

article

Social Capital as a Source of Competitive Intelligence in Universities

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Abstract

As organisations, universities coexist in an environment that conditions them and makes them change. Adapting to change is both a necessity and a challenge. Consequently, the European Higher Education Area (EHEA) constitutes a shift in the rules of the game in universities, which, together with a greater interrelationship with the employment market and a rise in competitiveness, means that universities need to have a number of mechanisms for detecting change. Therefore, as has been occurring within the business sector for some years, Competitive Intelligence (CI) becomes a tool, which, when rooted in its current role, can help universities with this new adaptation. CI is seen as a process for searching for, selecting, analysing and disseminating information about the environmental elements that may impact on an organisation. The result of this process acts as a support for decision-making and strategic planning. One of the instruments most widely used in CI to obtain strategic value information is the network of relationships and contacts of the organisation and its members. The Social Capital, therefore, is a very important information exchange instrument and may become a valuable resource for organisations. Social Capital is an important factor in CI processes. This article shows the importance of Social Capital and relationship networks as a valuable resource to universities within CI processes and as an aid in adapting to changes in the environment. In terms, it is proposed as valuable tool in the design and adaptation of a university's qualifications catalogue.

Keywords

EHEA, Social Capital, Competitive Intelligence, universities

Resum

Les universitats com a organitzacions conviuen en un entorn que les condiciona i les fa canviar. Adaptar-se al canvi és una necessitat i un repte alhora. Així, l'espai europeu d'ensenyament superior (EEES) significa per al món universitari un sacseig de les regles de joc, la qual cosa, juntament amb una interrelació més gran amb el mercat laboral i un augment de la competitivitat, condueix les universitats a la necessitat de disposar d'uns mecanismes de detecció de canvis. Així com ja ocorre en el teixit empresarial des de fa anys, la intel·ligència competitiva (IC) esdevé una eina que, embeguda dins el seu funcionament habitual, pot ajudar les universitats en aquesta nova adaptació. La IC s'entén com el procés de cerca, selecció, anàlisi i difusió d'informació sobre els elements de l'entorn que poden impactar una organització, en què el producte resultant del procés serveix de suport a la presa de decisions i a la planificació estratègica. Un dels instruments més emprats en IC per a obtenir informació de valor estratègic el constitueix la xarxa de relacions i contactes de l'organització i els seus integrants. Així, el capital social és un instrument d'intercanvi d'informació molt important i pot esdevenir un recurs valuós per a les organitzacions. El capital social es configura com un factor important dins els processos d'IC. En aquest article es posa de manifest la importància del capital social i les xarxes de relacions com a recurs valuós i proper a les universitats, dins dels processos d'IC i per tal d'adaptar-se als canvis d'entorn. En concret, es proposa com a eina valuosa en el disseny i l'adaptació del catàleg de titulacions d'una universitat.

Paraules clau

EEES, capital social, intel·ligència competitiva, universitats

Introduction

All kinds of organisations work linked to a specific environment. This environment interacts constantly with the organisation, which has to make an effort to keep up to speed with the changes generated in order to adapt and continue functioning.

This dynamism in the environment may have a negative or positive impact for organisations that want to be competitive. Therefore, organisations need to be able to detect opportunities and threats, to adapt and react with sufficient time to external changes. Detecting changes in the environment, for proper change management, needs to come about proactively and as early as possible. It is now considered crucial to create a systematic environment scanning and external information analysis process to provide support to decision-making processes. This process is known as Competitive Intelligence (CI).

This analysis, formerly associated with the business world, works for all types of organisations; for example, public administration when designing policies and reacting to social phenomena, NGOs when running projects and campaigns, or educational centres when designing teaching product catalogues.

This article discusses these related questions, primarily in a very specific type of organisation: universities. These institutions are pressured by the environment to change, whether economically or socially, or due to their need to be competitive. If in this scenario, we also take into account the features of the new European Higher Education Area (EHEA), the driving force for change at European universities at the start of the twenty-first century, it is clear that we find ourselves at a point when universities feel obliged to reassess how they operate and the need for a change both in terms of their mentality and their management and structure.

Given all this, the challenges faced by universities mean that in recent years they have felt obliged to incorporate tools traditionally associated with business in their management, most notably CI.

In CI, an important part of theoretical analysis regarding the information acquisition and analysis process concerns the concept of Social Capital and, in particular, the types of resources and information that can be obtained from a specific relationships network and its impact on the decision-making process.

