Strategy, Knowledge and change in an Institution of higher education: points of intersection

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Abstract

The paper aims to understand the experience in preparing a training strategy linked to knowledge management, learning and organizational change done at a private institution of higher education. More specifically, it seeks to detail the stages of development, analyzing the difficulties faced and provide indicators of change throughout the process. A feature of the strategic process in the researched organization led the search for a theoretical discussion could involve strategy, knowledge and change. This association was fully viable when considering events that are mobilized by people interacting in a defined context. It uses a methodology of action research in which the investigative process includes a cycle of planning, action, observation and reflection. As a result, we defined four general indicators of the actions and influencers nine indicators of knowledge management should be promoted in the strategic process.

Keywords: *Strategic, process, knowledge management, higher education institutions.*

Introduction

This article has the objective of seeking to understand an experience in preparing a strategy associated with knowledge management, learning and organizational change done at an institution of higher education (IES). More specifically, it will seek to detail the stages of development, analyze the difficulties faced and present indicators of change throughout the process.

The relevance of studying the intersection of strategy, knowledge and change in higher education institutions is related to the fact that these organizations present differentiated characteristics that imply a certain specificity in their management.

That particularity has not yet been very much analyzed by organizational scholars, and there is a risk of adoption of management procedures that are similar to those of other types of organizations.

The concept of strategy in traditional literature has always been associated to having a plan, defined in detail based on rational analysis of the strengths, weaknesses, threats and opportunities that the external and internal environments offer the organization. To counterbalance that descriptive mode of viewing organizational actions, other perspectives have been observed and valorized.

Strategy has come to be seen not only as a plan or scheme that is studied and put into practice in order to achieve a given objective, but as a pattern of action of social systems, whose consistency of behavior (whether intended or not) interacts with processes, structures, systems and environment, creating new perspectives for action that provide leeway for emerging directions, guided first of all by a perspective of learning based on that interaction. Because of that, for Mintzberg and Quinn (2001), studying strategy is to recognize how the strategy [itself], its processes, the strategist, the structure, the systems, culture, power and style come together in particular contexts, producing practical results in complex organizations and social systems, whether they are a consciously intended um course of action, a patter for carrying out sequences of actions, a position in the environment or a shared perspective or vision of the world.

One may understand knowledge management in an organization as independently related to three dimensions: as a process of change in the state of knowledge, implying its acquisition, dissemination, refinement, creation, and implementation; as the skill in acquiring diverse information and sharing common understanding, in a way such that this knowledge may be explored, and further, as the skill in developing insights, knowledge, and associating past and future activities in an organization.

The integrated work in two dimensions (strategy and knowledge), utilizing procedures of strategic formulation, knowledge management and organizational learning required configuration of a method, which was developed by the researcher throughout the process. During the final stage, that of organizing phases and materials developed throughout one year, the method proposed by Teixeira Filho and Vidigal da Silva (2003) for knowledge management was partially utilized.

The methodology adopted was action research, in which the researcher actively participated in all stages of the process. A qualitative approach of the case study type was used (YIN, 2001), to describe and explain the stages of preparing and implanting the proposal.

To report on the research and its results, besides this introduction, the article has been structure into seven more topics, which deal with the following questions: strategy as process and knowledge management; some specificities of Private Brazilian IES; methodological aspects of the research; a brief report on the IES at which the research was developed; the description of the process of implanting a strategy associated with knowledge management and to learning; analysis of the difficulties; and final considerations regarding the research.

Strategy, knowledge management and organizational learning

In the search for a typology capable of grouping the different visions in the field and bringing them close to the research employed in the area of organizations, Whittington (2002) distinguishes generic approaches to strategy: classic, evolutionary, procedural and systemic.

In the classic approach, strategy "is the rational process of deliberate calculations and analyses, with the objective of maximizing the long-term advantage." (WHITTINGTON, 2002, p. 3) The world can be predictable and may be molded, as long as the necessary decisions are ordered and the correct decisions are made by the directors at the top of the organization. Dominating the internal and external environments depends upon good planning.

