

## THE IMPORTANCE OF INNOVATION AND KNOWLEDGE MANAGEMENT

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#### ABSTRACT

This study aims to reflect the importance of the manager when dealing with changes in scenarios that are increasingly competitive and dynamic, in which institutions must seek new ways of acting and be inspired. For this reason, managing innovation and knowledge has become essential. With that, the objective here is to debate the importance of good management of intellectual capital and human capital skills, presenting elements of failure and success for the innovation process. For this, bibliographic research was used as a methodology, and as a basis, are the authors: Quinn (2012), Brooking (1996), Chiavenato (2006) and others. Thus, institutions are able to anticipate the market in relation to competition and bring innovation that can ensure their competitiveness in it. Anyway,

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### **1. INTRODUCTION**

The events that organizations struggle with in their daily lives are progressively complex. For such situations, the measures and results taken must also be gradually complex. Balance can be seen as an improvement. However, change and complexity can bring unique opportunities. To pursue such exclusive possibilities, developing knowledge is essential. Developing the scientific study of knowledge and the mind allows administrators to amplify the intellectual capacities of their co-workers, for example.

In the meantime, the interdisciplinary and systemic point of view must be present, in order to correctly perceive the complexity, also structured, of the corporate atmosphere. Thus, intellectual capital is essential for organizations that operate in the current sphere of business. Managers must seek the greatest probable sovereignty within their field of activity in order, in this way, to also reach the development of all their co-workers.

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In this context, the fundamental objective of this study is to debate the importance of good management of intellectual capital and human capital skills, presenting elements of failure and success for the innovation process. In order to achieve the outlined objective, bibliographic research was used as a method, performed based on an analysis of the existing published literature.

### 2 ADMINISTERING INTELLECTUAL CAPITAL

Understanding the activity he performs, as well as everything related to it, it is essential to always seek to expand, increase, improve responses, adapt to changes and the complexity of current open systems that are organizations. In this way, new results appear more easily. Knowledge, also defined as intellectual capital, can be obtained in a practical way, in daily life within the institution itself or even in personal relationships; it can also be acquired through education networks, with undergraduate courses, improvement courses, technical courses, training, etc .; through readings of materials from the desired field; and even through guidance from people with specialists in the subject of the area in question. The role of the manager is therefore paramount.

A competent manager is therefore responsible for exposing four essential managerial skills: controlling, collaborating, creating and competing. According to Quinn and others (2012, p. 23-24) collaborating should cover the constitution and sustainability of commitment and cohesion. Means:

Understand yourself and others;

- Communicate honestly and effectively;
- Guide and develop others;
- Manage groups and lead teams;
- Manage and stimulate constructive conflict

• Control, according to the authors, involves the establishment and maintenance of stability and continuity, seeking to: Organize information flows;

- Work and manage through functions;
- Plan and coordinate projects;
- Measure and monitor performance and quality;

• Stimulate and enable compliance.

• Competition on the part of the manager, should aim at improving productivity and increasing profits. To this end, management must: Develop and correctly communicate the organization's vision;

• Establish goals and objectives;

- Motivate yourself and others;
- Design and organize;
- Manage execution and drive for results.

• Finally, the creation process is the competence where the manager must promote change and encourage the adaptability of his employees. In search of creation, the manager must: Use his power ethically and effectively;

- Sponsor and sell new ideas;
- Stimulate and promote innovation;
- Negotiate and agree commitment;
- Implement and sustain change.

To obtain a competency, the manager and his subordinates must have ownership over the knowledge associated with the behavioral ability to manipulate the knowledge in an appropriate way. Any knowledge can become superfluous if we do not know how to use it. The development of competences therefore requires obtaining knowledge and putting into practice the capacities obtained through that knowledge. Whetten and Cameron (2010) safeguard a five-stage pattern for obtaining knowledge and, consequently, skills and abilities. It is a pattern of pedagogical development like the learning process, named ALAPA: assessment, learning, analysis, practice and application, from English "Assessment", "Learning", "Analysis", "Practice" and "Application".

