

Human Capital in Teuku Umar University, Indonesia

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Abstract— Human capital is a core strategy that referred as knowledge, skills, abilities, and potentials of individuals. The purposes of this research are to identify the assets of Universitas Teuku Umar (UTU) grouped into components of human capital (HC) as well as to analyze the existence and management of HC in UTU. Assets identification that is grouped into the components of human capital was conducted by implementing the intangible elements indicators of HC on the recognition and measuring intellectual capital (IC) in Spanish universities. There are 11 out of 12 elements of HC were identified as the human resource assets. Some of the elements were not managed optimally as indicated by different data records on the work unit. This study focuses only on the management and identification of intangible assets which categorized into the components of human capital based on the intangible elements found in the previous research. Further research need to identify HC components based on the characteristic of the university including human capital as part of the intellectual capital will be beneficial.

Keywords—Intangible asset; Human capital; Knowledge management; Intellectual capital; University

I. INTRODUCTION

Intangible assets are the key determinants of success in an organization. In the new economic era, intangible assets in term of knowledge are often known as intellectual capital (IC). Bontis (2000) claimed that IC is identified as being intangible (resources, capabilities, and competencies) that can drive organizational performance and create value. In term of knowledge, IC has become the core of competitive advantages for the performance of business, university, regional and national (Sveiby, 1997; Pullic, 2000; Bontis, 2004; Ramirez, Lorduy and Rojaz, 2007; Stahle and Bonufour, 2008; Stahle and Stahle, 2012; Labra and Sanchez, 2013). Considering all literatures in the last decade, IC has been pointed out to have a crucial role not only for profit organization but also for universities (Sangiorgi and Siboni, 2017). Universities are considered as the player in the innovation system and the producer of knowledge. Along with this path, universities are ideal for the application of the ideas related to the IC theory (Ramirez, Tejada, Manzanegue, 2016).

In recent years, the component of IC has been modified. It can be concluded that human capital (HC) is one of the most critical driver of IC. Human capital is a key strategy and critical factor directly related to the performance of organization (Mehralian et al., 2013; Felicio, Coutu, Caiado, 2014; Sehrawat and Giri, 2017). Human capital is referred to the knowledge, skills, abilities, and potentials of individuals. As the knowledge producer, the university should develop the human capital management strategy to specify the direction of their vision, mission, and goals (Thienput et al., 2015).

UTU is one of universities located in the district of West Aceh, Indonesia. It was changed from private to a state university in 2014. The change of the university status affected the ownership of the assets in UTU. The human resources of the university are not only from the assets before the public status but also from the national selection conducted. Besides, UTU must be able to compete according to the quality of state and private universities in Indonesia. As a producer producing human resources, intangible assets, UTU should have the right strategies to manage its intangible assets to have value in improving its competitiveness according to the Indonesian national qualification framework (KKNI).

UTU must be able to manage all its human resources to achieve the results as the qualifications determined by the stakeholders. Therefore, a system related to human capital and knowledge management as a unity of managerial activities is required. When both are well managed, the goals of an organization will likely be achieved (Thienput et al., 2015).

Based on the review mentioned above, this study aims to identify the assets of Universitas Teuku Umar (UTU) grouped into components of human capital (HC) as well as to analyze the existence and management of HC in UTU

II. METHOD

This study employed a qualitative method. The assets of UTU were determined by grouping the components of HC using 12 characters of the university intangible elements as proposed by Ramirez and Gordillo (2014). All elements were adapted to the conditions of the object of this research and the provisions of National Accreditation Board of Higher Education (BAN-PT) as a quality assurance institution of universities in Indonesia.

III. FINDING AND DISCUSSION

Assets are the resources owned by a company or organization which can be classified into several categories including current and non-current assets, tangible and intangible assets, fixed and non-fixed assets. Several previous studies (Nieto and Perez, 2002, Sawarjuno and Kadir, 2003; Sanchez-Segura et al., 2017) mentioned that assets are the foundation for setting success strategies. The shift of the dominant economic model to a knowledge-based economy lead to the competition based upon competitive advantage. This will be obtained when a company or an organization can identify and manage knowledge assets to create strategies to improve its performance.

