

INTELLECTUAL CAPITAL PRACTICES' IN UNIVERSITIES

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Abstract: *Intellectual capital is a concept that increases the researcher's attention nowadays. The intellectual capital is one of the most important keys to growth and organizations development. Intellectual capital represents the intangible assets that have used for knowledge creation and performance promotion of universities. However, success at universities depends on their intellectual capital. The main purpose of this paper is to explore the practices working of the intellectual capital at universities. Education organizations especially universities were selected because it plays an important role in the development and growth of the knowledge-intensive sector. The paper concluded that only universities in developed countries are paying high attention to intellectual capital, while other countries their universities still in the development process of intellectual capital.*

Keywords: *Intellectual Capital, Universities, Higher Education.*

Introduction

During the last decade, higher education institutions have faced plenty of changes. These changes in Higher Education institutions due to multiple factors like the economy, popular opinion, and shifting political ideologies (Losco and fife, 2000). Further, Shoham and Perry (2009) list the key factors impacting universities as diminishing resources, government regulation, and increased competition. Brown and Duguid (1996) claim educational markets are getting global as universities conceive to internationalize their curricula and program offerings to students notwithstanding. "The influence of globalization process in higher education has demonstrated the trend that tug and pull aren't solely inside national boundaries, however, has become a worldwide phenomenon" (Davenport et al., 1998).

Universities have continuously been in any society as a result of their enduring mission of making new knowledge through research, of coaching generations of pros, and providing service to the community. They need an extended life cycle and want to adapt continuously to their ever-

changing environments. Further, within the last decade, knowledge management and intellectual capital in the main appeared within the context of private corporations, there's an accrued interest in public organizations, like universities and research centers. This can be in the main as a result of the very fact that universities have as main goals the production and also the dissemination of knowledge (Sanchez et al, 2006).

In addition, the universities and higher education institutions need to engage and respond to the pressures of the marketplace (Levin, 2001). The public universities compete for the market position; they need to be more strategic by identifying their resources and creating an organizational strategy that meets the demands of multiple stakeholders (Randerce, 2006; Brown and Duguid, 1996). Furthermore, the competitive environment forces the public universities to manage and operate their activities by the different way (Randerce, 2006). In addition, Rawat (2009), states that the public universities have to be more strategic and dynamic in their approach and practice. Universities cannot access to the strategic goals only through possessing the ability to manage and evaluate the performance of its business. Achieving lasting success, it be by improving the performance of its members and the development of working capabilities within the team as well as individual and organizational contributions in general, and these elements cannot be achieved unless the organizations has the sophisticated methods of assessing performance and keep up with the changes that occur in the competitive environment. Currently, the intellectual capital represents a high percentage of the total value of the organizations, up to 90% of the total market value. For example, the market value of Microsoft Corporation is estimated at the US \$ 115 billion, of which a physical capital is only 10% the remainder represents intellectual capital. However, the ability to find a way to manage the intangible assets of the organization, allows the organization to identify the shortcomings and address them in the future and to achieve strategic objectives, future vision, and mission of the organization. Thus, the managing of intellectual capital of the organization, which can help the management to determine the appropriate method of assessment, has continuously improved the current and future performance of the organization. However, the main objective of this study is to identify the practices of intellectual capital that exist in universities.

Literature review

Intellectual Capital Practices in Universities

Intellectual capital management and reporting were developed at intervals business as a response to the ever-increasing investments in intangible assets. Although most of the first experiences and also the academic literature refer to intellectual capital in companies, throughout the last 20 years the interest has extended from non-public organizations to public ones, specifically to universities and research centers. Management can benefit from understanding that intellectual capital investments must be considered seriously as investments for future competitive advantage. Investments in intellectual capital, such as employee training, should not be seen as pure costs. Investments in intellectual capital are critical; management needs to find an appropriate balance between investments in tangible and intangible resources (Cater and Cater, 2009). Intellectual capital can influence the operating capabilities of organizations, which ultimately influence business performance. Menor, Kristal, and Rosenzweig (2007) discovered that intellectual capital usage contributes to operational and competitive capabilities of organizations when effectively managed and leveraged. "An organizations' operational intellectual capital or operating know-

how constitutes a strategic knowledge-based resource is valuable, rare, and difficult to substitute or imitate" (Menor et al., 2007, p. 560).

