Human Capital for Organizational Innovation in Malaysian Public Universities

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Abstract: Organizational innovators are interested in knowing what influence the results they achieved, how and why they would succeed or fail. The belief that results could be linked to organizational innovation has continued to inspire questions and research on the subject by professionals and academics. The objective of this paper is to explore human capital ideal toward organizational innovation. The analyses focused on the administrators of the three Malaysian public universities in the East Coast of Peninsular Malaysia. Deans participated in the face-to-face, semi-structured, in-depth interview which lasted for an hour per session. Seven themes of human capital emerged from our analyses: talent, specialization, administrative and support staff, new ideas and knowledge, teamwork, IT skills and handling stress. The findings indicate the importance of well-qualified human capital within universities in order to propel organizational innovation of Malaysian public universities.

Key words: Human capital · Organizational innovation · Dean · Public universities · Malaysia

INTRODUCTION

The development of public higher education institutions (HEIs) is one of the factors closely linked with national progress [1]. HEIs play critical roles in fulfilling the needs of the development process in a holistic manner, which include the economic, political, social and technological development [2]. In realizing the national development goals, HEIs should act as organizations creating well-informed, skilled and self-motivated professionals. Human capital through training, revised teaching methods and increased opportunities for access to higher education, help in promoting the country as a center of academic excellence while taking the lead in creating new fields of knowledge through research activities [3].

The concept of innovation is always current. All technological groups and organizations are interested to know as to what influence the results they achieved, how and why they succeed or fail. The belief that their results relate to organizational innovation has continued to inspire questions and research on the subject by

professionals and academics [4]. With the rapid improvements in technology and the volatile economic environment, knowledge management has become a necessary and critical part in the enhancement of organizational competence. In this environment of rapid changes and uncertainty, where the market demands keep changing, the only way for an organization to make a breakthrough and obtain a competitive advantage is through knowledge management [5].

Human resource management plays major roles in creating necessary conditions in order to proliferate the process and conduct individuals to build and develop innovative behaviors. To emerge innovative, organizations can use human capital to develop organizational expertise so as to create new services and products; however, expertise has been found as a more complicated concept driven from exploring the goals and specific tasks in a given environment [6]. Using some strategic human resource practices such as recruitment, training, participation, performance evaluation and reward as a means to motivate employee engagement, organizations can oblige workers get to their innovative

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thinking and innovation [7, 8]. In order to create innovation, companies can rely on human capital so as to create expertise in the production of goods and services. Expertise is extremely complex, mentioned primarily as a result of deliberate actions on tasks related to a domain. To accomplish such deliberate activities, it needs individuals who are determined to do the tasks and make efforts to improve their performance.

Organizational innovation has been accounted as a catalyst of human resource development within the organization and HEIs are not exempted to this. Today, innovation is not only regarded as characteristic where having it conveyed better than not having it, or sometimes can only be found as an index in some individuals. Further, it is essential for survival in the competition and sustaining the position [9]. Innovation is a factor which reviews and addresses the turbulence existing in the external environment of the organization whereby it can be further accounted as a driving factor for long-term success, particularly in dynamic markets.

The objective of this paper is to present and discuss themes on human capital that could drive organizational innovation of Malaysian public universities in the east coast of Peninsular Malaysia. The main research question was, "What are the epistemological meanings of human capital towards organizational innovation?"

Literature Review

Underlying Theory: Recent developments in the study of the resource-based view (RBV) of the organization has expanded the scope and nature of resources that the organization may acquire or develop in pursuit of sustainable competitive advantage [10]. According to Personal, Archive, Kraaijenbrink and Groen [11], the resource-based research on organizational innovation is based on the fundamental premise that organizational resources and capabilities are those that underlie and determine a firm's capacity for innovation. Within this perspective, organizational resources, both tangible and intangible, are taken to provide the inputs that in turn are combined and transformed by capabilities to produce innovative forms of competitive advantage.

From the resource-based view perspective, innovation does not come simply from scanning the external environment for market opportunities, but from looking inside and build on the human capital and core competencies of the organization [12]. The relationship between RBV and innovation is bilateral. It means that RBV expands the knowledge of the factors that determine the capacity of the organization, such as HEIs, to

innovate and at the same time views innovation as a mechanism through which an organization can renew the value of its assets.

Human Capital and Organizational Innovation: Human capital is one of the intangible assets of organizations, including HEIs. It is defined as the knowledge, skills, behaviors and commitment of employees in an organization [13]. Using a sample of 155 employees of Melli Bank in Iran, Ghorbani, Mofaredi and Bashiriyan [14] had proved the existence of the strong relationship between human capital and organizational innovation. According to their findings, there is a positive and significant relationship between human capital management and organizational innovation. This finding gives suggestion helping managers get the capability to manage human capital of the organization and the employees based on their competence.