As one of the universities focusing on knowledge and knowledge sharing, it is crucial for UTU to identify its assets. The assets are then identified and grouped into the components of HC. The grouping benefits UTU in defining strategies and creating the future competitive advantage.

TABLE I. INTANGIBLE ELEMENTS OF HUMAN CAPITAL

<i>Component</i>	<i>Code of Element IC</i>	<i>Element of HC</i>
<i>Human Capital</i>	HC1	Typology of university staff
	HC2	Academic and professional qualifications of teaching and research staff
	HC3	Mobility of teachers and researchers
	HC4	Scientific productivity
	HC5	Professional qualifications of administration and service staff
	HC6	Mobility of graduate students
	HC7	Efficiency of human capital
	HC8	Teaching capacities and competences
	HC9	Research capacities and competences
	HC10	Teamwork capacity
	HC11	Leadership capacity
	HC12	Training activities

Based on the interview results and secondary data obtained, 11 elements of intangible assets that can be grouped as HC (presented in Table I) were identified in UTU. Unidentified elements were the mobility of graduate students as there was no tracer study available to track the graduates and users.

Based on the staff typology of UTU, it is identified that out of 410 the staff members, 55.1% are professors, with the ratio of female and male lecturers is 1: 1.3. 98.2% of the lecturers hold a postgraduate degree and the remaining hold doctoral degree. Based on the BAN-PT assessment matrix for university accreditation, the number of lecturers having a doctoral degree in UTU is sufficient. In term of functional qualification, 49.5% are lecturers, 11.06% is a senior lecturer, 0,009% is an associate professor, and only one is a professor. Furthermore, the professional qualification called an educator certificate can also indicate the skills and expertise of a lecture. The data showed that nearly 20% of lecturers in UTU hold an educator certificate. In addition to the academic profession, UTU also has educational staff that helps and supports the process of Tridharma University or Three Principles of Higher Education (The University's three primary responsibilities of education, research and community service) conducted in UTU. Out of 184 educational staff, 44% are female, and the rest are male.

The professional qualifications of administrative and service staff are governed by the standard operation policies employed in UTU. The criteria and selection of civil servant employment for both academics and educational staff are based on the criteria established by the Ministry of Research, technology and the Higher Education Republic of Indonesia (Kemenristekdikti). For non-civil servant academics and educational staff, the admission selection is conducted by selecting the applications submitted to UTU and the required position.

Although the admission of academics, administrative and service staff is based on the qualifications and required position, there is no staff having distinct skill qualification such as librarians, laboratory staff, technicians and operators in UTU. The operator in UTU is an additional task of an academic data analyst. The educational staff obtains an additional task as an academic data operator responsible for inputting data to Higher Education Database (PDDIKTI) so that the data of lecturers and student are published in the higher education report forum (FORLAP). Other qualifications such as the working experiences of lecturers and staff are only recorded in the form of the curriculum vitae provided by each staff and educational

staff and rector's decision document on the appointment of permanent academics and educational staff. The data is recorded in each faculty and the general section of the personnel subsection.

As for training activities participated by lecturers and educational staff, the evidence of lecturer and educational staff performance are managed by each work unit organizing the training. Such training is usually internal, for example, the academic sub-section conducts the training, and the evidence of performance is kept and managed by the academic subsection. Similarly, when the training conducted by lecturers and educational staff work units, such as faculties or study programs, the evidence are only recorded and managed by each faculty. The interview results of the head of the academic and the head of the personnel sub-division revealed that the evidence of the training performance had not been optimally managed as the records are only kept at the related work unit by relying on the lecturer and educational staff initiation to submit the performance evidence in their respected folder. Evidence of such performance is often not forwarded or reported to be recorded in the academic and staff sections.