According to Stewart (1997) intellectual capital is a package useful knowledge that includes an organizations processes technologies, patents, employees, skills, and information about customers, supplier and stakeholder. Further, Seviby (1998) defined intellectual capital as the knowledge, experience, brainpower of employee as well as knowledge resource, stored in an organizations databases system processes, culture and philosophy. Bontis (2001) defined intellectual capital as the collection of intangible resources and their flows. Intellectual capital is considered as one of the vital strategic assets for the success and sustainability of the organization in a competitive business environment and also recognized as the most crucial asset for the survival of knowledge-intensive organizations (Khan, 2014). Intellectual capital components are human, relation, structure, social, technological, spiritual, renewal, trust and entrepreneurial capital (Alkhateeb, Yao and Kie, 2018)

The Intellectual capital was adopted and adapted by public organizations and universities, within the late of the Nineties. The first country has been adopted Intellectual Capital report wide for research organizations and universities are Austria. However, "Austrian Institute of Technology in 1999 was the first European research organization to publish an Intellectual Capital report for the entire organization. And the report of Intellectual Capital in this research organization is to support information for management of intangible investments and to disclose information to the stakeholders" (Leitner, 2002; Alkhateeb, Yao and Kie 2016).

On the other hand, Spain is another country in Europe that take an advantage of the Intellectual Capital managing and reporting at the universities, and their dependent was based on the voluntary approaches. However, according to Sanches et al. (2006), "The Observatory of European Universities (OEU) proposed the presentation of the Intellectual Capital report called the Intellectual Capital Universities (ICU) Report, particularly designed for universities and research centers, with the aim of improving transparency and aiding the homogenous dissemination of the indicators of intellectual capital". In addition, intellectual capital projects for universities have been also carried out in other countries aiming also to support the management of knowledge-based resources and to communicate with diverse external stakeholders.

In Poland, Poznan University of Economics was the first university to launch Intellectual Capital project. Fazlagic, (2005) present the intellectual capital report in the way of resources, activities, and results following on the method that proposed by the Danish Ministry of Science, Technology, and Innovation (2000). Italy has National Agency for the Evaluation of Universities and Research Institutes that created in 2006 and its task of promoting the quality of the Italian system of universities and research, with reference to State Universities, Private universities entitled to grant academic degree, Public research institutions controlled by the MIUR (Italian Ministry of Universities and research). Indeed the criteria related to the Research Assessment are more related to structural capital, human capital which is part of intellectual capital components (Leitner et al., 2014).

Lithuanian universities have been regularly publishing annual reports as part of strategic management. Over the years the scope of annual reports has expanded and currently includes a number of indicators on human, structural and relational capital. However, the discourse and principles of Intellectual Capital management and reporting are not widely used. (Leitner et al., 2014). The universities in Latvia have to prepare every year three different reports. All these three reports can be consolidated also in one document. So far none of the universities in Latvia are including their information about the intellectual capital; only one university has mentioned the importance of intellectual capital. However, the annual reports usually include the basic information on human, structural and relational capital (Leitner et al., 2014). The amount of intellectual capital information disclosed by UK universities in their annual reports is low. UK universities were identified as being over-regulated and having low awareness of intellectual capital (Bezhan, 2010).

On the other hand, in America especially Colombia, Bucheli et al, (2012) study the knowledge production of Colombian universities in terms of their accumulation of intellectual capital. However, the result shows that universities with greater intellectual capital accumulate more capacities than others to carry out further research activity. These universities get to be recognized for their research, which supports their achievement of intellectual capital. The accumulation of intellectual capital translates into ever greater capacities for carrying out research activity.

