



THE ESSENCE OF ENTREPRENEURIAL PROCESS AND THE COMPLEXITY OF THE INDIVIDUAL: PERCEPTIONS FROM THE PERSPECTIVE OF KNOWLEDGE TYPOLOGIES

Thais Elaine Vick

Doutoranda em Engenharia de Produção pela
Universidade de São Paulo, Brasil.
E-mail: thaisvick@yahoo.com.br

Marcelo Seido Nagano

Doutor em Engenharia Mecânica pela Universidade de São Paulo, Brasil.
Professor do Departamento de Engenharia de Produção da Escola de
Engenharia de São Carlos, Universidade de São Paulo, Brasil.
E-mail: drnagano@usp.br

Bárbara Ilze Semensato

Mestre em Engenharia de Produção pela Universidade de São Paulo, Brasil.
E-mail: barbarailze@gmail.com

Abstract

The scenario described by the recent theoretical conceptions about innovation reflects a moment of transition from industrial paradigm to knowledge paradigm. A great expectation is arisen over the individuals responsible for defining contexts, promoting innovation and identifying opportunities. In the interest of approaching a wider concept of the entrepreneurial process and the understanding of this activity on the individual and group levels, the review promotes a discussion about the synergy between the competency and the inherent individual traits, as well as its insertion in team work, based on the dimensions of the knowledge typologies.

Key words: Entrepreneurial Process. Cognitive Property. Individual Competencies. Team Work. Knowledge Typologies.

1 INTRODUCTION

Every discussion over innovation attracts to itself companies and their ways to compete strategically for leadership. At the same time, we find the debates over the new necessities for differentiated professional profiles.

The secret of organizational success is more and more based on individuals, their competencies and individual characteristics. Identifying and pursuing new ways of associating resources and opportunities is an indispensable responsibility of people in order to meet the demand of continuously aggregating more value to the institution.

Innovative ideas are formed through a profound interaction between professionals and environments that have conditions of promoting knowledge creation (POPADIUK; CHOO, 2006). Innovation based on knowledge requires that innovators learn and practice the entrepreneurial administration (DRUCKER, 1988). Fillion (1991) also clearly associates entrepreneurship to innovation, stating that the essence of entrepreneurship is to perceive and take advantage of new opportunities in the business environment.

The study of entrepreneurship comprises the individual behavior of identifying and creating opportunities, the emergence and growth of the organization, the industry's

relevance, the team formation initiative and the organizational transformation (BRUYAT; PIERRE-ANDRE, 2001).

Researchers now recognize the importance of teams after decades of emphasis on entrepreneurs as individuals. Ventures founded by entrepreneurial teams tend to be more innovative than those with only one founder and larger teams are associated with higher levels of venture growth (MARTINEZ; ALDRICH, 2011).

Bearing that in mind, and also considering the subjectivity of the entrepreneurial process, this work's syllabus resides in analyzing the individual's singular complexity and the teams' involvement in identifying and creating opportunities, reinforcing in the discussion the necessary knowledge typologies, and their relevance in the discussion of the ways of generating innovation, which eventually demand from the individuals a new set of traits that model their competencies.

2 METHOD

The type of research according to its procedures is bibliographic. This review seeks a knowledge update to get a new position, aiding in the problem comprehension starting from the analysis of the scientific contributions and through three consecutive dimensions: literature review and substantiation, research justification and theoretical foundation, that is, contributions from authors to the knowledge theoretical field.

The review can be classified according to the criteria of Noronha and Pires (2000):

The purpose is analytical, when done as an end in itself, so that the sum of the studies may, in the long run, provide an overview of the development of a given area, with its peculiarities, successes and failures.

In its scope, the article takes the thematic aspect, since this is a specific focus of a particular theme.

Classified as to its function, the review serves as a document update, when notified about the recent publications and highlight the most significant works on the subject matter covered. It is suggested by this articulation an inquiry on the following phenomenon: By whom and with which types of knowledge the opportunities to create products and services are discovered, assessed and explored?

