Discriminant Analysis of Intellectual Capital Model of State University in Medan

Isfenti Sadalia, Arlina Nurbaiti Lubis

Faculty of Economic and Business, Universitas Sumatera Utara, Medan, Indonesia

Abstract

A lecturer has to understand the intellectual capital for creating qualified graduates. The aim of this research is to find out the impacts of organization culture and corporate governance on the lecturers intellectual capital. The population is the lecturers from three public universities; samples are 300 respondents, were taken by accidental sampling method. Data was collected by questionnaire; data analysis method is discriminant analysis with SPSS.

The results are (1) There is no difference of organization culture and corporate governance factors in affecting intellectual capital. (2) Organization culture has insignificant effects on lecturer's intellectual capital. (3) Corporate governance has significant effects on lecturer’s intellectual capital.

1. Introduction

Global competition is not just happening in the world of industry and commerce, but also applies to the world of education. The challenge for higher education in Indonesia is the increase of competition level, both between local universities and competent.

Discussing about college, its presence cannot be separated from the existence and role of lecturers in it because college performance is also heavily influenced by the role and performance of the lecturers. College is the highest
level of an education process not only prioritizing the learning process and transfer knowledge, but also playing a role in the search and development of science itself. Equipped with science and knowledge it is expected that college can be used as a tool and solution to the problems of society.

Medan has a lot of colleges of higher education with the status of both domestic and private. However, of the many universities in the field, only three public universities are in Medan i.e. University of North Sumatra (USU), State University of Medan (UNIMED) and the State Islamic Institute of North Sumatra (IAIN) North Sumatra.

Based on data obtained, one element of intellectual capital in each State University is the educational qualifications of the lecturers. At USU of the overall number of 1672 lecturers, 1045 lecturers are with the qualification of S1 and S2 and 338.289 with the qualification of S3. Whereas the overall number of lecturers in UNIMED is 859 persons: 429 with S1 qualification, 388 with S2 qualification, and 42 with S3 qualification. The overall number of lecturers in North Sumatera IAIN is 271 people with as many as 159 people qualified S1, S2 as many as 68 people and S3 as many as 44 people. Based on data obtained, it shows that the educational qualification of the lecturers is still relatively low or in other words, an element of intellectual capital that is expected to increase the value of Higher Education in providing educational services is low, especially in human capital, so that it will affect the quality of graduates and Universities concerned.

Intellectual capital is an intangible asset of an organization which is used to create a value of organization through a combination of human capital, relational capital and structural capital. The purpose of analysis of the intellectual capital (IC) is to determine the intellectual wealth of an organization, in this case the university / college. This is done so that universities can maintain their existence through an increase in the values of the college (Value of the Company) through the educational service user loyalty that comes from intellectual capital owned by the College. In the research an analysis was conducted to identify and evaluate the critical variables Intellectual Capital Lecturer State Universities as well as the impact on services and end user loyalty with value enhancement at universities. Basically, the higher intellectual capital built by elements of human, relational, and structural capital, the better quality of universities it will achieve in carrying out its functions so that impact on increasing the loyalty of users of educational services and the high loyalty can also increase the value of Higher Education.

The purpose of this research is to find out how far the impact of organizational culture and government policies adopted by universities in shaping the intellectual capital of the lecturers at the three state universities is.

2. Literature review

2.1. Intellectual capital

Intellectual capital is an intangible asset for a company. The terms of Intangible Asset, Knowledge / Intellectual Capital are frequently used and have the same meaning. The term of Intangible Assets is found in the accounting literature, while the term of Knowledge Assets is particularly used by economists and Intellectual Capital (IC) sometimes is used in the management literature, but all refer to the same thing namely Intangible assets or values that intangible such as employee relations, staff management, user / customer and stakeholders. IC does not only include the contents of the mind or the minds of employees, but also includes intangible and complex structure between them and make the organizational functions (Ulmer, 2003).

According to Lomquist and Metanen (2003), the IC has the following characteristics:

1. Characteristically Invisible (not shown)
2. It is related to the knowledge and experience of the employees or users, and technology used by the organization.
3. It can provide an opportunity for organizations to be successful in the future.

