

Reconceptualisation of Human Capital in Open University

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Abstract

Purpose: Human capital (HC) has been widely acknowledged as the most important asset for universities, whilst universities are now considered to be critical institutional actors in innovation systems. This paper aims to discuss the reconceptualisation of HC in Universitas Terbuka (UT) from the perspective of intellectual capital accounting (ICA) using the theoretical framework of strategic human resources management (HRM). To increase the relevance of HC to be applied in the specific context of ODL universities, HC was then reconceptualised.

Design: Given the significance of HC and the challenges that UT faces in a highly competitive environment nowadays, utilising a case study in UT, this paper raises a major question: What are the elements of HC embedded in UT? Data were gathered through in-depth interviews and analysed using the conceptualisation of HC based on its structure, level and function.

Findings: The study reveals that HC in UT comprises individual capabilities and social capabilities, however, not all capabilities can perform 'capital' for UT. At the organizational-level, ODL capabilities are accumulated to form HC and RC (relational capital). While organizational culture is the third element of HC to form SC (structural capital), ODL system and HC functions (acquiring, developing and retaining HC) are also internal core processes to form SC. These three elements (HC, RC and SC) are integrated in HC.

Limitations/ Implications: This paper enhances the extant literature on HC concepts and derives practical implications for practioners in university sector, especially in open and distance context.

Originality: This paper provides additional insights into HC in ODL involving multi-disciplinary studies of ICA and strategic HRM.

Keyword : Reconceptualisation, Human Capital, Open University

Type: Research paper

Introduction

This paper discusses the reconceptualization of human capital (HC) from the perspective of Intellectual Capital (IC). Human capital (HC) refers to an organisational resource that is created from individuals' knowledge, skills, abilities, and other characteristics [1]. From the perspective of intellectual capital (IC), HC is often defined as a sub-element of IC [2] and a value driver of all types of capital [3].

The concept of HC was initially introduced to quantify the economic value of people to an organization. In the last two decades, the accounting literature has considered the strategic importance of HC as the most valuable asset for organisations [4]. However, HC cannot be recognised as an "asset" in the balance sheet [5]. Under the current accounting system, the concept of HC as an "asset" is weak because HC cannot be owned by organisations, for example, due to employee turn over and retirement. While IC literature posits HC as the most valuable asset for an organisation [6], the concept of HC as an asset that creates value is contested because the relationship between HC and other elements of IC is weak. Chiucchi and Dumay (2015) have suggested that to enhance the meaning of HC, it must be treated as an integrated part of IC rather than as a distinctly separate element of IC [4].

The strategic importance of HC as the most valuable asset for organizations is also acknowledged in education and training sector ([7], [8]) as well as in universities ([9], [10]) which are now considered to be critical institutional actors in innovation systems [11]. Universities have now shifted from a traditional face-to-face education mode to focusing more intensively on the use of information, technology and innovation. This growth has resulted in an increase in the number of students attending virtual classes in an open and distance learning system measured through student retention and graduation ([12], [13]). While Indonesia is the world's fourth most populous country and Southeast Asia's biggest economy, the country trails behind countries with smaller populations (such as Singapore and Malaysia) when it comes to the development of HC in universities.

The digitisation and openness in tertiary education have raised issues related to the potential outcomes resulting from this type of learning delivery [14], including the contribution of HC to creating value for universities. Aligning with the rapidly changing world and economy, the massive open online courses (MOOCs) and ODL system are also part of a major trend in this revolutionary industry. The ODL system enables students with limitations (such as job and/ or family commitments, year of high school completion) and those who live in remote areas to undertake higher education study. Amongst tertiary education institutions, Universitas Terbuka (UT) is one of universities in Indonesia reflecting these conditions. UT currently has 300,000 students (UT, data as of June 2018). The number of students also means that UT alone has dominated with 5% of the total number of Indonesia tertiary students (currently six million), while there are more than 3000 public and private universities in Indonesia that share 95% of the total tertiary students (BPS, 2018). The figures show that the role of UT in higher education sector in Indonesia is dominant. This makes UT a case study site worth investigating.