In order to achieve that, conceptions of entrepreneurship directed by innovation and perception of opportunities are first presented: the individual, his competencies and cognitive property. Later on, it is highlighted the relation of these topics with the interaction among people through team work, in an environment that promotes conditions to create knowledge. Finally, it is described the relations between the knowledge typologies and the cognitive property concepts, individual competencies and the work of innovative teams.

3 THE ENTREPRENEURIAL PROCESS

Entrepreneurship possesses a very subjective concept. Many authors have difficulties in defining it as a process. The subjectivity takes place because of the different conceptions not yet established about the topic and also because it is relatively new. It was only in the beginning of the twentieth century when we first heard about entrepreneurship as, summarily, a creative process associated to innovations.

Speaking of entrepreneurial process involves all the functions, activities and actions related to the perception of opportunities (BYGRAVE; HOFER, 1991). Shane and Venkataraman (2000) characterized this process as all the attitudes, opportunity perception, the Discovery, the assessment and gathering of these ones, as well as the group of individuals who discover, assess and explore them.

The entrepreneurial process begins when there is a generator event due to external, environmental, and social factors, personal aptitudes or a sum of all these factors, which enables the emergence and the growth of a new company (STEVENSON; JARILLO, 1990).

Among the aspects that characterize an entrepreneurial organization, it can be considered:

- Pro-active attitude,
- Goals higher than the actual potential or sources,
- Team work culture,
- Ability to learn and ability to solve problematic situations.

It is relevant to highlight that these very same aspects are present in the one's entrepreneurial profile. Thus, the entrepreneurial process can be considered as a set of behavior that the entrepreneur develops (GARTNER, 1985).

During the process, the entrepreneur should find, assess, and develop an opportunity, even overcome any obstacle towards the creation of something. Hisrich and Peters (2001) present the process in four distinct phases:

- Identify and evaluate the opportunity;
- Develop the business plan;
- Determine the necessary resources;
- Manage the resulting company.

In what this study is concerned, only the first phase has been considered pertinent.

4 CHANGE: OPPORTUNITY OR MENACE?

The entrepreneurial organization is directed by the perception of opportunities and oriented to action (STEVENSON; GUMPERT, 1985). This way, the entrepreneurial process consists of the transformation of ideas (whether they are new or just other ways of perceiving something already existing) in a profitable business.

The search for opportunities, a strong trait of this process, is characterized by an orientation towards the market, instead of an orientation towards resources. In other words, the entrepreneur is aware of the environmental changes that may show an opportunity, so they can go after the necessary resources to explore it. The change must be perceived much more as an opportunity than as a menace. In this search, the external pressures are faced by the entrepreneurs as stimulants to opportunity acknowledgement. Highlights of this pressure are fast changes in the following areas: technological, social values, consumption economy, and political among others.

Timmons (1994) proposes another way to analyze the entrepreneurial process. The author contemplates it through 3 fundamental factors: opportunity, entrepreneurial team and resources. The first step is to evaluate the opportunity, which has to be analyzed to decide whether the project is to be continued or not. The second step, the entrepreneurial team has to act together. This way, it should be inquired whether they are really capable professionals to help continue the process. Finally, it is evaluated how and where this team will get the necessary resources. Picture 1 represents the entrepreneurial process model proposed by Timmons (1994):



Picture 1: The Entrepreneurial Process
Source: Adapted from Timmons (1994)

This way, the essence of the entrepreneurial process is in the search, perception and the use of new opportunities in the business environment, in the creation of new products, production methods, and new markets. It is about the involvement from people focused on the process and that, as a team, change ideas into opportunities. Moreover, good innovating ideas combined, good planning and competent teams, in association with the right moment (opportunity) and funds are major contributing factors to the business' success.

5 THE INDIVIDUAL WITHIN THE ADMINISTRATIVE HISTORICAL CONTEXT

The individual is by definition a biopsychosocial being, a triple origin that gives him a singular complexity. These three features are present in every study about the human being in organizations (BARON, 1998).

Within the administrative historical context, the human being presented himself at first as a solitary individual. Later on, he became a social being who sought his acknowledgement as a human being who belonged to a group that gave him legitimacy and prestige. The human being then starts to be perceived as someone who has multiple necessities, which are fulfilled in different ways.