Consequently, this article focuses on the potential for the introduction of Competitive Intelligence in universities. In particular, we will see how Social Capital, and its knowledge and exploitation, can become an important part of CI and, therefore, contribute to the decision-making process and the adaptation of universities to the environment.

Universities facing environmental changes: the EHEA as a driving force for change

One of the challenges facing universities is to achieve excellence. One way of doing this is to stimulate specialisation and competitiveness between them. The Lisbon European Council (2000) states that Europe needs excellence in its universities to make it a more competitive and dynamic knowledge-based economy with the capacity to sustain economic growth and create quality jobs that guarantee greater social cohesion.

In turn, the Commission of the European Communities (2003) states that, on the one hand, universities have to contribute more to local and regional needs and strategies and, on the other, that they have to establish closer collaboration with business to ensure operations and creations more in line with the new knowledge required by the present economy and society.

Therefore, two of the current university aims are to:

- Guarantee greater adaptation of the university educational offer to the requirements of the employment market, and
- Increase university contribution to local and regional development.

The legislative and political frameworks constitute a driving force for change in universities in terms of their operation and offering a better response to this process. In this sense, the EHEA, with its many declarations and milestones, gives universities the opportunity to benefit from this theoretical harmonisation process to position themselves more appropriately within the environment. In addition to this, one of the key principles of the EHEA is the adaptation of qualifications to the requirements of society and the employment market, and the fostering of practical placements in companies. In this sense, monitoring market trends and the environment is clearly important for defining suitable qualifications and ensuring proactive evolution. Similarly, changes in the conception and orientation of the focus on the qualification and programmes aimed at the paradigm of student-centred learning should, in theory, provide new graduates with a greater ability to adapt to the new environments and continuous professional retraining.

In particular, in terms of Spain, the official decrees that regulate graduate and postgraduate degrees are committed to an initial education cycle (degree), the aim of which is to provide students with the ability to integrate directly into the employment market with an appropriate professional qualification, which is complemented by advanced training during the second cycle (postgraduate), the aim of which is specialisation by the student in their academic, professional or research training. In this sense, the dialogue between the

university and a part of its environment, where there are employment market agents, is crucial to identify and define the professional skills required by society.

As mentioned, like almost all organisations, universities operate in a dynamic and constantly evolving environment. As a result, they feel increasingly pressured to position themselves in any of the following areas (Cobarsí, 2005): securing students, securing talent (researchers and lecturers), gaining the interest of other external agents or responding to the appearance of new social and economic needs. The current trend is that the universities received financial contributions on the basis of competitive criteria. The 2005 Glasgow Declaration states that universities must undertake to study public or private funding models to improve their government and leadership structures.

As a consequence, universities need more efficient and professional management structures and models. This declaration advocates the need for cooperation and interrelationships between universities. In this sense, the interdependence of universities with their environment, sustained by the inter-organisational theory, means that they need to identify the agents linked to their network and analyse the possible forms of collaboration to maximise their value as an institution. In other words, it is important to stimulate cooperation as another element of competitiveness (Peltoniemi *et al.*, 2005).

We glean from this that universities need to implement professional management strategies to help them deal with the changes to the environment and, at the same time, establish or strengthen relations with external agents. All these challenges are particularly delicate for university organisations, since the present institutions of higher organisation, as Bates says, given their history, combine characteristics from the agricultural age and Fordist industrialisation (Bates, 2000), periods in history with more stable environments than the current ones and, generally speaking, with less need for organisations to process and analyse information.

We should also remember that the EHEA involves other variables for change to the environment, such as student mobility, which, combined with economic (reduced public assistance per student) and demographic factors (reduced student demographics), together with the requirements of the employment market, are added to the duty of universities to become the lynchpin for development in their own geographic environment.

In this context, we should stress the importance of the university's relationships with external agents and the management mechanisms used by the university to engage with and explore its environment, since this relationship may be critical to the survival of higher education institutions.

Once this analysis is complete, we will then go on to look at the application of the techniques and processes specific to CI to universities and the important role that universities' Social Capital may play in this process.

Competitive Intelligence as a support tool in decision-making processes

As mentioned in Section One, the uncertainty and dynamism of the environment may have a negative impact on any organisation, even though this impact, when correctly managed, can be positive. Adapting and adjusting to the competitive environment is one of the primary functions of an organisation and to do this a systematic environment observation and analysis process needs to be established which provides support to the strategic decision-making process (Rajaniemi, 2007). This process is known as *Competitive Intelligence* (CI) and consists of correctly managing information outside the organisation to detect and analyse events that may impact on its development and competitiveness, with a view to providing support to the decision-making process. CI is understood as a process, in that it comprises specific phases and follows a set of guidelines; as a function, insofar as it is considered a form of management for strategic planning and decision-making, and as a product, in that the result of the process is analysed information, which can be presented in different formats and ways.

