Generating competitive intelligence within higher education institutions. Case study in Constanta Maritime University

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Abstract. Nowadays marketing strategies means customer and competitive intelligence. In sharp contrast to customer intelligence, there is a little research on how competitive intelligence is actually generated within an organization. Our research intends to establish if Constanta Maritime University is concerned in implementing principles of new public management and in developing and improving the competitive intelligence generation process. Drawing on both department interviews with full time professors who conduct competitive intelligence and academic literature in related fields, the authors established a novel conceptual framework that describes three independent phases of the competitive intelligence generation process:

- Organizing for competitive intelligence within universities;
- Searching for information;
- Sense making of competitive intelligence in developing programs in university.

Does our university develop systematic programs for gathering and analyzing information about the educational services' offer of our main competitors? Is the decisional process in university oriented on our educational strategic goals? Is satisfactory of students one of the important objective in educational process? We created a methodological instrument for measuring: student's satisfaction in educational process, collegial evaluation process and satisfaction of professors within university and the way of this level of satisfaction will influence strategically decisions within Constanta Maritime University.

Keywords: competitive intelligence, new public management, quality management.

JEL Codes: I25, I28, O15, O16.

1. Introduction

With string intention to enhance the global competitiveness of their university systems, either European, Asian and American governments have introduced reforms along the lines of ideas and practices embedded in neo-liberalism. Corporatization and incorporation strategies were adopted to transform national/public...
universities and in the last decade or do we have witnessed reforms being introduced to the higher education systems.

In the Asian universities, although the senior management or corporatized/ incorporated universities, has been accorded more discretion to decide how to operate their universities, most of the front line academics that interviewed over the time had not experienced major differences in university governance after the reforms took place. Studies proved that despite the fact that both American and European universities have tried to embrace the ideas and practices of neo-liberalism to transform university governance, academics still see that state is also involved in reluctance to these changes and controlling the higher education process.

Our research study in Romania was developed in Constanta Maritime University. The rise of the knowledge economy has generated new global infrastructures that information has played an important role in the global economy, in currently restricting higher education, research and learning. In order to make their university systems more globally competitive, governments have introduced ideas and practices along the line of corporatization/incorporation to reform their national/public universities. A good example of well practices has been offered recently by Asian governments in order to reform their higher education system. “With strong conviction to enhance their higher education systems to be more competitive in the global market place, higher education systems in Asia are going through processes of marketization, decentralization, privatization and commodification, hence neoliberalism and higher education become twined together (Mok, 2006). Realizing that traditional “centralized” governance model won’t work into an increasing competitive market of educational services, higher education institutions are run as a business corporation, whereby a “service oriented” approach is becoming more popular in academic management (Lee, 2009).

Implementing this model, Constanta Maritime University realized that actually higher education institutions are under great pressure to prove to be efficient and flexible in management policies, responsive and proactive to cope with external changes, sensitive to changing market needs and student expectations (Hawkin, 2009).

Globalization has brought the following major impacts to higher education:

- The construction of the public funds for public sector;
- The pre-eminence of market-related disciplines;
- A closer relationship between multinational corporations and state agencies, including universities and other academic institutions;
- The increased focus on multinationals and industrial countries on global intellectual property strategies;
- Free from the operational regulations and constraints imposed on statutory boards;
- More administratively and financially autonomous;
- More accountable to different stakeholders in local community;
- More responsible for the key decisions affecting university directions and strategic developments;
- More rigorous in the terms of internal quality assurance systems;
- More flexible in policies of student admission;
- Involved in decentralizing policies within faculties to deans, head of departments and faculty members.
The changing state-market university relationship has been marked by introducing of the concepts: academic capitalism (Slaughter and Leslie, 1997), enterprise university (Marginson and Considine, 2000) and market accelerationist state (Mok, 2005, 2008).

Universities are under pressure to adopt market-like efforts to secure external moneys and the market perspective is sweeping across higher education institutions, on a global scale (Kwieck, 2005; Spotn, 2005).

2. Literature review

It is well known that an organization of any kind (public or private) cannot be successful without a well-trained staff and in order to be successful there are several key elements: intelligence, creativity and wisdom. When referring to intelligence, there are many definitions, but they all considered it to be the ability to adapt to the environment and to learn from experience (R. J. Sternberg, 2005; R. J. Sternberg, D. K. Detterman, 1986). Many studies have shown that successful can be achieved only if a company think and act with a long-term horizon when managing customer relationships (J. Villanueva, P. Bhardwaj, S. Balasubramanian, Y. Chen, 2007). Strategic intelligence can be reach and challenge through knowledge management transfer (A. Capatina and G. Bleoju, 2012).