The evaluation process will help those who are developing their knowledge to find out what their current capacity for knowledge / competence in thesis is. It is the verification of knowledge / competence. For this, numerous tools can be used, such as either group debate or questionnaire. Learning is the period of obtaining knowledge through readings, videos, classes, etc. To testify that the learning was satisfactory, it is not enough to just accumulate knowledge and information. They

must be expressed, transmitted in summaries, classes, presentations and lectures. Therefore, it is the transmission and storage phase.

The analysis should look for the survey of behaviors that are appropriate or inappropriate. It is built through the analysis and observation of the situations in question. What was positive? What is generating errors? At this stage, the analysis of cases and examples is paramount. Right after the assessment, learning and analysis, what has been studied and absorbed so far must be put into practice. It is not yet a concrete application. Therefore, it makes mistakes and successes more freely possible. It is like a simulation before application in the real world. It is the period of experimentation and feedback during the learning process to allow improvements in the development of the acquired work. Finally, the application is execution in the real world. All knowledge is transported,

In informal spaces, it is not always necessary to go beyond the manifestation of our point of view. In the work environment, otherwise, it is essential to sustain and provide evidence to support what is being defended. For this reason, critical thinking is essential, it will enable the elaboration of convincing, clear, attractive and solid arguments. Critical thinking is a skill that can be developed through the acquisition of knowledge. It is the search for information to improve the quality of evaluations, promote the reliability of their recommendations during meetings, increase the credibility of others in the face of their decision-making power, among other factors.

According to Quinn and others (2012), effective managers must behave like effective thinkers. That is, they do not need to be excellent in terms of having full knowledge. Knowledge is, yes, essential for managers, but they may have cooperators who help them in acquiring knowledge. Managers who have no evidence to support their ideas, who do not develop critical thinking skills, will rarely be able to ensure their credibility. The complexity faced in organizations is gradually greater. Making rational decisions becomes progressively complex due to the various factors that need to be analyzed.

Information is not always openly available. For this reason, the search for knowledge, the development of competences and skills, are fundamental: first for administrators / managers and second, but no less relevant, for all employees of an organization. As in any space within corporations, managers are primarily

responsible for disseminating the rules, activities, functions, tasks, etc. With intellectual capital this is no different. The manager must gather knowledge, disseminate knowledge and generate interest so that all his assistants also obtain new knowledge. Brooking (1996) break down intellectual capital into four main groups:

- 1) Market assets;
- 2) Human assets;
- 3) Intellectual property assets;
- 4) Infrastructure assets.

It is observed that the author expands the reach of intellectual capital beyond human resources. However, all items cover the relevance of acquiring knowledge continuously, in addition to human resources to develop each of the assets listed by the author. Market assets encompass the potential of the organization as a whole in relation to intangible aspects that are related to the market: Loyalty, customers, brand, loyalty, recurring and ongoing businesses, franchises, distribution channels, etc. It is the knowledge that the organization has to stand out in the market in relation to its competitors, offering a differentiated brand, distribution channels that simplify access to the product, good business development that ensure the loyalty of its buyers, etc.

Human assets are primarily responsible for restoring knowledge continuously within companies. They involve all the benefits that a company's employees can bring to it: expertise, creativity, knowledge, problem solving. As is known, no company operates without human assets. However, they may be the most difficult asset to manage. This is because they encompass values, personality, culture, particular principles of each one. For this reason, the administrator must maintain a good relationship and specific attention to his human assets, which are essential for the development of intellectual capital in the organization as a whole.

Finally, infrastructure assets are discussed, which cover all the necessary methodologies, technologies and processes and which are part of the organization's structure. They range from the physical facilities of the building where the organization is installed, the factory project, going through the software, machines, and hardware used in the production process, to everything that is necessary in

terms of ordering for the development of the organization's activities. Therefore, once again, it is observed that this ultimate factor addressed by the author, also does not work without the existence of human resources.