Over time, a number of different models have appeared, which determine the phases of the Competitive Intelligence cycle. Generally speaking, there are four phases: a) identification of the critical monitoring factors; in other words, specification of the elements in the environment that we want to observe. These factors are determined primarily by the information needs of managers. This phase focuses on the efforts and orientation of the subsequent phases; b) searching for and acquiring this information, using different sources and resources; c) analysis of the information obtained, transforming it into added-value products on the basis of which tactical and strategic decisions can be made; and d) communication and dissemination of the information analysed among the people who are responsible for taking actions based on the results obtained.

Action based on the analysed information is the result of the process; without action, there is no intelligence. The stage before the action is the creation of meaning phase, in which aspects such as trust in the information obtained play a decisive role in the process.

A CI system should focus on the implications of changes in the market and environment in relation to the current, and future, strategies of the organisation. CI may be proactive or reactive. It is reactive when information search and analysis systems are activated to resolve a specific problem, and it is proactive when it is of an exploratory nature and the information capture, analysis and handling processes are carried out systematically, allowing changes to be made to the current strategy of organisations, with an obviously anticipatory philosophy. Proactive intelligence recognises that the lack of change events does not mean an

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absence of competitive threats and is therefore geared towards detecting weak signals. A weak signal should be seen as an isolated piece of information that can be considered to be the indicator that something is happening, or may happen, and to which we should pay attention. Taken separately, weak signals may make little sense, however, after a process of analysis, a set of weak signals takes on meaning.

On the basis of these premises, and the incorporation of business models as management references within public organisations, university qualifications can be seen as products and universities as the organisations that make them available to the market. Therefore, in this context, and within such a disruptive process for the university environment, in its adaptation to the EHEA, it is clear that universities are able to establish a set of reactive CI techniques, and once complete make them proactive. These techniques are one of the tools that universities can use to tackle the challenges mentioned above: adaptation of the educational offer to market requirements and the university's contribution to local and regional development.

However, it is important not to confuse a benchmarking process with a more complex one, such as the CI process. Benchmarking is an accepted process in companies and consists of identifying the best practice carried out by competition companies in order to offer a reference framework for assessing the company's situation in relation to the competition. For its part, CI is a process, which forms part of the set of formal and informal systems defined by an organisation, for managing internal and external information, and the communication mechanisms used to disseminate it. CI goes beyond detecting best practices, as it takes into consideration a broad range of elements in the environment that may affect the achievement of the organisation's aims (legislative aspects, demographic trends, technological advances, etc.).

Despite the creation of these systems, information reaches organisations via routes that were not initially thought of as instruments of information acquisition. In this sense, various research projects highlight the importance of social networks as a facilitator of the CI process for identifying strategic information. Specifically, a study has been conducted into the repercussion of social networks on CI processes (Jaworski *et al.*, 2002), as an element that contributes to the improvement of knowledge acquisition processes. With regard to universities, a study carried out into the information needs of heads of department at British universities also revealed that a determining factor for strategic information management was the network of relationships and contacts, both inside and outside the university and with different levels of formalisation (Huotari *et al.*, 2001).

The Competitive Intelligence of universities

The practice of CI is commonplace in companies, primarily in the English-speaking, Japanese, French and German arena, and CI has been noted for its importance and use as a tool that contributes to strategic planning (Bergeron *et al.*, 2002). CI was applied initially to technology companies and focused basically on technology surveillance; in other words, monitoring the evolution of science and technology in a specific field to detect emerging applications, trends, potential partners and competitors, inventions, etc. The aim was to provide support to the creation of technological plans and strategies. The monitoring aims were subsequently expanded to include observation and analysis of all the aspects in the environment that could affect the development of the business. CI techniques have recently begun to be applied to the management of public bodies. Consequently, certain governments, particularly in the French-speaking world, use CI as a political and management tool, be it to develop regional strategies or to provide support to the business fabric of the country.