Globalization of markets is a complex process which affects all sectors, thus determining constraints caused by stiff competition. Production economy progresses into knowledge economy, technologic economy and information economy, so sustainability become necessary for every company achieved by management of information. Referring to a company external competitive environment, it can be measured thru an important area of business intelligence which may be understood as the fuel that the decision-maker requires (Evren Ayranci, Nurdan Çolakoglu, 2013), known as competitive intelligence (Z. Zheng, P. Fader and B. Padmanabhan, 2012). In a competitive environment, the deployment of competitive intelligence is influenced by many factors like the fear of losing jobs or the power to negotiate personal interest (P. Nemutanzhela and T. Iyamu, 2011). It is important to notice that this is an important process that affects virtually all aspects of our daily lives (Liu Pu, 2010).

According to F. Bartas (2012) competitive intelligence is based directly on the principle of work of state intelligence services with the difference, that the competitive intelligence uses only legal sources of information and legal methods in its work. Competitive intelligence is an important tool regarding the enhancement of competitiveness in companies, which involves many areas of information like commercial information about the economic environment (products, customers, suppliers and competitors), technical and technological information or information about legislation and regulations regarding company’s development.

Competitive intelligence is also an important element of information management for organizations, allowing control of information about the external environment, being supported by the existence of well functional and well developed learning organizations (V. A. Popescu, G. N. Popescu and C. R. Popescu, 2012). It plays a key role in a company due to the fact that it identifies opportunities and determinants of success, anticipate threats and prevent risks (F. A. Cheffah and M. Hanoune, 2013). When referring to customers, competitive intelligence is a function of customer-centric extra-role behaviors, salesperson customer orientations and relationship quality (D. E. Hughes, J. Le Bon and A. Rapp, 2013), but it is important to say that a primary source of competitive intelligence are salespeople (M. Ahearne, S. K. Lam, B. Hayati, et al., 2013). Both customers and suppliers are important elements in this process due to the fact that thru the toll of influence their actions, intentions and decisions are coordinated (D. Salvetat, 2012).
Taking in consideration its role in achieving competitive advantage in a company, according to N. I. Bayandin, V. S. Kretov (2012) some of the objectives of competitive intelligence are:

- Analysing ones competitors’ projects, here including the ones that were implemented and were successful and the ones that did not succeed;
- Anticipating market changes and also the actions of competitors;
- Identifying new or potential competitors;
- Monitoring changes that can occur in the political, legislative and regulatory areas that affect a business;
- Analysing new technologies, products, and processes in order to compete with the competitors;
- Presenting news ideas and concepts;
- Providing important background information for a company development.

In today’s business world, competitive intelligence may become a way of life for every employee of a company if it is being used correctly, due to the fact that it is a process that provides critical information for short-time decisions (manly regarding the products) and also for long-term decisions.

3. Enhancing the global and competitive intelligence: university governance reforms in Constanta Maritime University. Comparative analyses to the Asian, European and American model

In today’s business world, Similar to their European counterparts, market-like reform strategies are adopted to transform the university governance in Singapore and Malaysia. There have been three major strategies of higher education reviews in recent years. International Academic Advisory Panel (IAAP) was an institution comprising prominent scholars from international higher education institutions or community leaders from big corporations, to help universities to develop into world-class institutions in terms of teaching and research (Ministry of Education, Singapore, 1999).

In the European model, university changed their policy admission which became more flexible. Bearing to motive to make the former national universities more responsive to external changes and productive in performance, the incorporation of the universities in the Asian model can be interpreted as policy tools adopted by the governance in order to enhance the global competitiveness of the incorporated universities in the globalization world. The processes of decentralization and deregulation or even “autonomization” taken place in university governance should not been interpreted as simply state’s withdrawal from controlling and steering universities. In this article we tried to compare two recent university reform projects: the Korean Brain Korea 21 project and the German Universities Excellence Initiative and we tried to establish which characteristics we could implement in improve quality process in higher education in Romania. Previous studies shown up the effects of policy changes on the research performance for one country, for example Spain (Rey et al. 1998), the UK (Patrick and Stanley 1998), Japan (Yonezawa, 2007) and South Korea (Shin, 2009). All these countries have an experience in showing a highly positive correlation between the amount of national support (measured in special research funds) and the performance (measured as number of publications) that universities have been reported. The Brain Korea 21 project henceforth BK21 and the German Universities Excellence Initiative, henceforth GUEI are the most important initiatives of reforms in higher education, within comparative results between continents and proposals of well practice which could be implemented in other countries.
There are substantial differences between the Korean university and the German ones in terms of enrolment rates, tuition fees, the percentage of private universities and the national ranking culture. The lack of the global leading university in both countries was one of the key reasons for the two reform projects in those countries. The Korean BK21 project appears to be equipped with relatively detailed goals (to place Korea among the 10 top countries with respect to SCI publications), a stronger focus on human resource development, and a focus on research sectors that are considered to be strategically important, such as animation and design.