And it is concluded that intellectual capital is essential, both at the individual level, of the company's employees, and at the institutional level, with institutional learning as a tool for innovation.

#### 2.1 Elements of failure and success for the innovation process

Communication modes evolve every day. Before, letters were used to communicate. Currently, messages that took days and even months to arrive, cross the world in seconds. Communication is faster, with lower prices and countless probabilities. With faster communication, information is also transmitted more quickly. We have numerous communication channels that enable the exchange of information.

The internet idealizes, every day, a new way of transferring information: emails, social networks, applications, websites ... Television also seeks to follow the progress of the internet so as not to be left behind. Channels that carry news in real time and transmit information wherever people stay also with the assistance of the internet. The distribution of services and products also needs to evolve and the logistical base that mobilizes international trade develops every year, seeking to follow the speed of the current world. The technology, which allows all this, has to be even faster. Today, it is impossible to imagine the end of technology. It seems that she has endless ability to evolve.

All of this would not happen without globalization, which is an essential feature of this whole discussion. The interconnection between the world grows, more and more, the speed of business and the connection between all parts of the planet, its markets and the individuals that operate in them. Therefore, the figure elucidates the new definitions, which do not cease to appear. These are new forms, new discussions, new theories that further stimulate the evolution and innovation of the organizational environment. In addition, they are new lifestyles, new practices that motivate the need for new definitions for business life. Until the development of the

internet, which decrees the creation of new ethical principles for online trading, for example.

Thus, innovation is born by innumerable factors, it originates in the most different types of needs, it can be from the simplest to the most complex, reaching different individuals or peculiar groups. It is relevant to highlight that, innovation can start by packaging a product. Thus, one can discuss innovation in: Products; Services; Law Suit.

According to Salim and Silva (2010, p. 25), innovation is a fundamental way to "find alternatives to solve problems and better solve the issues that bother". It is common to associate innovation with technology, since most innovations occur through technological development. However, in many situations, innovation does not need to be a unique and new idea, it can be transferred from another context, where success has been found, transformed and adapted according to the needs of the new context in question.

As seen earlier, innovation encompasses creative thinking. However, it must go ahead. Innovation cannot resist without creativity, but not all creative ideas become innovations. More than an advance, innovation must present value to the individuals with whom the organization relates, be it its suppliers, consumers, stakeholders and partners in general.

Recovering the relevance of the manager in the development of intellectual capital discussed in the previous item, for innovation, managers have a wide participation. They must create an enabling environment for all company employees to bring in innovative methods. The manager should not be responsible for creating all innovations. But also, make innovation a routine within your organization. The thinking of creativity for innovation must face some obstacles, mainly due to cultural situations. These barriers are conceptualized by Quinn and others (2012), the thought that reflection and fantasy are a waste of time, a sign of madness or laziness. Seen negatively and worthless.

Conversely, the best ideas can come from reflection and fantasy. The confidence that only children can play and that adults should be serious and work. Playfulness can also be an excellent source for creative ability. Good humor can be a good ally in problem solving. Without it, it can often make problems even bigger. In

addition to the cultural obstacles presented, Quinn et al. (2012) argue that the failure or success of innovation and creative ideas are subject to the overcoming of some personal barriers, such as: fear of making a mistake; Inability to admit ambiguity / flexibility; Tendency to judge instead of generating ideas; Too much tendency towards self-criticism; Inability to relax or allow new ideas to appear; Lack of information,

For this reason, the main suggestion, both for employees and managers of a company, is to avoid all the barriers presented. In this way, innovation and creativity can develop successfully.

Brainstorming is a very advantageous method for generating new ideas. It is one of the best techniques if the goal is to encourage the collective development of ideas. It uses group discussion and debate, as well as helping to disconnect from the dull habit of companies' daily lives. Thus, it allows the construction of creativity. For a good conduct of a brainstorming and the guarantee of good effects, he must be guided by a person in charge, who will arrange the ideas, write them down and evaluate them. Also, the person in charge can guide the debates so that they are better used. Initially, the problem in question must be determined. What is the purpose of brainstorming? What problems need solving? The creation of ideas should be oriented towards which point? The greater the involvement and the richer the debate, the better the ideas and the results can be. The review of ideas is essential to point out the feasibility and effectiveness.