2.2. Human capital

Fitz - Enz (2009) explains that human capital is as a combination of three factors, which is called: 1) the character or nature that is brought to the job, for example, intelligence, energy, positive attitude, reliability, and commitment, 2) person's ability to learn, such as intelligence, imagination, creativity and talent 3) motivation to share information or knowledge, the team spirit and goal orientation.
According to Wealtherly (2005), the value of the company is based on three main groups of assets, namely:

1. Financial assets, such as treasury securities which are often referred to as the financial capital.
2. Physical assets, consisting of equipment, buildings, land, also known as tangible assets.
3. Intangible assets, such as organizational capital, business alliances, customer capital, brand, reputation of quality and service, intellectual capital (patents, product design, and technology), goodwill, and human capital.

2.3. Structural capital

Definition of Structural capital is the infrastructure that supports employees to create optimum performance, including the ability of the organization to reach the market, hardware, software, databases, organizational structure, patent, trademark, and all the ability of organizations to support employee productivity (Bontis, et al., 2000 in Artinah, 2011). The concept of the existence of structural capital is enabled by the creation of intellectual capital and a liaison/processing of human resources into intellectual capital.

2.4. Customer capital

Definition of Customer capital is the knowledge of a series of markets, customers, suppliers, government and industry associations. Customer capital is the intellectual capital components that provide real value to the company by creating a relationship or a harmonious relationship with its partners or parts outside the company. This is a component of intellectual capital that gives real value. The interaction of the three components of intellectual capital is creating a value for the company as a whole.

2.5. Organization culture

Robbins (2002) states that every organization has a culture and it depends on its strength. The culture can have a significant influence on the attitudes and behavior of members of the organization. Based on these opinions, it can be stated that in general each individual is motivated by a culture that influences behavior. Culture leads people to behave and gives guidance to them about what needs to be followed and studied.

Cultural organizations depend on how leaders apply and embed it within the organization. Managing culture towards a better way and creating synergies between the existing cultures are the task of the leader of the organization. Good organizational culture will reinforce the values of behavior in the work, while the weak organizational culture gives little direction and allows all forms of improper actions occur. This suggests that organizational culture has a significant influence on the behavior of individuals within the organization as a member of any group, and organization as a whole.

2.6. Corporate governance

Corporate governance is a system or a way in which companies are controlled to be the company responsible to its stakeholders (Dahya et al., In Haji, A. A and MohdGhazali, 2013). According to Cadbury Committee of the United Kingdom in the Forum for Corporate Governance in Indonesia (FCGI), a corporate governance is defined as:

"Set of rules governing the relationship among shareholders, management of the company, creditors, government, employees, other internal and external stakeholders which is related to the rights and obligations or in other words, it is a system that regulates and controls the company”.

According to the National Committee on Governance (2006), there are five principles of good corporate governance, namely:

1. Transparency
A Company must take the initiative to reveal not only the problem that is required by legislation, but also it is important for decision-making by shareholders, creditors and stakeholders.

2. Accountability
   A Company must be able to account its performance in transparent and fair way.

3. Responsibility
   Companies must comply with legislation and implement responsibilities towards society, the environment which can be maintained in the long-term sustainability of the business and also gain recognition as a good corporate citizen.

4. Independence
   For accelerating the implementation of the principle of good corporate governance (GCG), the company must be managed independently, so that each organs of the company cannot dominate the others and avoiding the intervention from other parties.

5. Fairness and Equality
   In carrying out its activities, the company always considers the interests of shareholders and other stakeholders based on principles of fairness and equality.

2.7. Research method

The population of this study was all lecturers who served in UIN (IAIN), USU and UNIMED. Sample taken from each of the PTN is 100 people so the total sample of 300 respondents is entirely taken by accidental sampling technique. Data collection was performed by using questionnaires and data analysis methods used are discriminant analysis with SPSS.

3. Result and discussion

Results obtained indicate that (1) intellectual capital of the three state universities is not much different if viewed from both determinants factors namely organization culture and corporate governance. It means that there is no noticeable difference from both factors in influencing the intellectual capital of the three state universities lecturers. So it can be said that the strength of each of these factors is relatively equal in determining the intellectual capital of the lecturers who work in the three state universities. (2) Organization culture factor does not have a significant effect on the intellectual capital lecturers in the three state universities. Cultural organizations in each State is unable to significantly affect the intellectual capital lecturer because in general the lecturers of each State felt no positive connection nor relationship that is reasonably well with the environment and the system implemented by the university that is able to support productivity of lecturer and creating intellectual capital of qualified lecturers. (3) Corporate governance factors have a significant influence on the intellectual capital 3 lecturers in state universities. Corporate governance applied by the university is able to support the lecturers to create a quality of intellectual capital and create a good performance and productivity for professors. So as to create quality graduates who can compete.