According to Whittington (2002), for evolutionists, strategy emerges based on environmental strengths that are beyond the control of managers. The biological metaphor characterizes the process of natural selection, in which the market selects the organizations most fit for survival. To the managers falls the task of adjusting their organizations as best as they can to the demands of the environment in which they operate.

The proceduralists are skeptical as to long range planning and the implacability of the environment over the organization. They believe in the capacity of managers, but place much more faith in a pragmatic process of learning and commitment and on experience based on trial and error because of the limited understanding of the processes in which the organization is immersed. From an organization's internal perspective, procedural theories tend to conceive of the phenomenon of strategy "as influenced both by the rational intent of agents, and by interests, commitments and limits of a varied nature, resulting in choices that can be the fruit even of habitual or purely symbolic processes." (CRUBELLATE, 2004, p. 83). "Strategies (...) are a means through which managers attempt to simplify and order a world that is too complex and chaotic" (WHITTINGTON, 2002, p. 27).

The systemic approach "proposes that the objectives and practices of strategy depend upon the specific social system in which the process of development of an organization is inserted" (WHITTINGTON, 2002, p. 4-5). The different objectives that guide the strategists are more related to the culture in which the organization is immersed than to a rational search for better results. The reasons for a decision being taken cannot always be explained functionally; there is a need to establish connections between external and internal factors in the thought processes of strategists. "Forms and goals in the development of strategies depend particularly on the social context, and thus strategy must be undertaken with sociological sensitivity" (WHITTINGTON, 2002, p. 5).

It may be seen that the Whittington classification may hide combinations among the types that occur naturally in the reality of organizations. For example, although they are at polar opposites of an imaginary line, they procedural approach (micro) and the systemic approach (macro) should be seen as making up a context in which actions occur and may be developed strategically.

Bearing that proviso in mind, when one begins to use a nomenclature for the strategic process, this should be viewed as the way in which the strategies of an or-

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ganization are formulated (developed) and implemented. In a sense similar to the one investigated in this research,

> [...] the concept of process has been applied to describe how and why strategies are formulated and developed; in other words, there is an attempt to discover how decisions and actions are made with regard to strategic execution, including assimilation and reaction to external interferences. Additionally, explanations are sought for the consequences produced by decision-making patterns and/or actions taken over time (BULGACOV *et al*, 2007, p. 85, *italics ours*).

As the research went deeper into studies of the strategic process it was noted that its characteristics include dynamism and multiple levels at which actions occur. The process includes overlapping and interaction of multiple levels of analysis; in other words, it is a phenomenon that encompasses more than simply the formal hierarchical levels of the organization. "It includes interactions between individuals, between groups, between groups and structures, between groups and routines, between organizations and industrial sectors and between sectors and economic policies" (BULGACOV *et al*, 2007, p. 86).

It is partly related to the less rational side of strategy, to the daily organizational routine, decision-making processes and forms of participation. It is a phenomenon where one perceives the influence of organizational systems such as culture, structure, power relations, coalitions, relations between persons and between groups and persons and the knowledge resulting from that interaction.

Knowledge in organization theory is normally seen from three perspectives: knowledge management, organizational learning and organization of learning. Although they present different principles and methods, from readings of various authors about the three perspectives it is possible to extract common themes from among them, such as: culture, interaction, construction of meaning, reflection, change in attitude, group and autonomy.

For example, Antal *et al*. (2001) and Child and Heavens (2001) emphasize the culture and history of an organization as important for defining previous learning. Weick (1995) relates learning with the creation of meaning, sensemaking. He refers to this as the way in which social agents construct meanings in the flow of actions and events, and how this sense becomes crystallized in structure. This concept keeps action and cognition together, and is related with action, context and time. For Nelson and Winter (1982), the characteristic of the sensemaking activity is reflected in organizational routines that are considered bearers of tacit knowledge (*apud* PATRIOTTA, 2003).