At the conclusion, votes can be used to define the best solutions to the problem discussed. As can be seen, the innovation process is tied to the participation of everyone in the company. Managers must establish an adequate means for all cooperators to collaborate with new products, new ideas, processes and services. The success of an innovation process is therefore tied to the participation of all and overcoming the obstacles discussed here.

For this, the administrator must start with the proper management of his intellectual capital. Next, competency management will also be discussed in more detail, which is also fundamental to the innovation process within organizations.

### 2.2 Human capital skills management

Skills can be technical, in relation to everyday activities, they include the ability to know how to build specific tasks. And, therefore, the attitude includes putting into exercise. It determines what you want to do, demand it in order for things to happen. Thus, knowledge is the starting point. Skills are essential and represent the link between practice and knowledge. The practice, in turn, occurs through attitudes. Competency management therefore seeks to guide the company's efforts to maintain and create the skills of its employees. Or rather, competency management will outline what skills, knowledge and attitudes are necessary for your co-workers.

A posteriori, it will take advantage of employees with such premises or develop such requirements in the employees that already exist. And, therefore, competence management must continually assess the "established" competencies at every moment, every task and activity of the company. Are they appropriate? Are they meeting the organization's needs and purposes? Competencies can be assessed and analyzed individually, in groups, or at the company level as a whole. Maximiano (2008) safeguards that each employee can learn to recognize their own competencies. That is, you can learn to identify your own strengths and weaknesses.

The manager must also provide the ticket for the employee to perform his competencies in accordance with the needs of the company. As already discussed, skills can be sought, with the hiring of new employees; or developed, with improvement programs, for example. Chiavenato (2006) estimates that management by competences must be systematized. It must be a program by which the organization will seek to establish the appropriate professional profiles for each activity, ensuring greater adequacy and productivity.

The author also safeguards that management by competences must recognize the points of excellence for each function and the points that distinguish the career from that specific function. Absences should be identified, knowledge added and the evaluation parameters estimated. It is the search for value creation in the employee and company relationship. Some phases for the systematization of the competency management program are listed below: description and mapping of competencies: it is essential to describe and identify which are the primary

competencies for each function / task. Measurement of competences: how will each be evaluated and measured? It is convenient to require metrics and values.

Competency-based remuneration: how will employees be remunerated? The company must institute benefits and bonuses, for example, for employees who develop the essential skills for each function. They must constitute the career path. Competency selection: selection processes must be carried out according to the requirements for each function related to competencies. In the case of employees already established in the company, improvements can be made to the new skills required.

Skills development: as previously mentioned, training is the main instrument for developing the skills of employees. Performance evaluation by competences: when the organization has competencies established, salaries based on them, metrics for measurement, selection process and all its daily life based on competences, it must also establish how they will be evaluated. Competency development plan: therefore, as already mentioned, the company's job and career plan must be established based on each determined competency. It will indicate how each employee's development can be.

Following all the aforementioned phases, the company ensures a good systematization of its skills program. It is like guidance for employees and managers. Everyone should know how competency management will affect the company's daily life, from admission to salary. Thus, with the management of competencies, the creation of talented employees is expected, which will ensure greater productivity for the company, perform activities in a more assertive manner and coexist in a more participatory and motivating atmosphere. It is a way of managing that brings engagement in all hierarchical layers in search of the effectiveness of all employees, continuously seeking improvement. It consolidates group work and praises the human and intellectual capital discussed in the first part of this article.

Table 1 - Qualification x Competence	
QUALIFICATION	COMPETENCE
Relative stability of economic activity.	Low predictability of business and activities.