In addition, in a study of intellectual capital which include relational, structural and human capital and also organizational innovation, Ghorbani *et al.*, [14] have highlighted the result of testing the relationship between human capital and organizational innovation. The result showed a positive relationship between the two variables. This indicates that human capital has an effect on organizational innovation. The result seems to be similar to previous studies [14-17].

Although the researches above were quantitative in nature, their findings provided us insights on the interplay between human capital and organizational innovation, which are the foci of our qualitative research. The main lens of our study was to surface the themes on the nature of human capital, which could catalyze organizational innovation in the context of HEIs.

Methodology

Research Design: Research design provides an overall structure and strategy of the research. This study used a qualitative approach using case studies. Creswell [18] defines qualitative research as an inquiry process of understanding a social or human problem, based on building a complex, holistic picture, formed with words, reporting detailed views of informants and conducted in a natural setting. Creswell [19], Guba and Lincoln [20] and Merriam [21] explain that qualitative research approaches from a holistic perspective with a focus on the discovery and understanding meaning with the assumption that meaning, or reality, is socially constructed and interpreted by individuals in interaction with their natural world and experiences.

Qualitative approaches recognize that there are alternative ways of understanding and explaining social phenomena, providing ample models to suit a particular demand [22]. Data collected through this research approach is focused on its actual situation. Its purpose is to provide more in-depth insights into the issues surrounding the research questions [23]. It involves for the most part, non-numerical data which are featuring views of the research participants [24].

In qualitative research, topics are tentative at the beginning and are redefined throughout the study [25]. Research questions are thus developed as the study progresses. Data are collected using many and varied forms. These methods include interviews, direct observations and document analysis. Patton [26] argues these methods permit an in-depth detailed study, contributing to the openness and details of qualitative inquiry. It allows for greater analysis of data pertaining to an individual subject or issue. In addition, Warr [27] asserts that qualitative research provides a researcher with an opportunity to listen to people telling their life stories and the method yields rich and complex data. The in-depth nature of qualitative research approach allows the researchers to convey their feelings and experiences in their own ways.

Qualitative research is used for pragmatic reasons, in situations where quantified research is unnecessary, impossible or inappropriate in nature [26]. Furthermore, qualitative approaches may be appropriate at different stages of the research process that have different objectives. The qualitative method typically produces a wealth of detailed information about smaller numbers of people and cases. This increases understanding of the cases and situation studied [28].

Participants of the Study: All the three faculties (Faculty of Management) from three public universities in the east coast of Peninsular Malaysia served as the participating HEIs of our study. The rationale for choosing only three Faculties of Management is that the researchers were interested in studying those that offered management programs only at the time of this study. In addition, the phenomenon at the focus (i.e., human capital) was situated at these Faculties because it was construed as a management problem or a management-related issue. The Deans represented the Faculties as the participants in the qualitative research. The case study report was geared towards the HEIs. According to Morse [29], a good informant is one who has the knowledge and experiences, the ability to reflect and the time and willingness to participate. In our research, we positioned the Deans as good informants owing to the legitimacy of their position in the Faculties involved and their substantial experience related to our phenomenon of study.

Case Selection Procedure: The cases for this study are Malaysian public universities situated on the east coast of Peninsular Malaysia. In other words, one case constitutes one university. The total number of cases studied involved three public universities. The selection for each case is as follows:

- The researchers were responsible in selecting the three cases based on the following criteria:
  - The HEIs are classified as Malaysian public universities situated on the east coast of Malaysia.
  - The HEIs have a Faculty of Management which offered management programs.
  - The contact person is the Dean of the Faculty of Management as the unit of analysis in this study.
- The researchers contacted the top university officials or their secretaries for appointments and informed the respective researchers at the date and time of each appointment.
- The duration of the interview is less than two hours.

Data Analysis: Data from interviews were analyzed using Atlas.ti (version 7) software program. The software assisted the process of qualitative analysis data collected through unstructured and semi-structured methods of data collection. This software also keeps the researchers to be close to the data which allowed for intense and rich exploration and discovery.

The software applications consisted of open-ended data, accounts, images, videos, audio files, or Google Earth images. It required the description and understanding of participants' points of view or perception. It also required the different methods of data collection, such as in-depth interviews, semi-structured interviews, field notes, surveys with open-ended questions and multi-media analysis.