Work, a category used to present the interaction of men living in groups, with its components, activity, conditions and results of each activity, always presents a double character, personal and social-economic depending on the angle it is approached: the person who works or the company. The result of the activity of a worker is always unique, whether it is an object, part of an object, or a service whose concrete characteristics depend entirely on the activity developed to execute it. Even in mass production, the standardized objects that are produced are only identical in the way they look. By the human work invested in them, in its essence, they carry the personal trait, even pitiful, of those who made them. This trait is related to a set of specific knowledge and abilities (GUÉRIN et al., 1991).

From the work category, presented as one of the ways of interaction of men in groups, the entrepreneurial individual will be, over all, the one who seeks constantly ways to his needs from the creation of conditions to do so.

6 COGNITIVE PROPERTY

Each individual faces the life experience according to their own way of being and personality. The individual's personality is an intrinsic variable in their disposition, performance, motivation, attitude towards conflicts. Each favorable action or not favorable one depends on how the one interacts with others and society (DAVIS; NEWSTROM, 1985).

Personality includes intellectual, affective, impulsive, volitional, physiological, and morphological aspects. Each human being responds to certain stimuli and to life circumstances in their own way of being, which generates as a result their behavior (BECK, 2005). The multiple personality definitions comprehend the total psychological structure of each individual, where the way of thinking, expressing yourself, and manipulating your attitudes and interests are unveiled. According to psychologists, personality refers to the unique and relatively stable behavior patterns of a person, therefore, the individual's consistence, the person he was and will be (DAVIS; NEWSTROM, 1985).

The man is a complex live organism, who has motor, sensitive, and vegetative functions, with a biological and physical essence; and, at the same time, a unique element within his species. He is above all an intelligent being, with a thinking ability, with a rational conscience of his conduct, which makes him different from the other living beings. With all that in mind, personality combines the essence of the physical and mental group with the disposition each one adopts and makes him different from others (DAVIS; NEWSTROM, 1985).

Within the cognitive theory, the individual traits are formed by the central values and other cognitive dispositions which are developed very early in an individual's life through the relation of reciprocal determinism between the environment and his behavior. These are important categorically and hierarchically organized cognitive structures called cognitive schemes and central beliefs. These central beliefs represent the contents of the schemes and determine the content of thinking, endearment and behavior. The way the individuals process data about themselves and the others is influenced by their beliefs and other components of their cognitive disposition (BECK, 2005).

When developing an attitude towards something, the individual selects an idea full of feelings in contrast to something concrete, which molds him to behave in a certain way towards a specific situation. This happens because attitudes are formed in our minds thanks to personal experiences gained and/or to the influence of important people and groups to which we belong (BECK, 2005).

7 INDIVIDUAL COMPETENCES

In the last years, the competence topic, its development, management and other aspects have been the focus of academic and entrepreneurial discussions, associated with different understandings: at the individual level (the individual competence) and the organizations (called "core competences"). The organizational competences refer to the combination of the company resources that make it unique, therefore being the origin of the competitive advantage. The individual ones refer to a specific ability over a certain area of knowledge (SILVA, 2002).

The notion of competence focus on the mobilization and the articulation of resources aiming at aggregating value to the organization, a concept in line with the proposal of measuring the intangible, once competence is not measured by numbers, but by the Power it has to contribute for the development of the organization, through individuals. This analysis can be made both at the individual level, an aspect related to the evaluation of performance by competence, and at the organizational level, related to the entrepreneurial performance.

Speaking of competence can determine several meanings, not only related to the person characteristics, such as knowledge and attitudes, but also others concerning tasks and results (ZARIFIAN, 2001).

Fernandes (2004) suggests 2 classes of resources obtained by the organizations: the human and physical resources, also called tangible and intangible assets, respectively. The first one refers to the raw material, equipment, storage among others. The second one refers to the many classes of employees in the company. It is from this point that concepts of competence can be treated at the individual level, considered one of the pillars of this discussion.