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<th>Criteria</th>
<th>Sub-criteria</th>
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<td>Education</td>
<td>Curriculum development and implementation, percentage of employment of graduates, number of papers and presentation of graduate students</td>
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<tr>
<td>R&amp;D</td>
<td>Globalization (internationalization) of education at the graduate school, number of government R&amp;D orders received, number of patents by professors</td>
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<td>Industry-university collaboration</td>
<td>Number of industry R&amp;D orders received, outcomes of the collaboration between industry and academia (royalties), exchange of researchers between industry and academia, human resources development through collaboration between industry and academia</td>
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<tr>
<td>University Organization</td>
<td>Investment in human and physical resources by the universities, construction of research-centered universities, implementation of project group construction</td>
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One of the characteristic of BK21 Project, which could be implemented as a well practice model in Constanta Maritime University was the detailed numerical evaluation system. The categories and achievements of the program are carefully measured and expressed with numbers. This system leads to the quantitative performance of researchers rather than the qualitative, so that the model should be updated by the experts who are very well versed in it.

On the other hand, the GUEI Program in Germany is characterized by relatively vague goals (to increase the visibility of excellent research), focused on research capacity building by funding both junior and senior researchers, and no politically determined strategic sectors that should be founded.

Starting from the solutions of the GUEI Program, the German university system was stratified, with an increased visibility of differences in research performance between different universities, which is nowadays
considered to be “a functional differentiation”, “cultivating competitive profiles and setting of priorities” (Gemeinsame Kommission von DFG und Wissenschaftsrat 2008:60). Program GUEI established that in Germany almost one-third of the entire funds available were allocated by the four most successful universities (Hartman, 2010). This concentration of funds will lead the differences between universities. One of the main purpose of this article is to convince that this is an advantage of competitive intelligence between universities; it could be appear a paradigm shift away from the unity of teaching and research but there is certainly a modality of improve efficiency in universities.

The main conclusion of the comparative models analysed in this article is that government has been controlling the overall university governance from curriculum development and implementation to the percentage of employment of graduated students with its funds. This insufficient level of autonomy is not an advantage for competitive intelligence.

Over the past few decades, America’s social compact for higher education as a public good has effectively lapsed as government support of higher education has diminished (Kallison and Cohen, 2009). American universities resume competitive intelligence nowadays to the difficulties of cutting costs and increase productivity at the same time, especially during times of increasing enrolments.

Association of American Colleges and Universities proposed the implementation of an accountability system applicable in universities, to inform the public and provide for institutional improvement. Universities should set certain goals, develop programs, identify responsibilities and ensure that the goals are achieved. These common goals should include student learning and performance, as learning is an inescapably critical function of education at any level. Each university has to include in this common data base the portfolio of methods above the accountability techniques that best capture the information. Adherence to these principles should provide kind of accountability needed in new compact. University’s autonomy must co-exist with rigorous accountability standards. This will improve competitive intelligence in American universities. Accountability system should be multifaceted, as different methodologies have different strengths and limitations. All systems should inform the public and provide for institutional improvement.

In Norway, University of Oslo is one of the main promoters of competitive intelligence within universities (Lehre, Hansen and Laake, 2009). The system at the University of Oslo has changed to a system with more feedback to the students through compulsory attendance, more contact between students and teachers, more group-work, more compulsory tasks and feedback examinations during the courses (Hodvdhaugen and Aamodt, 2006). Evaluation has in many cases changed from one final examination to evaluation along the way. This model of transit form summative assessment to a formative one was implemented also in Constanta Maritime University. The problem of subjectivity (or the lack of objectivity) concerning the assessment process will not be completely removed, but it can be kept within acceptable limits, through the establishment of clear grading criteria, a lack of objectivity in valuing a paperwork or the subjectivity of an accurate presentation or not. Another problem appearing in this assessment form the situation where there are two or more assessors of paperwork and between their appreciations there are inconsistencies.