Localized competition.	Comprehensive competition
The logic of the industry predominates: production processes and standards.	The logic of services / events predominates
Formal, union-based employment	Informal and flexible relationships.
Traditional organization of work: definition of positions and scheduled tasks.	<b>U</b> , <b>U</b>
Focus on the process.	Focus on results
Emphasizes simple circuit learning.	Stimulates double-circuit learning.

Source: Ruas (2005, p. 37)

It is important to keep in mind that competence must be apparent to everyone in the company, or rather, it is useless for an employee to present the best qualities, but not to practice them in the daily life of the company. Managers need to be aware of and identify the benefits of their employees. The better the manager's constructive perception, the better he will assess his employee's competence.

It can be said that competency management crosses some barriers within companies. It was a change in models that involved, even, the cultural transformation of organizations, since it requires a lot of self-management, responsibility and participation of all so that it works properly. As noted, the constant modification of the current competitive environment also requires the continued development of such talents.

The success of companies and the success of those who work within them depends on this constant evolution. The more skills, knowledge and competencies are developed, the greater the foundation for ensuring daily activities, which is more and more agile. It can be ensured that competency management brings many benefits to the company and its workers. As it can be Listed below: Advance in the performance of the workers, consequently, in the productivity of the companies; Helps identify needs for employee training; It makes the company's objectives better aligned with the development of workers and teams; Enables historical, continuous and comparative analysis in relation to the development of workers; Ensures greater productivity of workers; With well-defined goals,

Thus, the managers of companies that act according to the competencies of their collaborators, it is up to the fulfillment of the four managerial competences exposed at the beginning of this article: to collaborate, to control, to compete and to create. They are essential for a good manager-worker relationship and for the real development of skills within a company. They are mainly responsible for the motivation in search of knowledge and, consequently, of better competences for good organizational performance.

## FINAL CONSIDERATIONS

The knowledge acquisition and learning process, therefore, enables the development of intellectual capital within corporations. For this reason, training and continuous updating through short and long term courses are essential. Managers should encourage this exercise among their employees. The learning process must also go beyond the simple accumulation of new data and information. For the knowledge learned to be truly complete and productive, learning must stimulate critical thinking.

In this perspective, having the ability to innovate denotes finding new results for activities already developed, better and more efficient. Innovating can also be the creative capacity to devise solutions for the new, cases that have not yet been discovered or studied, services or products that do not yet exist. To innovate can also be to improve practices already performed. After all, regardless of the situation, to innovate it is necessary to exercise, know and test new ideas.

It has now become clear that in today's competitive, dynamic and changing market, innovation is essential. For innovation to happen, it is also clear that knowledge is another very important condition. And competency management is no different. It is another way of ensuring the continuous evolution of workers / cooperators and companies. Finally, it is another tool to be used within the whole context discussed in this article: transformations, interrelationships, interactions,

concern for the whole and not just for the parts, globalization, adaptation to transformations and countless essential concepts that has been debated.

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## REFERENCES

BROOKING, A. Intellectual Capital: Core Asset for the Third Millennium Enterprise. Boston: Thomson Publishing Inc, 1996.

CHIAVENATO, I. General and Public Administration. Series tests and contests. Rio de Janeiro: Elsevier, 2006.

MAXIMIANO, Antonio César Amaru. General management theory: From the urban revolution to the digital revolution. 6th ed. revised and updated. São Paulo: Atlas, 2008.

QUINN, RE; FAERMAN, SR; THOMPSON, MP; MCGRATH, MR; CLAIR, LS ST. Managerial Competencies: the approach of competing values in management. 5ed. Rio de Janeiro: Elsevier, 2012.

RUAS, R. Management by competences. A contribution to that of organizations. In: RUAS, R. et al. The new horizons of management. Organizational learning and skills. Porto Alegre: Bookman, 2005.

SALIM, CS; SILVA, NC Introduction to Entrepreneurship: awakening the entrepreneurial attitude. Rio de Janeiro: Elsevier, 2010.