Its emphasis is more on qualitative rather than quantitative analysis, such as determining the elements that comprised the primary data material and interpreting their meaning. A related term would be knowledge management, which emphasizes the transformation of data into useful knowledge [30]. All participants were assigned code names or numbers for the data collection, processing

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│         HUMAN CAPITAL               │
│   •  1. Talent                      │
│   •  Participative                  │
│   •  Level of education             │
│   •  Work experience                │
│   •  2. Specialization              │
│   3. Administrative and support staff│
│   •  Job design and duties          │
│   •  Job rotation                   │
│   •  Learn other language           │
│   4. New ideas and knowledge        │
│   •  Communicate in meeting, group  │
│      discussion, informal conversation│
│   •  Research                       │
│   •  5. Teamwork                    │
│   •  6. IT skills                   │
│   •  7. Handling stress             │
│   •  Express to friends             │
│   •  Take a holiday                 │
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│  ORGANIZATIONAL │
│   INNOVATION    │
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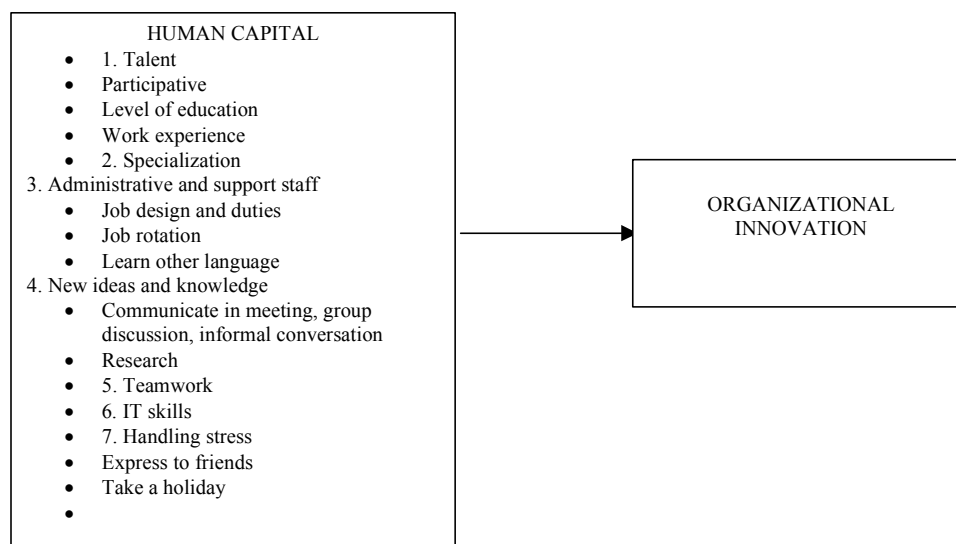
Fig. 1: Elements of human capital that propel organizational innovation.

and the written report. The participants were assured of the confidentiality of the data and the privacy of their identity in the study by assigning each of them a code (i.e., Dean 1, Dean 2 and Dean 3).

Findings: The following themes emerged from the qualitative analysis: talent, specialization, administrative and support staff, new ideas and knowledge, working on teams, information technology (IT) skills and stress management. Figure 1 presents the themes of the analyses.

Talent: Dean 1 agreed that the staffs are talented in their work field. They are knowledgeable in managing programs and participative in contributing to the good reputation of the university. Dean 1 stated:

"Yes, in this faculty, the level of staff accountability is good and they are very talented. They are knowledgeable in planning and program development. They are also participative in faculty and university programs."

Dean 2 also mentioned that the staff are talented and have good educational qualifications. He emphasized on the lecturers from the industry who required work experience in their field. Dean 2 stated:

"Yes, all my staff is talented. For instance, to qualify for a young lecturer qualification, he or she must possess minimum of 1st class degree. In addition, for

those who are from industry and aiming to become lecturers, they should have work experience in their respective fields."

Dean 3 highlighted on the requirements and ability of the staff for the position of a lecturer:

"The requirement of physical qualification for the position of a lecturer is a PhD. Teaching ability is also important in this field."

Specialization: Specialization also surfaced as another theme of the study. The participants viewed specialization as important in the field of lecturing. By having specialization in university, it will create expertise in the particular areas and contribute new things to the university and country. There seems to be a converging interface in the views of the participations with the following statements:

"Yes, all staff specializes in their jobs. Lecturers will teach within their area and they have their own syllabus."

Administrative and Support Staff: Dean 1 stated that the administrators and support staff have their own job design and they will have a rotation of works in order to get exposed with other job scope. As Dean 1 revealed:

"Administrators and support staff have job cycles per year. For example, the assistant registrar

department has always formed job rotation in order to give exposure regarding the range and scope of work."

Dean 2 added it is important to learn another language such as English in dealing with various international students:

"All staff needs to posses a good communication in English in order to make them easier in dealing with international students."

Dean 3 perceived that the staff are familiar with their work. They know what to do regarding their work responsibilities:

"They are great support staff. For example, the clerks do not need instruction to do the work. They know their duties and during the examination, they know what to do and they are ready before we told."

New Ideas and Knowledge: All the deans agreed that administrative staff and lecturers in the faculty have brilliant ideas to convey. However, some of them were communicated personally about the new ideas and knowledge with the deans. Most of them likely deliver their ideas and knowledge in the meeting, group discussion or informal conversation. All the deans shared this view:

"Staff or lecturer will give ideas through meetings, in group discussion or off-record conversation. There are a few lecturers who come individually to my room and make proposal about some matter. I usually listen and bring the proposal to faculty staff meeting level."