As far as the assessment through multiple choice tests there must be realized the fact that an efficient assessment is hard to conceive, as it is required a careful accomplishment of the questionnaire, an accurate target-group, an efficient implementation and an elaborate analysis of the results. In the assessment process the multiple choice tests must be used occasionally, they must be short and simple. In order that such tests be efficient, they have to be submitted to the following criteria: the asked questions must be essential; the
questions must be easy to understand; an emphasis upon closed questions to lead a choice of more alternative answers; avoiding subjective answers, the questions must be short and precise.

Moreover, an efficient assessment test must take into account the following criteria: avoid figure results, eliminate irrelevant questions, avoid vague and unclear questions, it should not contain exaggerate questions, avoid ambiguous questions, to give student enough time to offer feedback.

Transforming summative assessments in formative assessment is an objective of implementing quality management in Constanta Maritime University. Positioning students in the centre of the educational process can be achieved only under conditions in which students perceive that they are learning objectives that they have mastered and which ones should be reviewed. The two types of needs: the need for recognition (by the student obtain social confirmation of the fact that his reactions to stimulation coming from the company are relevant and approved) and the need for specific judgment (not enough that the answers it receives student just be consistent, they must be consistent with the experiences and expectations) cannot be satisfaction than by implementing formative assessments, feed-back.

Recent reforms measures by the Ministry of Education in Japan can be seen as part of a broader reform movement whereby new public management and deregulations are the driving force. The ministry allows more flexibility and autonomy to the universities but this necessitating evaluations and the assurance of accountability (Knipprath and Arimoto, 2006). Criticism by reform in higher education in Japan can be categorized according to three targets:

- Curriculum reduction leads to decline ability
- Deregulation and diversity lead to an increase of inequality of educational opportunities
- Education reforms measures are double-edged or inconsistent

In China, needs for introduction the dimension of competitive intelligence in university is explained by following concepts:

- Because of the production and circulation of culture and knowledge, universities has to apply the plan and reform according to scientific academic administration concepts( not simple transmission of ideas and patterns of economic administration(Xianming, 2006)
- Managerism occupies higher education, in which economic thinking and administrative patterns become the core. Influenced by the McDonaldization of all-around society, various social fields begin to emphasize the pursuit of efficiency, calculability and predictability.
- Unlike economic production, educational services are not easy to calculate regarding outcomes. Competitive intelligence in universities has a task in creating “values of calculability reach deeply into the university’s inner life, including its epistemologies, its ontologies, and its communicative structures. Only a reform in university fitting university’s humanity will improve administrative efficiency. Ecoadministration-based reform might increase the number in some fields but may decrease actual efficiency for the departure of culture essentials and knowledge circulation and production.
- In reform in universities process, more attention shall be paid to reform in the concepts level, research on changing deep-level administrative concepts and value structure.
4. Conclusions

Regarding the models of well practice presented, Constanta Maritime University established the following purposes for improve competitive intelligence within university:

- Existence of excellent research on an international level in several fields of research, percentage of third-party funds among the university budget, third-party funding received from Ministry of higher education, publications, patents and other distinctions. The research performance of the university showed a positive trend during the past few years.
- The university shows clear potential to become an outstanding international university.
- Innovative and original aspects of the concept, based on a plan of the university that takes into account its strengths and weakness
- The concept is based on the strengths of the university and will allow the university to improve its overall quality substantially. It should provide a lasting change and promote networking across disciplines, international networking, of junior scientists, and gender’ equality in scientific research.

In administration of the Constanta Maritime University, reasonable exercise of power and effective cooperation are key to improving efficiency. In academic administration, administrative power shall respect and cooperate with academic power, shape personal behavior during exercise of academic power and guarantee the impartiality and legality of academic power as public power. Current preoccupation regarding reform includes the relationship between various power of administration in order to strengthen the legal restriction and democratic supervision of all powers (including academic power), and to accelerate its rationalization and administration in the background of higher education institutions’ decentralization and increasing academic administration. Empty awareness of academic administration and a mixture of economic ore general administration and managerism dominance, these are the key for implementing competitive intelligence in universities. Concept of academic administration should be established starting from:

- Power submits to truth
- Laypersons submits to professionals
- Open, impartial and scientific in-line professional system which could assist academic administration system in evaluating professional activities and outcomes.

Implementing of these measures requires the realization of university as academic community, implementing new forms of academic leadership, focusing to bring out process goals rather than operation goals and collective understanding rather than corporate performance.

5. References


