



## International Research Journal of Human Resources and Social Sciences

ISSN(O): (2349-4085) ISSN(P): (2394-4218)

Impact Factor- 5.414, Volume 4, Issue 7, July 2017

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### Critical Study of Knowledge Dynamics Strategies to Enhance Intellectual Capital of Universities

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#### Abstract

The article will examine how knowledge dynamics strategies can be applied to universities. It will specifically focus on the way in which internal and external knowledge dynamics are managed by universities, and how it affects their performance. Additionally, it will examine how best practices in knowledge dynamics can be applied to research universities, who are seeking to develop their performance. For the purposes of this article, the term "knowledge dynamics" will be used to refer to a range of activities that contribute to developing an organization's relationship with its environment. It will include activities that contribute to a "good fit" between an organization and its environment and facilitate change within an organization in order for it to adapt effectively. This article examines the significance of knowledge dynamics strategies at a number of different levels: institutional, organizational and individual and its challenges. It considers current management approaches towards knowledge dynamics strategies at each level and the factors which may inhibit successful implementation from occurring.

**Keywords:** Knowledge Dynamics Strategies, Intellectual Capital, Strategies for Enhancement, Universities.

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## **Introduction**

The critical study of knowledge dynamics strategies to enhance the intellectual capital of universities. While knowledge has been an essential component for universities since its inception, it has received limited attention in the modern era. This stems from the increasing relevance of digital media in our lives, which offers increased opportunities for conceptualization and dissemination of information. The advent, use, and availability of digital media have given rise to a different approach towards knowledge creation by university faculty members who are no longer bound by physical constraints. They are relying on intangible online technologies such as blogs, podcasts, and social networks among others to generate new ideas while contributing these ideas back to students through their social networks or via blogs or other platforms that allow for student feedback. The result is increased production of knowledge as increased numbers of students and faculty members are contributing to the creation and dissemination of knowledge.

The development of an effective understanding of knowledge dynamics strategies is necessary for the enhancement of intellectual capital attributed to universities. Offering expanded and differentiated courses and services through current and emerging education models, the university will continue to play a strategic role in the development and enhancement of intellectual capital through knowledge dynamics strategies. This study illustrates how the university's performance with regard to its knowledge dynamics strategy has been enhanced by leveraging information technology as a foundation for defining, delivering, monitoring, and evaluating academic programs as well as student services across multiple campuses as per market demands.

Since the last millennium, knowledge has emerged as one of the most powerful tools in the world, but it is also one of its rarest resources. Universities are responsible for fostering and propagating the knowledge to individuals, communities and societies. Thus, universities are an important vehicle for the improvement of society. They play a major role in the development of culture, education, communication and communication networks.

Knowledge is now diversifying in all its forms and is becoming more dynamic rather than static as it used to be before. With the growing number of knowledge sources, there is a need to reorganize and revisit the ways of managing knowledge in a dynamic world. The word 'knowledge' is used to mean any system of thought that has been formed over time and has been accepted by people. Knowledge can be characterized as a system of propositions based on

experience or evidence. In today's globally competitive market, knowledge has become increasingly important because it is considered a powerful resource for economic growth. Firms rely more and more on knowledge-intensive activities to create new products and services that offer customers value (Bejinaru, 2017).

It is however interesting to note that knowledge is not just something that can be stored up in some textbook or archive. As it was explained above, knowledge has to be motivated by the need of the business; otherwise, it will remain useless. Knowledge must be utilized by organizations through operational activities (Bratianu & Pinzaru, 2015). For example, knowledge on the use of technologies like new products and services has to be used for business processes to run smoothly. Therefore, organizations need systems that enable them to utilize their existing knowledge efficiently; otherwise, waste will ensue. Organizations must think about innovating their work processes through changes in organizational structures (Secundo et al., 2015).

In order to maintain their competitive position, innovative organizations have developed various knowledge management systems. Knowledge management is a process of identifying, organizing and strategically applying knowledge to improve an organization's performance. It is a way for businesses to deal with the complex world of today

## **Objectives of the study**

The current study is a reflection of a cyclical process that has been identified as a dynamic strategy to enhance intellectual capital for universities. The article aims to describe the knowledge dynamics strategies with their antecedents, their significance and challenges.

## **Research Methodology**

This study is compiled with qualitative research methodology, by using the secondary source of information from different sources. This paper focuses on a critical study on knowledge dynamics strategies to enhance the intellectual capital of universities and explore its significance and challenges

## **Literature Review**

This segment of the article aims to move the discussions regarding knowledge dynamics and intellectual capital in higher-learning institutions into a contributive and constructive direction. The main objectives here are to review the literature on knowledge dynamics as they relate to universities as well as provide some insights on ways to enhance intellectual capital.