Moreover, in South Africa specifically at Rand Afrikaans University, the intellectual capital model was developed to use to manage and measure the intellectual capital of high education institutions (Kok, 2007). Asia is another part of the world, that some of its countries study intellectual capital at their university. In Pakistan Shehzad et al, (2014) study both public and private universities to examine the impact of intellectual capital among universities performance, and the result shows that intellectual capital in Pakistan universities has a positive impact on performance. Another study in Taiwan analyses the intellectual capital based on innovation capital which is the critical factor in affecting the quality level of Education University and research in different types of Taiwanese university (Wu, Chen, and Chen, 2010). Another study in Malaysia public university has examined the factors influencing university performance by focusing on intellectual capital that comprises the sum of knowledge to might use to create value for an organization (Ishak, Kamaluddin, and Said, 2014). In the Middle East, the intellectual capital is still in a building process. However, the study of the impact of intellectual capital on university goals has shown a positive result in Jordanian private and public university (Najim, Alnaimi and Alnaji, 2012). Further, intellectual capital in Iran universities also is still in building process (Bahrami, 2011; Babaei et al, 2012; Mousavi et al, 2015).

Further, Intellectual Capital has been becoming a popular subject at universities and institutions of research, especially in the European higher education. Intellectual capital reporting instrument has been adopted by public research organizations and universities. Universities are social institutions with long histories as a result of their enduring mission of knowledge creation, education and instruction at a high level, and service to the community. Knowledge and intellectual capital of the university became a strategic resource and a core competency in obtaining a competitive advantage within the international competition. Intellectual capital reflects the hidden power of the university intangible resources and competencies. Within the

last decades, there have been nice efforts to spot these intangible resources and to know the character and quality of the intellectual capital (Brătianu and Pînzaru, 2015). Nowadays universities ought to encourage being socially accountable and show that they're responding to social demands (Cañibano and Sanchez, 2008).

Conclusion

The mission of universities is to generate and transfer knowledge through teaching, learning, and research. Thus, universities can be described as a knowledge-intensive organization, and its intellectual capital has a very high potential but a rather low operational intensity, due mostly to its management. However, with the advent of the knowledge-based economy, there is an apparent tendency towards promoting intellectual capital in order for companies to sustain their competitive advantage. In particular, such tendency has extended from enterprises to higher education institutions such as universities. Since universities and research organizations are producing knowledge; but only a very small proportion is considering identifying, measuring and valuing intangibles as part of an overall knowledge management. Hence, it is become compulsory to achieve higher intellectual capital, and increasing number of universities are focusing on innovation, which is a crucial factor of intellectual capital in affecting the level of quality of university education and research. Therefore, to achieve a better quality of higher education, it becomes imperative for existing universities to effectively measure their intellectual capital, which only the developed countries are doing that. Further, the situation is likely to change in developing countries because the increasing autonomy and competition among universities and research organizations will oblige them to position themselves strategically, and raise new financial resources and find new ways of accounting for their investments and expenditures. Nevertheless, other countries are still in building process of intellectual capital. The governance not yet takes action to the importance of university's intellectual capital in developing countries. Thus, this is one of the research gaps that this study illustrated.

References

- Alkhateeb, A. N. A., Yao, L., Kie, C. J., & Shaban, O. K. A. (2016). Review on Intellectual Capital and Its Components towards Competitive Advantage in Universities. *In: Proceedings of the National Conference for Postgraduate Research (NCON-PGR 2016), 24-25 September 2016*, Universiti Malaysia Pahang (UMP), Pekan, Pahang. pp. 763-774.
- Alkhateeb, A. N. A., Yao L., Kie C. J. (2018). Review of Intellectual Capital Components Research. *Journal of Advanced Social Research* 8(6).
- Babaei, N. F., Bohlooli, Z. N., & Rahimi, G. A. (2012). Comparative Study of Intellectual Capital Management in Universities. *Innovation & Creativity in Human Science*. 1(3), pp. 53-96.
- Bahrami, S., Rajaeepour, S., & Yarmohammadian, M. H. (2012). Comparison of Intellectual Capital Components in Iranian Universities. *Health Information Management*. 8(7), pp. 521-521.
- Bezhan, I. (2010). Intellectual capital reporting at UK universities. *Journal of Intellectual Capital*, 11(2), pp. 179-207.
- Bontis, N. (2001). Assessing knowledge assets: a review of the models used to measure intellectual capital. *International journal of management reviews*, 3(1).

