Cultural Determinants of Research Community Participation

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Abstract— Informal and formal communities play important roles in organisations including in higher education institutions. These communities provide platforms for knowledge sharing and creation among participated members and in turn lead to research innovation. In order to increase participation in research community, higher education institutions need to address important cultural elements that support their knowledge activities. However, lack of studies examining cultural determinants of research community participation which might impact the role of community as the facilitator of organizational learning. Based on review of literature, this paper proposes top management support for knowledge sharing, openness and structure as the factors that influence research community participation. The identification of these factors are taking into account the needs of these cultural antecedents for the growth of research communities in the context of higher education institutions. Finally, the contributions and future research are discussed.

Keywords— community; knowledge management; Malaysia; higher education

I. INTRODUCTION

Organizational knowledge is believed to be a critical determinant to a firm's capabilities and competitive advantage [1]; [2]; [3]. This knowledge might be created through learning activities arising out of the social relationships within the workplace or learning environment. While learning results from participating in the practices of social communities [4], universities still struggle to promote participation in knowledge activities including research based communities. Universities must encourage academics to participate in both internal and external communities to keep themselves well informed of recent knowledge advancement particularly in research and development.

Knowledge communities are where knowledge sharing activities occur among members of groups [5]. A sense of belonging to the community is created through creating, sharing, and using knowledge for achieving the common vision [6]. As a result, this mutual engagement provides community members with advice, solutions and acquisition of new knowledge [7]. However, geographical distance, temporal separation and temporary association in these project collectivities restricted the high socialisation and development of a common 'blackboard' memory of complex and ambiguous knowledge characteristics of a classical knowledge community [8].

Working on the notion that management has a responsibility to harness fragmented practices across the organisation for increased competitiveness [9]; [10]; [11], many companies have assimilated existing informal communities into their formal structures [12]. However, many empirical studies on communities focus on informal communities where members come from various professions [13] [14] [15]. Also, these studies typically concentrated on individual factors leaving out potentially distinct insights into culture as antecedences for community success. In order to effectively work together, learn, and share knowledge, people within higher education institutions have to accept some common rules and ways of doing, which are part of the organisational culture [16]. The aim of this paper is to study cultural determinants of research community participation particularly in higher education institutions. In the following section, the literature review and hypotheses of this study are presented followed by the conceptual framework for research community participation. Finally, we discuss the contributions and future research.

II. LITERATURE REVIEW

The corporate culture concept has been discussed recurrently within the knowledge management literature. Despite its practical importance, corporate culture remains one of the most debated areas among organisational theorists [17], resulting in various definitions. Generally, corporate culture is the set of common standards, and beliefs that members share in common. Recent evidences show that greater financial performances of firms have closed relations to leaders' principles and beliefs reflected in their firms' corporate cultures [18]; [19]. Culture provides best way of responding that assist leaders in decision making process.

Reference [20] defines culture as set of beliefs, values and experience that have established during the progression of an

organization, which tend to be demonstrated in tangible evidence and in the members' behaviours. Corporate culture is defined as a pattern of shared basic assumptions invented, discovered, or developed by a given group as it learns to cope with its problems of external adaptation and internal integration" that have worked well enough to be considered valid and therefore, to be taught to new members as the correct way to perceive, think and feel in relation to those problems [21]. Referring to these definitions, many authors defined higher education culture as common principles and beliefs of university stakeholders (i.e., managers, faculty, students, board members and support staff) that affect decision-making processes at universities, which further influencing individual and organisational behaviours [22]; [23];[24]. As higher education exist to create and share knowledge [25], knowledge culture is significant in the higher education survival. In a similar vein, the cultural manifestation and value by which specific antecedents that affect knowledge participation in higher education play vital roles in inculcating knowledge culture.

Previous research has considered how knowledge communities are affected by cultural manifestation such as leadership and structure [26], [15]. Reference [26] claimed that top management support and leaders empowerment are the enablers of the community success. Leaders are responsible to develop an innovation culture that stimulates people to contribute their physical and mental energy to the process. In term of structure, the alignment between communities and organizational structure play an importance role towards communities success [26]. The structure should include altering organization layers, from management through divisions and groups to individual work in ensuring continuous and equal community participation [27]. In enabling knowledge sharing among community members, universities structure needs to be constantly evolving, innovating, and responding to opportunities and threats. Different structure should be formed to align the new communications among academics and research communities. This might include creating communication channels, and instituting suitable plans and policies. A good structure should have a good balance of control and participation among its membership, which allow formal and informal communication networks to be established [28].

Regarding cultural value, studies dealing with communities have identified trust as one of important determinants [14]; [13] and [29]. While trust has been highlighted in various studies related to informal communities, openness of organizational members towards new ideas in research and development is another cultural value that needs to be addressed in order to achieve innovation capability. Active participation is vital, because leaders often have to handle employees' resistance to change, which affects the implementation of the innovation change process. A crucial stimulus for successful change is the openness to change

which requires a joint effort from both leaders and employees [30].