In the case of Spain, there are observatories aimed at obtaining information from the environment for making decisions at a local level. Similarly, the regional bodies aimed at providing support to SMEs regarding CI, innovation or technological monitoring highlight the importance of this discipline (such as the Zaintek¹ service in the Basque Country)

In universities, CI has been used primarily to analyse the university-company relationship from the technology and knowledge transfer perspective. For example, the Laboratory for Technical Change Analysis and Evaluation, at Madrid's Carlos III University, emphasises the importance of applying CI to R&D planning by public research bodies which need to establish priorities for their research programmes and evaluate the results (Modrego, 2007). Even so, very little work has been carried out which focuses on the application of CI techniques as a factor to favour the competitiveness of universities in terms of their educational offer. In this respect, we should mention the research carried out into the competitiveness of Galician universities based on an analysis of the variables of supply and demand for all degrees offered in Galicia (Fernández *et al.*, 2005).

In the same vein, a study was carried out at Chinese universities (Liu *et al.*, 2006), which shows that CI theory and methods are an excellent support for developing the competitive strategies of universities in today's society. The importance of applying CI techniques to the university strategic planning process was also discussed at the annual conference of the Indiana Association for Institutional Research (Cronin, 2006).

1. See: <<http://www.zaintek.net>>.

It is clear that universities, in some way or another, in a more structured or more informal way, do carry out some sort of CI process while deciding, for example, the qualifications that they want to offer. In this context, the introduction in universities of the intelligence process and the involvement of social networks in obtaining weak signals should be viewed as a management tool for tackling the challenges that we mentioned above.

Analysing Social Capital as part of Competitive Intelligence

Before looking at the role of Social Capital in CI processes, we should briefly explain intellectual capital (IC). This concept was used recently to explain the processes that create value at today's organisations. IC refers to intangible assets that generate value for organisations: people's knowledge, relations with other organisations and recognition by society, to name just a few (Edvinsson *et al.*, 1997).

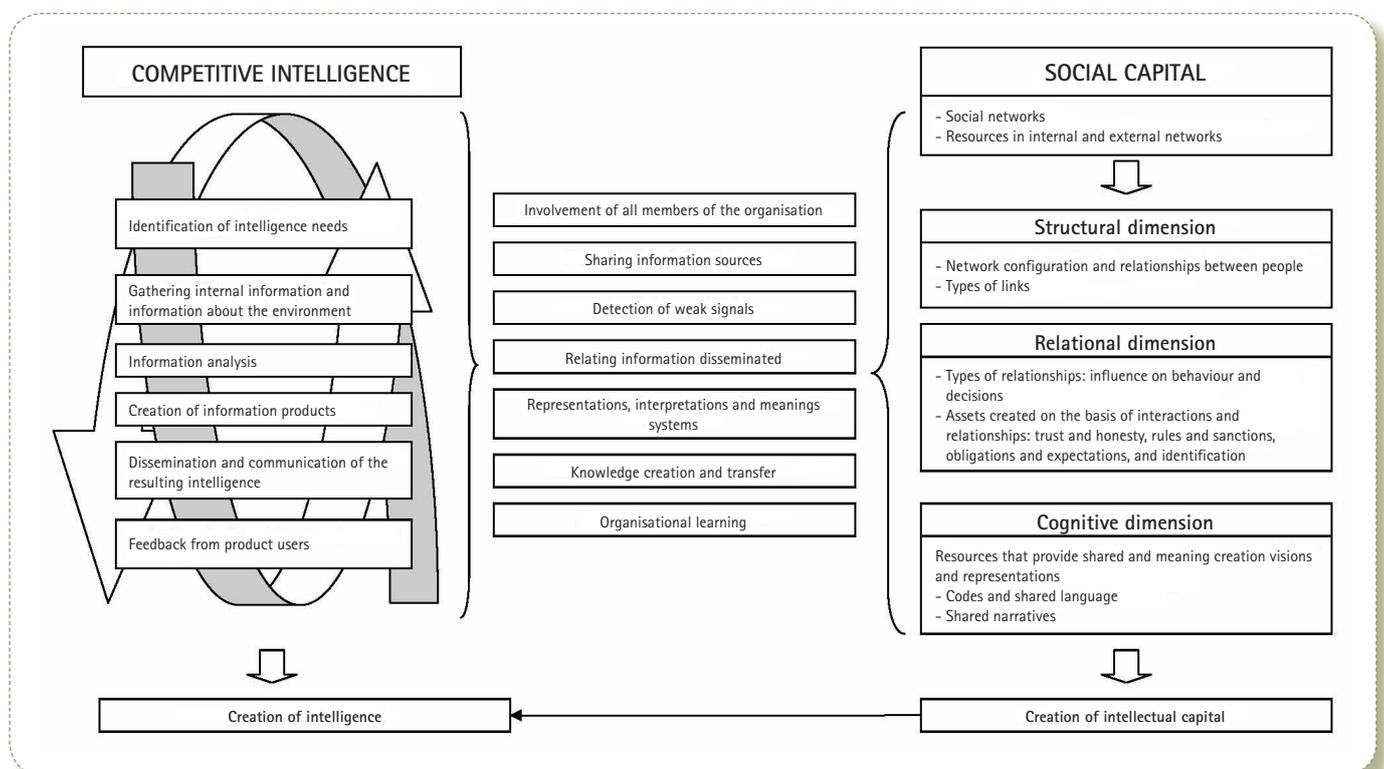
The study into intellectual capital at universities was analysed basically from the point of view of research and knowledge transfer and, incipiently, on the creation of instruments for