Universities have a major role to play in preparing students to be able to contribute towards the development of a nation. These bodies play a pivotal role in enabling networking and collaboration between individuals, both locally and internationally. Universities must therefore build upon the strengths of their students to ensure that the many diverse cultures involved in higher-learning institutions can be explored to their maximum potential. This can only be achieved, however, if there is networking and sharing of ideas(Bejinaru, 2017).

Major study shows that there is a need for a major change in higher-learning institutions if they are to be effective and productive. However, this cannot be achieved unless there is a change in the way the knowledge within these institutions is managed and shared. The information literacy movement has in the past few years also played a huge role in ensuring that universities are constantly in touch with what is happening in their respective fields. Making more of this information available to students will greatly enhance their performance(Secundo et al., 2018). There are many different methods to integrate the information into teaching. The three main forms of information integration are integration through general information literacy, integration through knowledge-building approaches and integration through technology(Bratianu & Bejinaru, 2017b).

The following are cited as examples of attempts to integrate information in teaching: 1. Modelling pedagogy that uses commonly available information 2. The integration of web-based learning to support research skills 3. Teaching & Learning through Information Literacy 4. Teaching & Learning through Information Literacy(Sánchez & Elena, 2006).

However, as all human knowledge is inherently dynamic and constantly changing, it is important that universities now take active steps to harness the necessary knowledge to ensure they maintain their competitive edge(Bratianu & Bejinaru, 2017a).

The main challenges to higher-learning institutions now are a. the need for a more effective and productive learning and teaching environment b. the need for a formal and comprehensive method of evaluating and measuring students' learning. An example of an initiative to enhance intellectual capital is the project spearheaded by Bratianu (2016), whereby he developed a program to enhance the learning outcomes of students at the University of Botswana. The program was titled "Exploring the Knowledge Universe". This project used the philosophy of knowledge dynamics to enhance intellectual capital(Veltri et al., 2014).

According to Bontis (2001), a dynamic program for a university was required to upgrade its intellectual capital. This program had five components: forward-looking planning, teaching

organized around the learner, enabling faculty to learn along with the student, application of theory and research, and involvement of professionals.

Cricelli et al. (2017) model presented the dynamics strategy as an activity-based model that involved three phases: Planning and Visioning; Approaching Change, and Producing Results. These phases were applicable for any educational institution while the activities could be modified for individual organizations depending on their needs and circumstances. The dynamics strategy was enhanced by technology as it provides mechanisms for the production of knowledge both within the university and outside of it. The use of technology has definitely reduced the barriers to knowledge creation due to increased access to information, increased opportunities for conceptualization and dissemination, among other things. This is because the Internet allows universities' faculty members to communicate with each other on a more effective basis. Since it is becoming increasingly easy for staff members to post their ideas online through blogs or social networks, more students are able to gain access to these ideas which generate an increased output of new knowledge(Nirino et al., 2011).

Finally, there are many opportunities to integrate information in teaching. Due to the dynamic nature of knowledge, higher-learning institutions now need to look at the way they teach knowledge, as well as ensure that information is available throughout their courses/programs.

### **University's Performance about its Knowledge Dynamics Strategy**

The state of higher education is changing rapidly, and universities are not immune. With the rise of technology, the ability for individuals to learn independently has increased exponentially with resources that are now available online. That being said, universities are now forced to adapt through knowledge-dynamics strategies to keep pace with today's changing society. University coaches have access to information about what students need in their courses which can help create a more personalized experience for them so it directly but also indirectly benefits the university as well.

Many universities across the world have been seeking ways to improve learning outcomes, as well as gain competitive advantages. To that end, universities should be looking for ways to incorporate dynamic knowledge acquisition and rendition techniques in their organization. A good knowledge management strategy is essential for the success of an organization. It helps organizations to achieve their objectives, be more profitable/successful and handle change better. Over the years the major challenge for universities is to create a solid knowledge management

foundation. In order for any organization to be able to fully utilize the knowledge they have created, this organization needs to have a firm foundation of knowledge management.

## **Significance of Knowledge Dynamics Strategies to Enhance Intellectual Capital of Universities**

Many universities are striving to improve their intellectual capital through quality research and teaching. There is a need for universities' leaders to leverage knowledge dynamics strategies in order for these institutions to maintain competitive advantage. Knowledge dynamics strategies provide a framework for universities to enhance their intellectual capital by coordinating resources and activities across the university system.

The need to enhance universities' knowledge capital is becoming more of an imperative with the rapidly changing world of higher education. Demand is increasing at the same time that resources are decreasing. A quality research university has four characteristics:

Leveraging these assets is an important aspect of university leadership. Alignment of resources and strategy is critical for universities to satisfy societal demands and expectations by creating new knowledge and providing high-quality services to students, primary stakeholders, external community groups, industry, government, alumni/ae, and the public. This alignment of resources and strategy will lead to a university's competitiveness in transforming knowledge for tomorrow's economy.