Competence at an individual level can be thought as a set of knowledge, abilities, and attitudes that justify a high performance, believing that the best performances are founded in people's intelligence and personality. It can yet be understood as the task and the set of tasks pertinent to a position (ZARIFIAN, 2001). It is also the capacity of executing a task, something that requires knowledge and personal ability. Someone is considered competent, for instance, in a foreign language, if he has the ability of comprehending the written language, or the spoken language, if he can speak, or from samples of it, be able to translate or interpret it.

LeBortef (1995) reminds us, however, that during the 80's and 90's, many authors contested the definition of competence associated to people's realizations. According to them, the fact that some people possess the necessary qualification for a certain job does not mean that he will do what is demanded from him. According to LeBortef (1995), competence is not a state or knowledge you have, neither is it a training result. Competence is, above all, putting into practice what you know in a specific context, generally set by the work relations, the company's culture, unforeseen events, time limitations, and resources. Competence can only be spoken of when there is competence in action, that is, knowing to be and knowing to use knowledge in different contexts.

The new information and communication technology have created a new necessity diversity, making space to the new knowledge economy. According to Zarifian (2001) competence is the quality of those who are able to analyze a situation, present solutions and resolve issues or problems. In the competence model, the work follows the subject and becomes the direct expression of the power of his thinking and performance.

According to Tremblay and Sire (1999), there are five competence dimensions that present particularities capable of giving indications of the individual's performance:

- Knowledge: collection of information, concepts, ideas, and scholastic achievements pertinent of a specific domain that an individual possesses. It is necessary to have a constant updating and learning in order not to turn the knowledge obsolete;
- Skills: abilities that correspond to the real demonstration of the competences one has, ability of turning knowledge into action, ability of turning theory into practice, through a personal view of the business activities;
- Behaviors: concepts that an individual has about himself and that reflect on attitudes, values, emotions and reactions towards a situation, behavior that involves the impulse and the determination of innovating, as well as the conviction of having to improve continuously, and the entrepreneur spirit;
- Traits: refer to the personality traits that lead a person to behave in a certain way;
- Motives: these are the behavior in the directed work done for a motive or a specific target and that mobilizes the inner forces that generate reactions.

It is noticed then that the set of aptitudes and intelligence form the necessary individual's competence to successfully execute a professional activity. From this point of view,

it is possible that the individual competences differ from the individual traits related to the cognitive behavior.

8 INNOVATION AND OPPORTUNITY

A company that strategically competes for leadership should have a concern directed to innovation in products and services in order to get competitive advantage. Innovation can be understood as a new asset or service, a new production process or a new plan or program adopted by the organization (DARROCH; MCNAUGTON, 2002). For this study, it is considered pertinent the concept of innovation such as new ideas that are transformed or implemented in products, services, or processes, aggregating value to the company. These ideas are formed through a profound interaction between people in environment that possess conditions of providing creation of knowledge (POPADIUK; CHOO, 2006).

Innovation is a specific instrument through which the entrepreneurs explore the change as an opportunity for different business or service. As aforementioned, the entrepreneur faces change as something healthy and he is always looking for it, reacting to it and exploring it as an opportunity. Whatever the personal motivation is, he seeks for creating value, knowledge and new satisfaction (DRUCKER, 1998).

The opportunities are out there. The entrepreneur is the one who take advantage of them by using their cognitive side (SHANE; VENKATARAMAN, 2000). It confirms the idea of opportunity as something to be identified, and not created.

Change always provides the opportunity for the new and the different. Innovation consists of deliberate and organized search for changes and systematic analysis of opportunities that such changes may offer (DRUCKER, 1998).

8.1 Opportunities sources based on knowledge

According to Drucker (1998), this is perhaps the kind of opportunity that calls the attention the most. Opportunities based on knowledge differ from all others, for they demand time and are particularly challenging. Between the discovery of new knowledge and the application of it in a useable technology, and the occurrence of it in new products and services, a long time has passed by. This time that has considerably diminished through history. For instance, to make the computer a reality, many types of knowledge were necessary: binary arithmetic, the calculating machine concept, the punched card, the valve, the symbolic logic and programming concepts; moreover, it was necessary to have all of them converged.