Furthermore, the government regulation on higher education sector (Number 12/2012) allows conventional universities to operate in the ODL system. The competition in the market has raised tensions between the university's current capabilities (human capital and other resources) and the educational services provided, and the organisational performance targets of UT. Consequently, this raises an issue of how HC can help UT deliver targets related to its proposed set of organisational objectives. Given the significance of HC and the challenges that UT faces in a highly competitive environment nowadays, this paper raises a major question: What are the elements of HC embedded in UT to help UT deliver its value in proposition? These provide sound reasons to discuss the reconceptualisation of HC in open university by investigating HC practice in UT.

Methodology

Reconceptualisation of HC to be applied in UT and ODL context was carried out by utilising a performative case study to IC [26]. One of three major themes of performative approach to IC was employed to help the author answer the question. The conceptualisation of HC focused on the development of HC, particularly how HC elements emerged and are embedded to form HC as an organizational asset. Consistent with the conceptualisation of IC, the question was synthesized into sub-questions: “What comprises HC?” “Where is HC located?” and “What HC functions are embedded in practice. The conceptualisation of HC focuses on how HC elements are to be understood and analyzed. Thus, HC was analyzed based on the structure of HC (people and the components of HC), the level of HC, and the function of HC.

Ployhart et al. (2014) deconstructed HC into structure, level and function, based on multi-disciplines of economics, strategy, human resources (HR), and psychology [15]. The structure of HC explains 'what human capital is' and the latent contents such as skills, education, and health [16]. The level is 'at which level the human capital exists', whether it is at the individual level or organisation level [1]. Ployhart et al. (2014) clustered the structure of HC into a dual level analysis: the individual-level and the organizational-level. The function of HC explains 'what human capital resources do' and their consequences such as acquiring HC, developing HC and maintaining HC. Whilst the maintenance and growth of HC including getting the best people, keeping the best people, and growing the best people [17] are the fundamental role of human resources management [6]. Nevertheless, there are some particular skills and attributes that the value-creating organisation would seek in acquiring HC: the commitment to continuous learning and the ability to learn effectively, the commitment to continuous innovation, the commitment to personal knowledge management, and the commitment to continuous change [18].

Case Study Results

The research data were collected from interviews and observations. The interview responses resulted in sixteen codes, which were synthesised into three key themes: the people, the components and the function of HC. The key themes were analyzed then grouped into the conceptualisation to HC. To answer the question of “What elements of HC are embedded in UT?” the author utilized the theoretical framework of strategic HRM to provide insights into HC practice in UT.

The structure of HC is synthesized into “people” and “component” of HC ([6], [19]). Mayo (2012) argued that only human resources who create value for organization are considered as human capital. In conventional universities, academics are considered the most vital asset due to their role in delivering knowledge to students. This view is reasonable given the fact that the core business of the universities is academic and that not all human resources within the organization work in the academic field. However, UT adopts ODL system that allows students to engage in learning process without being present in the classroom. The characteristics of ODL system make academics and tutors no longer the only primary HC in the university. Rather, it relies on the system (structural capital) and the networking (relational capital) operated by the supporting agents. As one of the academic stated,

HC includes all personnel who work for UT even though the most important one is the decision makers, because every individual has a certain role that contributes to the achievement of UT goal/mission.

Academics and tutors create value for UT through delivering learning activities, developing learning and assessment resources, and enhancing capabilities such as multimedia authoring and instructional designing. Additionally, the roles of specialists and academic supports are also significant to create value for UT through supporting round the clock consultation for students and helping to produce and deliver learning and assessment resources. Their respective roles in accomplishing UT’s mission and objectives are significant. Based on the

interview results, therefore, HC in UT refers to all staff who are permanently and casually employed by the university, including academics, tutors, specialists and academic support.

The other part of HC structure is the components of HC that include capacities, knowledge, skills, and abilities possessed by individuals and groups of academics and academic support staff. During the interviews, the participants were asked: "what are the major capabilities embedded in yourself?" and "how are they developed?". The majority of academics believe that their capabilities that are required as academics have not yet developed due to the nature of how UT operates. Consequently, academics are required to have capabilities in learning delivery and provide consultation for students in the ODL system rather than capabilities as academics. As one participant said,

UT needs our degree for accreditation purposes rather than the development of academics competence.. we must continuously enhance our capacities as academics, but we are not allowed to engage in lecturing..