Garvin (1993) notes that learning processes may be mobilized around five major activities: systematic problem solving, experimentation with new approaches, learning from one's own experience and from past history, learning from experience and from the best practices of others and rapid and efficient transfer of knowledge to the entire organization. As characteristics that favor learning processes those organizations possess an environment with: time for reflection, shared vision, team learning. autonomy and exercise of leadership, a context quite different from that of the majority of Brazilian IES.

Specificities of Private Brazilian IES

So as not to lose the focus of the research, it was decided to base the specificities of Brazilian IES on the scope of the following dimensions: culture, climate, strategy and knowledge management.

Organizational culture may be understood as the process of construction of meanings/senses – sensemaking (WEICK, 1995) – that guides and shapes the values, behaviors and attitudes of people. In an IES, values such as autonomy, liberty and democracy should guide the way people make sense of things. That does not always occur in a private institution, where the figure of the "owner" is still very much present, and many times inhibits the occurrence of those values.

In the context of an IES, climate may be conceived of as the set of reciprocal expectations shared by agents in the school space. In a more detailed manner, it may also be understood as the set of perceptions and feelings in relation to the teaching institution that generally reveal the values related to the pedagogical and administrative structure, as well as the human relations that occur in the school space.

Culture and climate are intimately related, so that any change in one of them directly affects the other. It may happen, for example, that a given group may not want to become involved in some process because previous experiences in the organization have caused strains in relationships and even the removal of members due to their having expressed their opinions. It should be noted that other aspects that influence the culture and climate of an IES and, thus, certain dimensions of an organization such as strategy and knowledge management, are related to the external environment.

Studies have confirmed that despite the importance that managers assign to innovation and renewal of organizational strategy, and to the issue of execution, it may be observed in organizations that there is an intention that is subjugated to short-term interests, to interests and relations with power and to motivations related to the large number of rules to which IES are submitted in the Brazilian institutional environment.

In regard to this last aspect, Souza *et al.* (2012) not the results of their research in which it became evident that the articulation of multiple interests with government regulations meant that the process of preparing strategies in an IES followed a typically formalistic logic.

For a researcher with experience in this subject, after a short time in a private institution it is possible to clearly perceive that the legal system of the Brazilian educational sector imposes several limitations on IES managers, including the time needed to "adjust" to evaluation parameters that do not always befit the organization's academic maturity.

When one adds to that scenario the pressure on IES maintainers to obtain the highest scores on Ministry of Education evaluations, the result is a context that is not very conducive to reflection, to strategy formulation and above all, to their implementation. If there is reflection on the preparation and execution of organizational actions, knowledge management is compromised.

Antônio Nóvoa (1992), a well-known Portuguese researcher in the field of education, has affirmed that as institutions whose main purpose is the production of

knowledge, universities and higher education institutions in general know every little about themselves. Managers, professors and students in the various environments are not very interested in knowing about the real functioning of those types of organization.

Palácios *et al.* (2010), in researching higher education institutions as they prepared their Course Pedagogical Projects (PPC), found an incipient level of use of knowledge management techniques during their processes of reformulating PPCs, and concluded that the IES identified and developed individual and collective knowledge among their professors, students, employees and stakeholders in an intuitive manner, without a clear methodology. Therefore, they were operating at a level quite inferior to their capacity, and the authors suggested more in-depth studies so as to prepare a (procedures, tasks, methods and responsibilities) for a greater achievement of knowledge management in those organizations.

Methodology of the research

With the objective of capturing a given phenomenon at the moment when it is happening and presupposing that the social world is in permanent change, the research carried out has a phenomenological character.

Because it was performed with active participation of the researcher together with a group of actors from the target organization, it may be classified as action research. Thus, the investigative process encompasses a cycle of planning, action, observation and reflection (COLLIS; HUSSEY, 2005).

In that regard, there was first a moment in which the researcher adapted to the group. Meetings were held in order to get to know the organization and carry out an initial diagnosis of its strong points and its problems.

In those first meetings it was possible to begin planning, more in the sense of identifying one or two objectives than in clearly defining all of the stages of a process. First decisions were made and actions were performed, after which it was possible to reflect on their effects, making it possible to adjust the process to a plan that became increasingly clear.