In addition, Dean 3 advocated that research done by lecturers in university would help them to gain new knowledge:

"By conducting research, the lecturers are able to furnish new ideas to the university. Recently, there is a lecturer who has produced a theory to determine the level of vibration in order to know tsunami threat and so on."

Teamwork: Another emerging theme was Teamwork. Dean 1 stated that most of lecturers can work together in a group and share their knowledge:

"From my observation, lecturers at the university usually form a small group of discussion and they appoint a group leader, then, they will share their assignment together."

According to Dean 2 and Dean 3, teamwork plays an important role in helping each other to solve their problem. Dean 2 said:

"My staff is able to work as a team and help each others."

Meanwhile, Dean 3 revealed:

"No problem. They can work as a team and willing to help each others."

IT Skills: IT skills also surfaced as a theme. Dean 1 emphasized that IT helps to solve problem related to learning process issues. By using IT, it increases awareness to provide good quality of services in the university. Dean 1 stated:

"Sustainable of information technology (IT) skills require commitment throughout the career. Skills in IT will facilitate the staffs in solving their problems. There are many opportunities to enhance and develop IT skills from entry level to professional position by expanding the knowledge and work hard."

Dean 2 and Dean 3 agreed that IT skills of new staff are better than the long serving staff in the faculty. It gives benefits to each other in order to fulfill their tasks. They stated:

"Junior staff in the faculty is comparatively better or knowledgeable in terms of information technology (IT) skills compared to senior staff. Apparently, the junior staff with a better IT skills would assist the senior staff in completing their work."

From the participants' views, it appears that in contemporary management, it is important to acquire IT skills because it helps to expand content knowledge and relevant information base.

Handling Stress: Dean 1 and Dean 2 perceived that stress can be handled in a positive way. Staff or lecturers manage to talk among themselves and have some break. Dean 1 and Dean 2 said:

"The staffs and lecturers manage/be able to express their feelings to their friends and sometimes they also take a holiday break."

As human beings, sometimes it is common for the academic staff to have disagreements in a meeting. This is because they have different opinions about things and ways of deconstructing meanings from social phenomena. Thus, they also need to be tolerant of each other.

DISCUSSION

The themes that surfaced from the analyses of interview transcripts showed that human capital could be linked to organizational innovation. These themes, summarized in Figure 1, were seven dimensions of human capital consisting of talent, specialization, administrative and support staff, new ideas and knowledge, teamwork, IT skills and handling stress. As surfaced in the discussions, these themes could have an impact to the organizational innovation in the faculty, in particular and the university, in general. The findings also showed that talent should consist of participative, good level of education and work experience. Administrative and support staff in the faculties should fit into job design and duties, experience job rotation and learn another language in order to increase their innovativeness. The staff needs to express their new ideas and knowledge in meetings, group discussions or informal conversations. They also can convey their new ideas and knowledge by writing research articles together. The staff may express feelings to their friends or take a holiday break purposely of handling the work stress. It gives benefit to faculty by receiving new fresh ideas to increase and achieve organizational innovation.

CONCLUSION

Human capital is intertwined with organizational innovation. It is vital in managing the organization, in particular, in the context of the HEIs, in order to meet institutional objectives and increase innovation. The results of our study hope to stimulate dialogue within the professional community of leadership and business researchers, consultants and coaches because they suggest that the connection between organizational climate, change and leadership style impact both the effectiveness of organizational leaders and the overall effectiveness and performance of the organization. Our study also intends to emphasize that human capital is critical to the success of organizational innovation.

Limitations of Study: There are only three Malaysian public universities in the East Coast of Peninsular Malaysia. The sample size is also limited to the Deans of the Faculties of Management and thus, the results of this study could not be generalized to all Malaysian HEIs. Being qualitative in nature, our research was primarily geared towards the understanding of the interface of human capital with organizational innovation. It also aimed at thickening the discussions on how human capital could be linked to organizational innovation.

Future Research: Future researches on a similar topic are recommended in order to enrich the discussions related to human capital and organizational innovation. Examining the phenomena (i.e., human capital and organizational innovation) across other Malaysian HEIs will also be another consideration for future research. We also recommend the use of triangulation, such as the use of observations and document analysis as well as interviewing other key stakeholders of the HEIs, in order to theorize further the said phenomena and thus, contribute to knowledge expansion.

The phenomena mentioned can also be understood from the quantitative lens by examining variables that may moderate the relationships between human capital and organizational innovation. Researchers may consider further innovation into the technical aspect to examine further their individual impact on the performance or productivity of the organization.

ACKNOWLEDGEMENTS

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