The characteristics of the ODL system are the underlying reason why most of the academics' capabilities in their disciplines have not yet fully developed compared to their capabilities in the ODL context. With regards to capabilities embedded in academics, most of the participants agree that multimedia authoring is the skill mostly mentioned as developing in UT.

The capabilities of HC in UT is then accumulated from the aggregation of capabilities of the individuals that lead to economic outcomes and capabilities at the organisational level that leads to organisational performance and competitive advantage. Consequently, in order to achieve the targeted level of performance and attain competitive advantage, the function of HC embedded in the internal core processes of OUI is an essential component. The functions of HC are conducted through a combination of the recruitment system (acquisition of HC), the training and career development system (developing HC), and the performance and rewards system (retaining HC).

Thus, this paper clarifies that the components of HC comprise personal value, social value and organisational value ([6], [19]). While personal value is considered as HC, social value is considered as RC, and organisational value is considered as SC. These components are considered to be the elements of HC, which result in value-adding outcomes for UT stakeholders through UT's internal core processes (HC function) from acquiring, developing and maintaining HC. After having redefined the HC concepts and explaining how HC has developed in UT, the section continues by analysing how HC is reconceptualised in UT.

Reconceptualisation of HC

In order to reconceptualise HC, HC was analysed by examining its components using the theoretical framework of IC and strategic HRM. According to IC concept, HC is posited as the primary component of IC, followed by structural capital (SC) and relational capital (RC) ([20], [21], [22], [23]) as depicted in **Figure 1**. Thus, HC is considered as a value driver of SC and RC to create value for organization [6]. However, the relationships between these elements are not strong.

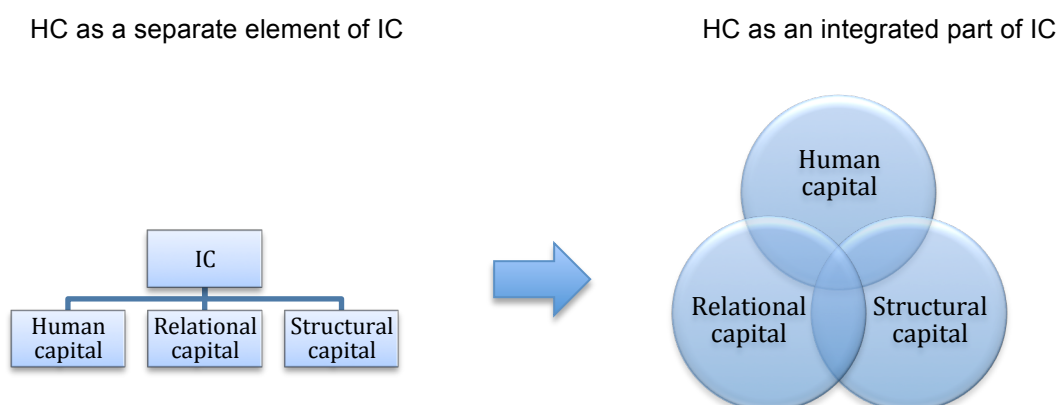
Treating HC as a separate element of IC that generates assets for the organisation is inappropriate because of measurement and valuation issues in attempting to quantify HC. HC cannot be included in the balance sheet because it cannot be owned by the organisation. Moreover, 'accounting-isation' of HC and other IC components is fraught with danger because each organisation is unique and HC practices are only relevant when applied in a different context within an organisation [24]. HC generates other types of assets for the organisation, such as SC and RC, but the value of HC is difficult to determine. Thus, the concept of HC as a separate element of IC is open to challenge. In this paper, I argue that SC and RC are embedded in HC. Thus, HC is an integrated element of IC rather than a separate

one. To support this argument, the theoretical framework of HC in IC and strategic HRM are employed ([1], [6], [15], [19]).