It is known that action research is a type of applied research, "projected for finding an effective means of motivating conscious change in a partially controlled environment" (COLLIS; HUSSEY, 2005, p. 71). Aware of that, the researcher encouraged people to speak in order to express their desires. At the beginning it was noted that there was a certain reluctance to participate among the people, but with time, everyone became involved in seeking solutions to the problems presented by the organization.

About the institution researched

The institution where the research was carried out is private. At the time of the research it had approximately 3000 students, 208 employees (professors, administrative technicians), 8 undergraduate courses and 20 specialization courses.

Located in the Northern region of Brazil, it had been founded seven years earlier and there was a strong presence of the maintainers in management of routines.

Its centralized structure displayed little flexibility, with few spaces for debates and for presenting ideas. The strong presence of the owners made for an organizational culture in which autonomous and innovative processes were not encouraged. Consequently, the climate was one of inertia and conformity, with actions taken in a reactive manner.

In the perspective developed during the research, in which strategy and knowledge management are constructed socially – which implies that the construction of knowledge in effect there will occur based on the collective memory of the organization, through progressive adaptations of new ideas or proposals, sharing their assumptions and exchanging experiences – the organizational culture and climate must favor the process. In the action research carried out – because of incompatibilities with the characteristics of the actions carried out – those two items many times led to personal friction and a reduction in the pace of the process.

The process

Beginning in November 2010 and throughout 2011, the IES that is the focus of this research developed an activity which – in a manner that was partly planned and partly emergent – became a process of collectively constructing strategy, organizational learning, knowledge management and a still incipient cultural change.

Carried out through weekly meetings, where the participants were a defined group of managers at the institution, the entire process occurred founded on the following principles:
- ✓ Systemic thinking;
- ✓ Free expression of ideas and opinions by the participants;
- ✓ Propensity for continuous learning;
- ✓ Encouragement of communication and oral and written expression;
- ✓ Capacity for research and analysis of information;
- ✓ Encouragement of teamwork and sharing of knowledge.

The first meetings were concerned with performing an organizational diagnosis guided by the following items:
a) Analyze the history of performance by the organization;
b) Analyze the profile of the professors;
c) Identify the profile of the students;
d) Analyze the profile of the potential newcomers;
e) Identify the products offered;
f) Identify other products that may possibly be offered;
g) Analyze the documents of the external regulating/evaluating agents;
h) Analyze the processes of the organization;
i) Analyze the organizational structure;
j) Analyze the architecture of recent technology;
k) Analyze recent organizational performance;
l) Evaluate available information on management;
m) Evaluate the flow of organizational communication;
n) Analyze the organizational processes already implemented (planning, evaluation etc.).

Based on that diagnosis it was possible to structure an organizational strategy that had defined two central objectives: a) promoting improvement in student learning; b) strengthen institutional legitimacy.

The macro-strategies prioritized were:

a) Invest in qualification of academic activities;

b) Invest in greater academic and cultural expansion of the College in society;

c) Strengthen the organization's identity and image.

Some strategic actions in this first phase ended up structuring the strategic plan for the year 2011 and only partly implemented, notably:

1. Faculty Selection Process;
2. Preparation of the Faculty Manual;
3. Organization of Pedagogical Meetings;
4. Calendar for 2011;
5. Academic Guidebook;
6. Revision of the organizational structure;
7. Reformulation of the Constitution and By-Laws;
8. Institutional Evaluation.

In all of this process the reference documents were:

✓ Constitution and By-Laws;

✓ Institutional Development Plan (PDI);

✓ Institutional Evaluation;

✓ Evaluation of Undergraduate Courses;

✓ Pedagogical Projects of Undergraduate Courses;

✓ Planning 2010.

The second state of this entire set of activities went beyond the goal of strategic preparation and came to include knowledge management, learning and the consequent organizational change. The meetings became the nucleus for collective learning fed by the mistakes and successes in the daily experiences that the managers were having at the College. Strategy, learning, knowledge management and cultural change became naturally integrated throughout the process.