Based on Kaplan and Norton's (2004) model of intellectual capital, there is special attention on learning about the culture and the environment. On that model culture is a part related to intellectual capital. The other model, called the Skandia Navigator model that is presented by Edvinsson (1997) mentions that culture connects aspects present in the intellectual capital, that is human, structural and customer capital to form an intellectual capital. Research conducted by Nazeem and Mozaaini (2014) also states that organizational culture directly influences the intellectual capital of an institution of higher education in Iran. These opinions would not support research which states that organizational culture does not affect the formation of intellectual capital lecturer in state universities.

Meanwhile, corporate governance which has an influence on the intellectual capital lecturer in state universities supports the results of research conducted by Wahid, et. al., (2013): a university intellectual capital has a positive relationship with corporate governance. The better the corporate governance of a university runs, the better impact of the intellectual capital and lecturer in state universities have on the loyalty to the university lecturer. Yusof’s opinion (2008) also states that intellectual capital is an important and strategic resource in building the reputation of a university.
4. Conclusion

In general, intellectual capital, organization culture and corporate governance of the three state universities (UIIN or formerly IAIN, USU and UNIMED) are not much different in the form of patterns and relationships or it can be said that each of these variables is relatively the same. Organization culture and corporate governance have relatively equal power in determining the intellectual capital lecturers who work in the three state universities.

Organizational culture has no effect in shaping the intellectual capital of the State university lecturer while corporate governance has an influence in shaping the intellectual capital lecturers in state universities. Results of this study can be a consideration factor for universities to manage their organizational culture to be better and implementing corporate governance as a medium to form intellectual capital lecturers of state universities to have better quality and integrity for the sake of becoming a high-quality university.

References


Procedia - Social and Behavioral Sciences

C. Wexler

McMaster University, Hamilton, Ontario, Canada

I. W. Slocom Jr.

Southern Methodist University, Dallas, Texas, USA

X. L.

The University of Hong Kong, Hong Kong, China

E. Kruithof

KU Leuven, Leuven, Belgium

K. Leeners

Arizona State University, Tempe, Arizona, USA
PREFACE

It is a great honour to edit the special issues of Procedia - Social and Behavioral Sciences Journal which is publishing the accepted papers that were presented in the 2nd Global Conference on Business and Social Sciences (GCBSS), 17-18 September 2015, Bali, Indonesia.

A large number of intellectually stimulating papers were received for this Conference, most of which exhibit a high degree of quality research work. It was a difficult task for the selection panel to select the papers suitable for publication. Considerable care was taken during the selection process ensuring the papers’ quality.

GCBSS series has provided a platform for sharing novel ideas in the last two years. It has disseminated scholars’ research outcomes which represented the countries around the world, including the USA, United Kingdom, Australia, Czech Republic, France, Finland, Poland, Malaysia, Iran, India, Indonesia, Nigeria, Thailand, Pakistan, Sri Lanka, Vietnam, and the United Arab Emirates.

It was also an honour for us to welcome our prominent plenary speakers: Professor Danture Wickramasinghe, University of Glasgow, United Kingdom; Professor Gabriel A Moens, Curtin University, Australia; and Professor Ahmad Fauzi Abdul Hamid, Universiti Sains Malaysia, Malaysia. We are grateful to them for their invaluable contribution.

We sincerely hope that this Conference will contribute to furthering business and social sciences research by exploring alternative methods, frameworks and issues, and delegates’ career development in particular.

Finally, we like to thank the authors for submitting their papers. We also would like to show our gratitude to the reviewers for their valuable and timely comments and guidance. We also thank all the others who contributed in various ways to the success of the GCBSS, especially the session chairs and the organizing committee members.

Guest Editors:

Danture Wickramasinghe, University of Glasgow, United Kingdom.
Gabriel A Moens, Curtin University, Australia.
Ahmad Fauzi Abdul Hamid, Universiti Sains Malaysia, Malaysia.
Kashan Pirzada, Global Academy of Training & Research (GATR), Malaysia.*

* Corresponding Editor. Tel.: +60322011665.
E-mail address: kashan@gatentreprise.com