Another element of HC is the mobility of teachers and researchers (HC3). Based on the indicator of HC3, it is found that there has been no exchange of lecturers recorded in the work units at UTU. The mobility of teachers and researchers is identified based on the collaborative research in UTU and graduates from current lecturers that are not only from the university guiding UTU, namely: Syiah Kuala University (UNSYIAH). The graduates of these lecturers are spread in outside the provinces and countries such as Bogor Agricultural University (IPB), Gadjah Mada University (UGM), University of Science Malaysia (USM), and University of North Sumatra. The lecturers who are from the various universities are entitled to the same responsibilities of teaching, conducting research and participating in community service or as stipulated in the Tridharma of university. To be able to fulfill their duties, the lecturers must have the capacity and competence as a lecturer. Referring to the indicators the current eligible lecturers to be certified as educators, their teaching capacities and competencies (HC8) can be identified based on their creative efforts in teaching, the conformity of the education area (expertise) with teaching materials as well as the guidelines for preparing the syllabi, assessment, and the evaluation in teaching. The creative efforts in teaching are usually shown in the semester learning plan (RPS) and learning scenarios included. However, most of the lecturers in the UTU have not yet optimally established the RPS based on the Indonesian National Qualification Framework (KKNI). The record and management evidence of RPS have not optimally utilized as documents in most faculties are only kept in the archive of the study program and without being forwarded to the academic subdivision of the faculty or university. The conformity of educational area (expertise) and teaching materials are also lacking. This is indicated by the number of current lecturers who teach courses that are not in line with their field of study and competences based on the appointment of the subjects determined in the academic degree.

The other capacity and competence of lecturers related to the Tridharma is the research capacities and competencies. 82 research proposals and 36 submitted proposals in the national competition for research funding and community services by Kemenristekdikti are identified as the assets of UTU in the component of HC using the elements HC9 based on the data obtained from the Institute for Research and Community Service (LPPM) and UTU Quality Assurance are. 50% research proposal won the research grants. As for community service, there is only 1.2% of proposals funded in 2018. Furthermore, 17 scientific papers of UTU lecturers have been cited by other researchers. The capacities and competencies of research and community service conducted by lecturers are also related to scientific productivity. The indicators of the lecturers' abilities to produce scientific papers are identified by the number of scientific publications such as monographs, books, both nationally and internationally accredited scientific magazines. In 2017, UTU has published two scientific papers in two international scientific magazines as well as two papers in the national scientific magazines. Also, 13 papers are presented in the international seminar amounted, and 19 papers are presented in the national seminar. These results are not in line with existing data available in the respected work unit of the lecturers (faculty).

Based on the summary of data obtained from the faculties in UTU, there are 133 scientific papers published nationally, 17 published internationally, and 17 have been cited. 69 scientific papers submitted for the community service has not been included in the figure. The results show that more than 50% of the lecturers in UTU have produced scientific papers in 2017. The data discrepancies between the LPPM, the quality assurance and the faculty in UTU indicate that the management of scientific productivity evidence has not been recorded well even though it has been well recorded in the faculty.

The information of the graduate concerns the output of human resources produced by universities. Universities should be able to produce graduates who can compete globally. This information is obtained from the feedbacks of graduate users. Although there are no specific policies and strategies in the tracer study and graduate users at UTU, they have been managed separately in the faculty. The policies and strategies to track graduates and graduate users have been designed. However, it has not been implemented in 2017. Although there is no tracer study, as an indicator of HC6, HC6 and its management are obtained from the current alumni organization that has been established and currently active.

In addition to the elements previously discussed, the elements of teamwork capacity (HC10) and leadership capacity are also needed to be identified. This provides information on the capabilities, expertise, and knowledge of human resources

managed regarding the cooperation and leadership. The indicators identify both elements in each work unit in UTU with clear and right job targets, coordination process and meetings conducted to monitor and evaluate the proposed and implemented activities. The management of HC10 and HC11 elements has been conducted well as indicated by the successful implementation of planned activities and well-managed evidence of performance.

HC-related indicators are varied in each university because of the different vision, mission, and strategy. Therefore, it is necessary to identify the key elements in determining the strategy (Ramirez and Gordillo, 2011; Sangiorgi and Siboni, 2017).

IV. CONCLUSION

The assets of UTU grouped based on the elements consist of the intangible elements proposed by Ramirez and Gordillo (2014). 11 elements are identified as the human capital in UTU; however, their management have not conducted based on the knowledge sharing.

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