By associating the two separate stages it was possible to structure the elements that were capable of being placed in a management model called "innovative management." Those elements are made up of:

✓ construction of a strategic agenda;

✓ organization of the processes (methods and routines);

✓ monitoring and evaluation of actions;

✓ organizational learning;

✓ decision linked to strategic planning;

✓ structural reorganization and cultural change;

✓ alignment between academic, financial, marketing, technology and personnel management areas.

Difficulties existing in the process of implanting initiatives for knowledge management in medium to large-size organizations

Throughout the process, certain difficulties ended up standing out:

✓ meetings and debates with free expression of ideas were not a common practice at the institution. In the beginning, people were visibly inhibited by the presence of directors and were not able to fully present their opinions;

✓ the entire organization operated in the short term. Activism was very much present, with problems being solved as soon as they occurred. Thinking and reflecting about things beforehand is a change that is still very much a work in progress;

✓ there was no custom of recording the meetings, not only the minutes, but preparing a text that sought to reflect the topics dealt with broadly, founded on authors in the area of administration and education, especially;

✓ it was not possible to fully harmonize the strategic actions with other actions in the organization. For example, although a plan was actually drawn up, it was not integrated with a budget proposal, and thus it was not possible to make it fully effective;

✓ throughout the process there was limited use of the technology available at the organization. That was limited to exchanges of emails among participants of the meetings.

Final considerations

Thinking about a management strategy using a process implies intentionally promoting certain episodes or events capable of producing a chain of effects in the larger project of an organization. It is not possible to foresee the results that will be achieved, but only of making a gamble. The holding of periodic meetings that are carefully organized in order to allow perception of possibilities may be a good path towards implementation of a balanced strategy, meaning one that is partly planned and partly emergent.

Those meetings have a marked learning nature. There is questioning of what is going on, the relation of those facts with the intended strategy, possible changes in formation of structures and norms, for example. To that end, managers need to have available data and information from other events and episodes that have occurred in the organization.

At this point, strategy, knowledge and change converge.

The principal conclusion of the action research reported herein is that processes associating strategy and knowledge imply full involvement of people. For strategic managers it means a clear encouragement to place more attention on individuals, on social networks, on the sharing of meanings, on the processes that guide people around events or organizational actions.

Thus, several aspects need to be considered during the process of a given action:

✓ degree of motivation of those involved;

✓ trust among the people in the participating group;

✓ change in the mental models of the agents, especially the managers of the institution;

✓ visualization of results, which implies a permanent evaluation.

In the specific case of knowledge management, it is understood that a higher education institution, because of its organization specificities, should develop its own indicators for implantations, always using the prior status in which the organization had found itself as a parameter.

Among the indicators utilized in the experience reported, the following may be highlighted:

- ✓ change in people's behavior, such as adopting a clearer position regarding their opinions;
- ✓ more diversified use of technologies, going beyond the stage of using emails and into that of organizing forums and discussion lists;
- ✓ development of organizational memory through recording and disseminating lessons learned;
- ✓ capacity for learning from one's own mistakes;
- ✓ having interest and availability for carrying out joint projects;
- ✓ disseminating learning using the experiences of other organizations;
- ✓ expanding discussions and informal meetings;
- ✓ greater openness of the organization for undertaking new experiments;
- ✓ consider the questions dealt with in the meeting as inputs for sectorial actions. For example, planning of training courses by the personnel sector of the organization.

One may conclude that it is fully possible to associate strategy and organizational knowledge. More than possible, in the current reality in which educational organizations find themselves, such an association is vital for their full development.

That association offers a wealth of material for the higher education institution to rethink its management process. The questions in this regard could be: Does it allow agile and flexible decisions? Does it increase the capacity of managers for perceiving emergent opportunities? Does it enable managers to begin to monitor what really is significant? Does it enable a more decentralized, yet integrated management? Does it aid in achieving a systemic vision of the organization and the context of its environment?

It is believed that these are the most pertinent questions about the strategy, knowledge and behavioral change in a higher education institution in the modern world, and that they may provide suggestions for continuing this research and other research following the same approach.

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