- Bratianu, C., & Pinzaru, F. (2015). Challenges for the university intellectual capital in the knowledge economy. *Management Dynamics in the Knowledge Economy*, 3(4), 609.
- Brown, J. S., & Duguid, P. (1996). Universities in the digital age. *Change: The Magazine of Higher Learning*, 28(4), pp. 11-19.
- Bucheli, V., Díaz, A., Calderón, J. P., Lemoine, P., Valdivia, J. A., Villaveces, J. L., & Zarama, R. (2012). Growth of scientific production in Colombian universities: an intellectual capital-based approach. *Scientometrics*, 91(2), pp. 369-382.
- Cañibano, L., & Sanchez, P. (2008). Intellectual capital management and reporting in universities and research institutions. *Estudios de economía aplicada*, 26(2), pp. 7-26.
- Cater, T., & Cater, B. (2009). (In) tangible resources as antecedents of a company's competitive advantage and performance. *Journal for East European Management Studies*, 14(2).
- Davenport, T. H., De Long, D. W., & Beers, M. C. (1998). Successful knowledge management projects. *Sloan management review*, 39(2), pp. 43.
- Fazlagic, A. (2005). Measuring the intellectual capital of a university. In *Conference on Trends in the Management of Human Resources in Higher Education. Poland*, pp. 1-9.
- Golshahi, A., Estahbanati, F. K., Haghparast, A. A., Nou, Z. R. G., & Firoziani, E. (2015). Identifying and ranking indicators of intellectual capital in higher educational situations from perspective of faculty members: a case study University of S and B. *Journal of Scientific Research and Development*, 2(3), pp. 169-176.
- Ishak, M., Kamaluddin, A., & Said, R. (2014). Intellectual Capital and Performance of Malaysian Public University. Knowledge Management International Conference (KMICe). Malaysia, pp. 268 - 272.
- Khan, M. W. J. (2014). Identifying the Components and Importance of Intellectual Capital in Knowledge-Intensive Organizations. *Business and Economic Research*, 4(2).
- Kok, A. (2007). Intellectual capital management as part of knowledge management initiatives at institutions of higher learning. *The electronic journal of Knowledge management*, 5(2), pp. 181-192.
- Leitner, K. H. (2002). Intellectual capital reporting for universities: conceptual background and application within the reorganization of Austrian universities. In *Conference on the transparent enterprise: the value of intangibles. Madrid*, pp. 25-26.
- Leitner, K. H., Elena-Perez, S., Fazlagic, J., Kalemis, K., Martinaitis, Z., Secundo, G., & Zaksa, K. (2014). *A Strategic Approach for Intellectual Capital Management in European Universities: Guidelines for Implementation*. UEFISCDI.
- Losco, J., & Fife, B. L. (2000). *Higher education in transition: The challenges of the new millennium*. Greenwood Publishing Group.
- Menor, L., Kristal, M., & Rosenzweig, E. (2007). Examining the influence of operational intellectual capital on capabilities and performance. *Manufacturing & Service Operations Management*, 9(4).
- Mousavi, P., Pourkiyani, M., & Tavakoli, M. A. (2015). The Relationship between Strategic Management and Intellectual Capital in Iranian Universities of Medical Sciences. *GMP Review*, 8, pp. 208-213.
- Najim A., Mohamed A., & Alnaji L. (2012). Impact of Intellectual Capital on Realizing University Goals in a Sample of Jordanian Universities. *European Journal of Business and Management*, 4 (14), pp. 153-162.

- Sánchez, M. P., Castrillo, R., & Elena, S. (2006, November). Intellectual capital management and reporting in universities. In *Conference on Science, Technology and Innovation Indicators: History and New Perspectives*.
- Shehzad, U., Fareed, Z., Zulfiqar, B., Shahzad, F., & Latif, H. S. (2014). The Impact of Intellectual Capital on the Performance of Universities. *European Journal of Contemporary Education, 10*(4), pp. 273-280.
- Shoham, S., & Perry, M. (2009). Knowledge management as a mechanism for technological and organizational change management in Israeli universities. *Higher education, 57*(2), pp. 227-246.
- Stewart, T. A. (1997). Intellectual capital: The new wealth of nations. *New York*.
- Sveiby, K. E. (1998). Intellectual capital: Thinking ahead. *AUSTRALIAN CPA, 68*(5).
- Wu, H. Y., Chen, J. K., & Chen, I. S. (2010). Innovation capital indicator assessment of Taiwanese Universities: A hybrid fuzzy model application. *Expert Systems with Applications, 37*(2), pp. 1635-1642.