1996). However, the clan culture seen in the ITC is only for easing the work of faculties in order to officially fulfill the duty and to involve in private business rather than

integrating their individual ability to improve the institutional competence in quality human resource and technology development. Moreover, the leadership in the departments because of the past legacy has not acquired the confidence to integrate the individual ability for organizational competence enhancement.

A considerable body of knowledge suggests procedural way for changing organizational cultures. However, many of the researches have not considered the resource and capacity constraints in educational institutions as the authors the most important issue in some least developed countries including Cambodia to enhance the institutional performance through organizational culture change. In order to enhance the organizational competence of educational organization the authors has developed a model on integrated system for human resources and infrastructure development (ISHID) in developing countries (Niraula, R, 2005). The ISHID incorporates three major activities: external Adaptation (A), internal Integration (I) and Adoption (A). Collaboration provides university opportunity to enhance their capacity in researches and external adaptation. Similarly, integration helps to integrate the individual abilities in to the organizational

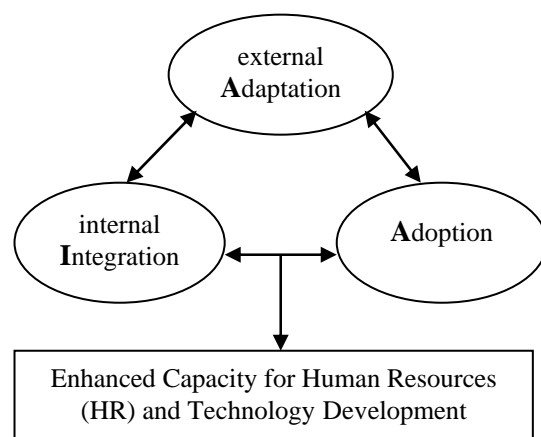


Figure 4.1: Conceptual Model for HR and Technology Development in Developing Countries

competence. The opportunity for deployment of the services and technology from the university will help in adoption of the technology in the industry. The conceptual model for human resources and technology development in developing countries is shown in figure 4.1.

Collaboration here is in between universities from developed countries with university in developing countries. The collaboration is done in order to enhance the capacity of faculties as well as facilities in local university in developing countries to enable them able to produce qualified graduates and to develop appropriate technology which are required for their domestic infrastructure development. The university from developed country provides faculties from developing countries for advanced studies and researches. The integration in the model is to enhance the organizational competence by integrating the individual ability. This is done by establishing a Center of Excellence (COE), non profit making entity in the university which is managed and operated by the qualified faculties including the trained persons through university collaboration. The activities of the COE are to develop advanced technology and materials through research & development and to provide training opportunities for local industry practitioners. And, the deployment of the human resources, technology and products of the COE in development works provide the technology and product to internalize in the industry. The human resources development activities and deployment of human resources, technology and product from university generate opportunity and resources for the educational institutions to utilize full capacity of faculties and to develop quality human resources and appropriate technology. These three activities are integrated to each other and continuous feedback mechanism from industry to education system would be established

which is nonexistent at present in many developing countries like Nepal, Cambodia, and Mongolia.

The ISHID model has been used in order to improve the capacity of ITC, Cambodia. Kochi University of Technology, Japan after investigating the actual situation of the School of Civil Engineering of Institute of Technology of Cambodia and Cambodian infrastructure development environment had offered collaboration with ITC and provided opportunities for 2 faculties from the ITC to study in doctoral program on concrete technology and management. The ITC is now able to offer advanced degree, training and to conduct researches on construction materials and concrete technology. KUT-ITC collaboration based on authors' model has made a significant achievement by developing technology on high strength concrete and high strength PC girder using self compacting concrete in Cambodia to facilitate bridge rehabilitation. The Ministry of Public Works and Transport, Cambodia which is responsible for roads and transport infrastructure development in the kingdom of Cambodia has shown interest to deploy the high strength PC girder for rehabilitating short span bridges. ITC in cooperation with KUT has organized several discussion/presentation/demonstration forums on the high strength concrete technology in Cambodia, and is now cooperating with the Ministry of Public Works and Transport, Cambodia for the standardization of the high strength PC girder for short span bridge rehabilitation. This has shown a great prospect of deployment of a new technology in Cambodian environment which has further encouraged faculties from ITC to transform their teaching/learning environment from delivering more on same to advancing knowledge by involving in research and development works.

5. Discussion and Conclusions

Least developed countries like Cambodia, Nepal usually have low expenditure on higher education as major portion of national budget is required for basic infrastructure development. The quality problem of education is left unaddressed and investments on researches are insignificant. The developed countries have been supporting developing countries for socioeconomic development, for instance about 80 percent of the infrastructure development cost in Cambodia has been financed from foreign loans and grants. However, there was no evident investment from official development assistance (ODA) on research and development works in the universities.

The theoretical knowledge imparting in university of least developed countries has been remained unchanged due to lower capacity of faculties and lack of resources. The existing culture in university education therefore is unlikely to be changed unless there are enough opportunities and resources for faculties to enhance capacity and to involve in research and development works. The KUT-ITC collaboration could be an example to enhance capacity and to develop appropriate technology by changing cultures in university in least developed countries and the model can be used in other universities and in other countries as well. However, donors' contributions are essential for the sustainability of the universities collaboration system in order to continuously improve the quality of human resources and to develop appropriate technology in least developed countries through capacity improvement and cultural change. A certain amount of ODA should be invested in university collaboration in developing countries for capacity improvement and to conduct research & development works in university. For instance, some resources and activities on human resource

development component of Japan's Official Development Assistance can be integrated and conducted through university collaboration.

Finally, this study has shown that capacity of university in least developed country can be improved, appropriate technology can be developed and culture can be transformed provided the opportunities for capacity enhancement, integration and deployment of university's services.

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