Alignment of resources and strategy is achieved through the multiple processes that take place within universities as they strive to improve their intellectual capital. Continual reprioritization or reallocation of priorities is the main process by which the university focuses its knowledge dynamics strategies.

In order for universities to consistently practice these strategies, continuous learning must take place at all levels so that new ideas, actions, and goals can be developed. This requires that universities develop leaders who are committed to the improvement of the institution over time. University leaders need to engage in continuous learning, or they will be unable to leverage knowledge dynamics strategies.

Another important aspect of university success is the determination of leadership. Leaders can improve their capacity to leverage knowledge dynamics strategies by determining leadership measures unique to the university environment. These measures must address all aspects of

knowledge dynamics in order for universities to consistently develop successful leaders. The need for effective leadership in higher education is critical if universities are going to change, grow, and progress. Universities are at a crossroads where they need leaders who are willing to make strategic decisions for the betterment of their institutions regardless of the consequences or costs involved. Knowledge dynamics strategies are essential forces that influence how institutions develop and deploy knowledge over time. Management practices and issues must be addressed by university leaders who are committed to developing their intellectual assets. It can transform knowledge and serve as a source of competitive advantage for universities. Changing the way we think about knowledge dynamics strategies is required for universities to grow and change in order to meet societal expectations. Knowledge dynamics strategies, interdisciplinary teams, collaborations, and problem-solving are all aspects that shape conceptualization, implementation, and evaluation of new knowledge.

University leaders need to develop a culture or environment that embraces knowledge dynamics strategies. In this type of environment, there is a strong commitment from leadership to continuously improve the university through the development of new knowledge and innovative solutions.

## **Major challenges of Knowledge Dynamics Strategies to Enhance Intellectual Capital of Universities**

The role of universities has changed tremendously in recent years with the rapid growth of knowledge economies. University courses now need to be seen as investments into intellectual capital that generates economic and social returns or else they will be cut under financial constraints. Knowledge dynamics strategies are essential for universities looking to enhance their ability to generate intellectual capital during the current competitive era where knowledge is considered a key resource. The major challenges of knowledge dynamics strategies are explained below

The major challenge facing institutions is how best to allocate resources between investing in human capital and investing in technology-based assets since both have been recognized as being crucial for success in a knowledge-based economy. The challenge is particularly acute for organizations to invest in knowledge capital while being constrained by resource constraints.

In practice, universities have been allocated a third of their budget on education and the remaining two-thirds on research. In India, this allocation is as high as 75% to 75.5%. It is not

surprising that the quality of research is of paramount importance for higher education institutions, given the crucial role of intellectual capital in their economic success. As the British Council noted in 2005, “in a knowledge-based economy global competition, universities are more important than ever before”.

The complex nature of increasing university budgets combined with constraints on resources naturally leads to a more uncertain environment for universities trying to plan investments into knowledge capital. The following typical scenarios are emerging:

Uncertainty about future trends in research funding means investment priorities will be volatile for some time. The more complex the future funding environment is likely to be, the more care must be the mapping of investment programmes on to new knowledge fields.

Rational choices about how to prioritize R&D may only get harder since "there is no predictable link between increasing student numbers and increasing employment in higher education", which makes it difficult for universities to predict the demand for higher education over time. Universities, therefore, need rational ways of making decisions about this large number of uncertain variables. They need technologies that adapt solutions depending on what they are used for.

There are many reasons behind the exponential rise in the commercial use of internet-based research tools. One of the most important is that universities are beginning to realize that they need to "produce something new" - providing student outcomes, translating research into products and services, and building new skill sets for their workforces - or risk becoming redundant.

The process of universities producing what is termed 'knowledge capital' is somewhat new, challenging and uncertain. It is very difficult for them to define this process without having a clear idea of what it means. To clarify this process, knowledge-based organizations need to explore how best to define knowledge capital over time.

Many elements make up the intellectual capital generated by an institution. A combination of these elements makes up the knowledge capital of an institution. These elements include:

(a) The intellectual assets of the university, for example, patents, courses and post-graduate degrees, etc. Intellectual assets could also include trademarks, copyrights and licenses.



(b) The research mechanism used to acquire knowledge capital. This could be via staff or students working in a particular field. It could also be through workshops, conferences or visiting speakers. Other research mechanisms are library-based studies and online search engines e.g.: Google Scholar, etc.

(c) The organizational structure of the institution. This could include faculty, administrative or research support, etc. It could also be the physical infrastructure that supports academic study (e.g.: buildings).

(d) The incentives for researchers to undertake research and share knowledge with stakeholders outside of academia (e.g.: Industry).

Universities need to consider how best they can develop their ability to generate intellectual capital in cooperation with other universities or academia in general. Two key options are (1) cooperation through formal channels such as public-private partnerships; (2) cooperation through informal channels such as partnering with industry or using online forums.