measuring and managing it. For example, we could mention the reports into intellectual capital by the Austrian Research Centers (ARC) and the Higher Education Institutions and Research Organizations (HERO). In the context of Spanish universities, we have the intellectual capital measuring model Intelec, run by the Autonomous University of Madrid, also from the perspective of the university's research. In any event, these models are not usually applied when analysing the university's teaching and focus on economic aspects.

Another view of intellectual capital is provided by Nahapiet *et al.* (1998). According to these authors, intellectual capital refers to knowledge and the capacity of a group to acquire knowledge and constitutes a highly valuable resource for action based on knowledge. Social Capital may lead to intellectual capital on the basis of specific combination and exchange processes.

The core idea of the Social Capital theory is that relationship networks are a highly valuable resource for furthering certain social or collective actions. According to these authors, Social Capital is taken to be the current and potential resources included in a network as a whole, available through it and derived from the relationship networks of a person or social unit. Consequently, it should become a source of valuable information in the competitive intellectual process.

Figure 1: Diagram of the relationship and contribution that Social Capital, in its different dimensions, may exercise on Competitive Intelligence.



Source: own creation based on the articles by Nahapiet *et al.* (1998) and Bergeron *et al.* (2002).

These authors consider that the Social Capital includes both the network and the assets that can be mobilised via the network and they describe three dimensions: a) the structural dimension: this refers to the configuration of the network and the types of links that exist; b) the relational dimension: this refers to the assets created through a series of interactions and relationships; the type of relationship influences the behaviour and decisions of the actors, and aspects such as trust, rules and sanctions, obligations and expectations and identification come into play; and c) the cognitive dimension: this refers to the resources that provide shared visions and representations and the creation of meaning; this dimension includes narratives, languages and shared codes.

Therefore, when we look at the role of Social Capital within the CI process, the vision of Nahapiet *et al.* provides us with an adequate analysis framework, as we can see in Figure 1. On the one hand, we have seen that relationship networks are a valuable instrument for obtaining strategic information; on the other, that the end result of CI is to act on the basis of the analysed information, in which the creation of meaning phase is a very important aspect. In connection with these premises, the dimensions that describe the Social Capital are an appropriate framework for identifying and studying the social networks of universities to gather strategic information.

As we can see from Figure 1, Social Capital does interrelate perfectly within Competitive Intelligence. Universities have available a very broad, but often under-structured Social Capital, with a resource of former students and companies where these completed their practical placements that are frequently not used as Social Capital. It is at this point, and at this time of adapting qualifications to degree status, that we feel that it is extremely important that this capital should be studied and structured within the Competitive Intelligence process that we believe that universities are adopting, albeit not particularly systematically and as an incomplete process.

Conclusions

Social contacts, be they informal or formal, play a very important role in obtaining the internal or external information required in the process of adaptation to all kinds of change. In this sense, analysis of the Social Capital that is derived from these contacts and networks is applied as a strategic information management methodology for a more in-depth understanding of corporate informational behaviour and the different actors involved in the process to obtain, analyse and apply strategic information.

Universities currently undergoing the adaptation process to the EHEA need to be very alert to the changes and movements in their environment, both in terms of the social, demographic,

legislative and economic factors and the movements by the competition, be they by other universities or institutions offering substitute products.

The definition of a university intelligence process and the integration of the Social Capital into this process, as a source of information for detecting and analysing weak signals emitted by the environment, is established as one of the keys to meeting current university challenges and the need to define educational strategies and offers that have been adapted to the environment.

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