As previously mentioned, HC was deconstructed based on structure, level, and function. At the individual level, HC comprises individual capabilities and individual differences that are maintained and developed in an organization to become HC with economic outcomes. The individual capabilities are emotional capital or non-cognitive (behavior); knowledge capital or cognitive (skills, qualifications and experience) and social and relational capital (social relations and networks) [6], while individual differences are knowledge, skills, abilities and other characteristics [1]. HC at the organizational-level is created from individual capabilities and individual differences [15] which are then accumulated to form SC and RC which converge as HC as depicted in **Figure 1** below.

Given the uniqueness of ODL system, UT is more dominant as an education provider than as a knowledge resource. HC in UT also has unique individual capabilities, such as multimedia authoring and other ODL capabilities. Additionally, positive attitudes in educating students, motivation in acquiring knowledge and delivering to students, and disseminating knowledge eventually create knowledge capital, social capital, and relational capital. Knowledge capital is the major contributor of organization value whereas human, customer and structural elements all work together in a positive environment of organizational learning to produce knowledge capital. Social capital or relational capital is formed when people within the organization work individually or within a team to promote social relations both internally or externally. These individual capabilities are embedded in individuals creating personal value that forms the most important element of HC.

Figure 1. Reconceptualisation of HC



Source: Developed by the author

HC, both individually and collectively, contains social relations, teamwork, leadership and networks that form relational capital (RC), in which RC is the second element of HC constructing social and relational values. As a bureaucratic institution, UT is socially egalitarian even though UT is structurally hierarchical. Teamwork-based oriented results and bottom-up leadership are embedded in practices in UT. This relational capital then enables the organization to function effectively and has become part of UT's organisational culture.

Organisational culture is the structural capital (SC) and the third element of HC that forms organisational value [19]. People bring their values, norms and beliefs which are influenced by their societal culture into an organization. These then shape the organizational culture. At the organizational-level, the personal value and social value of individuals are accumulated and integrated with the organizational culture to form a set of organizational values. In an accounting sense, organizational culture is an asset (something of value owned or controlled by an organization) which can impact earnings [25].

These arguments ([6], [15], [19]) outline the basic principles of HC in this paper. As structural capital (SC) and relational capital (RC) merge into HC, clearly, HC is an integrated part of IC rather than a separate element of IC.

Conclusion

To conclude, the concept of HC as an integrated element of IC is applied in this paper. The study aims to investigate the elements of HC embedded in the practices of UT. According to Ployhart et.al. (2014), to understand the elements of HC, HC should be synthesized based on the structure, level and function of HC. The structure of HC is determined by translating the notion of HC: who is HC in UT and what sort of components that comprise HC. The level of HC can be determined by identifying whether HC is located at the individual level or the organizational-level. The function of HC can be determined by identifying all HC related systems in OUI clustered into three major functions of HC: acquiring-developing-maintaining.

The study proposes that HC in UT comprises all employees including academics, specialists and academic support staffs. At the individual level, HC refers to individual capabilities comprising behaviour, skills, expertise, qualifications and experience, social relations and network, capability as well as organisational culture. However, not all individual capabilities can perform 'capital' for the organisation. At the organizational-level, the individual capabilities, which are most dominant (e.g. ODL capabilities and teamwork), are then accumulated to form structural capital (SC) and relational capital (RC). ODL capabilities (HC) and other social capabilities (teamwork, leadership, social relations and networks) are integrated to form RC. HC and internal core processes (ODL system and the three major functions of HC) are also integrated to form SC. Organisational culture is structural capital (SC) and the third element of HC that forms organisational value. These elements are embedded in HC practice in UT.

This study contributes to the theory and practice of HC in ODL system. In terms of theory, not only does HC generate SC and RC, it is also embedded in SC and RC. Thus, this study supports the argument that HC is an integrated element of IC rather than a separate entity. In terms of practice, this study reveals that ODL capabilities (HC), and teamwork and leadership (RC) are dominant in UT to actuate UT's internal core processes and shape UT's organisational culture (SC). These three elements of HC, RC and SC are embedded in HC, which can potentially generate value for UT.

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