The choice of the collaboration channel is the result of an institution's credibility, flexibility and willingness to commit resources. All institutions will need to tailor their strategic approach accordingly.

The above challenges arise due to the increasing complexity of science, industry and society. The increasing amount of data available has created an exponential increase in the ability to make sense of this information, which in turn has created new economic opportunities for knowledge-based organizations to exploit these opportunities. More data means that more people are making sense out of it. With the data growth, there is also a growth in understanding how it all fits together, creating a better picture. It is this growth in data availability together with a greater understanding that has made knowledge-based organizations so successful.

## **Conclusion**

The knowledge dynamics in the current system can be improved to gain a competitive edge for universities. To do this, the institutions should be able to manipulate their intellectual capital and create synergy by leveraging knowledge from various sources. This article will have a conclusion that would suggest that there are three strategies that institutions can use to enhance their intellectual capital: Knowledge Radicalization, Asset Consolidation and Synergy Creation.

The conventional knowledge management strategy has proven ineffective in enhancing the institutions' intellectual capital. The best way to enhance one's intellectual capital is by creating knowledge. One should be able to take advantage of the experience to create new knowledge in this manner, to gain a competitive edge against other institutions in their respective fields. Knowledge radicalization enables institutions to develop their brand of knowledge that will then form a unique market position for that institution.

Asset consolidation is another one of the three strategies that will help enhance the intellectual capital of an institution. It suggests that an institution should be able to consolidate its resources to create synergies. This method involves institutes looking for synergies, synergistic value and duplication management.

Knowledge radicalization and asset consolidation may work well when there is a synergy between the two methods. As an example, an institution should be able to take advantage of its knowledge to carry out a consolidation, while simultaneously having all the resources available to it to use it in a radicalized fashion. An example is as follows: an institution may value its students as assets which they can then use to create a competitive advantage for themselves by using the students as a knowledge radicalization tool since the students are the source of new knowledge.

The final strategy to enhance intellectual capital is called synergy creation and is based on the idea that institutions should be able to create synergy to compete with one another. This is possible through collaboration and taking advantage of others' expertise, which will ultimately give institutions a competitive edge.

In conclusion, leveraging the intellectual capital of an institution requires more than just best practices for knowledge management. It requires creative thinking and unique strategies of its own. This article also explained various significance and challenges of knowledge dynamics strategies to enhance the intellectual capital of universities in long term.

## **Reference**

Bejinaru, R. (2017). Knowledge strategies aiming to improve the intellectual capital of universities. *Management & Marketing*, 12(3), 500.

Bontis, N. (2001). Managing organizational knowledge by diagnosing intellectual capital: framing and advancing the state of the field. *Knowledge Management and Business Model Innovation*, 267–297.

- Bratianu, C. (2016). A strategic view on the knowledge dynamics models used in knowledge management. *20th European Conference on Knowledge Management Proceedings, 1*, 185–192.
- Bratianu, C., & Bejinaru, R. (2017a). Intellectual Capital of the Cultural Heritage Ecosystems: A Knowledge Dynamics Approach. In *Knowledge Management, Arts, and Humanities* (pp. 215–238). Springer.
- Bratianu, C., & Bejinaru, R. (2016b). Knowledge dynamics: a thermodynamics approach. *Kybernetes*.
- Bratianu, C., & Pinzaru, F. (2015). Challenges for the university intellectual capital in the knowledge economy. *Management Dynamics in the Knowledge Economy*, 3(4), 609.
- Cricelli, L., Greco, M., Grimaldi, M., & Dueñas, L. P. L. (2016). Intellectual capital and university performance in emerging countries: evidence from Colombian public universities. *Journal of Intellectual Capital*.
- Nirino, N., Ferraris, A., Miglietta, N., & Invernizzi, A. C. (2015). Intellectual capital: the missing link in the corporate social responsibility–financial performance relationship. *Journal of Intellectual Capital*.
- Sánchez, M. P., & Elena, S. (2006). Intellectual capital in universities: Improving transparency and internal management. *Journal of Intellectual Capital*.
- Secundo, G., Elena-Perez, S., Martinaitis, Ž., & Leitner, K.-H. (2015). An intellectual capital maturity model (ICMM) to improve strategic management in European universities: A dynamic approach. *Journal of Intellectual Capital*.
- Secundo, G., Massaro, M., Dumay, J., & Bagnoli, C. (2016). Intellectual capital management in the fourth stage of IC research: A critical case study in university settings. *Journal of Intellectual Capital*.
- Veltri, S., Mastroleo, G., & Schaffhauser-Linzatti, M. (2014). Measuring intellectual capital in the university sector using a fuzzy logic expert system. *Knowledge Management Research & Practice*, 12(2), 175–192.