Based on the review of literature, this study proposes the cultural manifestation of leadership and structure and cultural value of openness as the antecedents for community participation in higher education. Besides, the importance of these factors have also been highlighted in case studies of organizational communities [26], [31], [32] .

III. HYPOTHESES

Top management support is considered one of the important potentials influences on organizational knowledge [33]. Many studies have found that top management support is essential for supportive climate and sufficient resources [34]. Top management plays a vital role in the success or failure of communities activities [31]. Thus, further research to investigate the perceptions of top management and employees' relating to the role of the communities and their importance to the organization is suggested [26]. In environments which have a high level of top management support for knowledge sharing, members of top management will show commitment by supporting knowledge sharing activities including through research community. They will encourage active involvement of organizational members in both internal and external research communities. Hence, the research community participation is likely to be high when the level of top management support for knowledge sharing is high.

H1: The top management support for knowledge sharing will positively affect research community participation

A company's culture that includes the value of openness will not be disturbed by new ideas and their accompanying change [35]. This culture perceives new trends and ideas as opportunities to develop and to show how able its members are to deal with change [36]. Research community provides academics with platform for knowledge sharing and creation processes. Environment openness is essential to encourage open communication in order to facilitate these processes. This type of environment that encourages experimentation is believed to be more conducive to aggregating desirable research community participation.

H2: The organizational openness will positively affect research community participation

Organizational structure provides a frame for actions and interaction, and therefore has the power to foster or hinder effective processes. Reference [38] found that hierarchical or bureaucratic structures are time consuming and hinder knowledge processes. In contrast, flexible structure where people are easily accessible allows easier and quicker knowledge flow [35].

Nowadays, most managers realize the disadvantages of bureaucratic structures in slowing the processes and raising

constraints on information flow. Knowledge need to be filtered through every level which results the procedures usually consume great amount of time [39]. Thus, structures that allow for flexible behaviour foster an open flow of knowledge across the organizational members. In higher education, this structure will provide an easy access to experts who might also belong to particular research communities. Therefore, organizational structure is expected to have a positive direct effect on research community participation.

H3: The organizational structure will positively affect research community participation

Fig. 1 shows the conceptual framework of research community participation for higher education institutions.
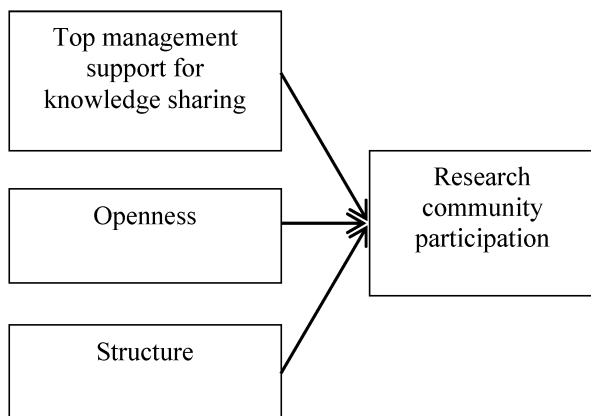

FIGURE 1: CONCEPTUAL FRAMEWORK

IV. CONTRIBUTIONS

This study sheds light on the cultural factors determining the community participation in higher education by focusing on the role of top management support, openness and structure, which have not been addressed in previous studies. Through this study, it is pointed out that academics are likely to participate in research community if the leaders are involved and committed with research community. The openness environment as the underlying factor for organisational change is perceived to also influence the participation of academic community, which contributes to the literature of the concept of openness. Furthermore, the structure being addressed in this study as one of the determinants may enrich the understanding on type of the structure suitable for community engagement and collaboration in academic environment.

For practical applications, this study offers a framework of reference for higher education stakeholders in increasing the community participation. This study offers suggestions to

management about how to promote and enhance participation among academic community through cultural determinants of top management support, openness and organisational structure. It is highlighted in this study the importance of top management as the leaders who are responsible to influence the perceptions of employees towards innovation, and thus, increase their participations.

In addition, the proposition of the openness being one of the determinants give an indication to the higher education stakeholders about the importance of increasing the degree of openness among academic community so as to enable more participation that contributes to the positive advancement of higher education.

Finally, the structure should not be neglected when considering the determinants for community participation as it can foster or hinder effective processes including knowledge exchange processes. This study, therefore, highlights that from the practical point of view, the structure of organisation that focuses on increasing autonomy among academicians may produce sustainable research outcomes.

V. CONCLUSION

This study proposes cultural determinants of research community participation among universities' faculties by addressing the relationship of top management, openness, and structure to the community participation. It provides insight on mechanisms in increasing the participation among academic community and, thus improving organisational effectiveness in achieving their goals. This study helps to explain why some organisations did not get their community participation and what cultural factors should be given attention. Therefore, a framework of reference produced in this study can provide guidance in effective community participation. To confirm the hypotheses produced in this study, future research will involve testing and validating using empirical data in higher education using quantitative research design.

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