Drucker (1998) reinforces that the opportunity capture based on knowledge requires:

- A meticulous analysis of all social, economic or perceptive factors that identify which factors are not available yet, so the entrepreneur can decide whether they can be produced;
- A clear emphasis on the strategic position: the introduction of an innovation creates a stimulus and attracts a series of others interested in it, which means that the innovator has to be right on the first time, under the possibility of being overcome by the competitors;
- That the innovator learns and practices the entrepreneurial management.

8.2 Innovative teams

The idea of projecting the organizational structure in the form of work teams comes from the 90's with the restructuring of companies by horizontalization, reduction of the number of the hierarchical levels and delegation of authority to lower levels. A considerable change was announced, changing from a department way of organizing to the adoption of a new vision of process of activities (DAVENPORT; PRUSAK, 1998). The creation of networks could be understood as an answer to the environment challenges faced by the organizations, aiming at building capabilities and strategic competences (SANTOS, 2000).

Oriented by the company's goals and capable of taking decisions, the members of the team start to control and plan their activities, regardless of the hierarchical level to which they are linked (SANTOS, 2000). They are teams made of highly versatile individuals with entrepreneurial and anti-bureaucratic behavior, with high tolerance to ambiguity and focused on long term activities (BEATTY; SCHNEIER, 1997). These are professionals willing to interfunctional cooperation and possess individual abilities and characteristics such as creative behavior and risk tolerance (LEUNG et al., 2003).

Innovative teams are overlapped to the functional structure or integrated in the organizational project, and though temporary, tend to have a long life (BEATTY and SCHNEIER, 1997). A group of individuals with strategically complementary abilities and mutually compromised with quality, client relation and productivity is formed. The group must have common goals related to innovation. As members of the team, these professionals have the opportunity to move from their work levels and let ideas and creative thoughts flourish, make decisions that will make the difference and interact with professionals from different areas (NATALE et al., 1995).

When strategically rethinking the work flow, in relation to business key-processes, companies have more and more able of conceiving and environment that enables the team work, using their employees' abilities and knowledge (BARKER; NEAILEY, 1999). In order to innovation to take place, it is necessary that the organization breaks with traditional established routines. Mintzberg (1983) classifies this type of organization as adhocratic. Adhocracy is the structure that best relates to innovation, since of all the structural configurations, it is the one that least gets influenced by the classic principles of management. It represents flowed structures and it is associated with the horizontality of the power of decision. This structure is typical of project and innovation teams, in which the degree of specialty and knowledge are high and have the decision process as one of the main advantages of this kind of structure (MINTZBERG, 1983).

The work flow is redefined to provide the professionals with more influence over the making of decisions. Interfunctionality and self-management of work teams are typical methods to increase the power employees have of doing things on their own initiative and proposing solutions for change and improvement (BARKER; NEAILEY, 1999).

In a wider conception, Santos (2000) presents the main characteristics of the network based on teams:

- Clear goals and purposes and creation of the team's identity;
- Involvement in the organizational change processes;
- Information sharing, based on the mutual reliability among members of a team and among teams as support for taking decisions;
- Combination of specialized professionals and with complementary knowledge;
- Commitment with purposes, goals and approach of common tasks;
- Mutual responsibility in defining goals and in the team performance;

- Continuous expansion of the individual and group competences.

It is through this horizontalization (reduction of the differences and power relations) that it can be acquired a higher involvement and increase in the quality of life at work at the same time the company's performance is improved. It is about a more egalitarian and cooperative work approach that eliminates the differences of status and power. The perspective of self-management of the innovative work teams proposes a radical change from the hierarchical supervision to a cooperative type of employee management (SANTOS, 2000).

9 KNOWLEDGE TYPOLOGIES

The role played by knowledge considering the strategy formation was thrown in the spotlight in the 90's. This new environment requires the incorporation of knowledge management as a success differential. It is in the knowledge present in the individuals that we can find the main source of competitive advantage.

Knowledge was formerly defined by Nonaka and Takeuchi (1995) as "justified true belief", a tool that may increase the effective action capability of the organizations. The knowledge pertinent to the business organizations is comprised of facts, opinions, ideas, theories, principles, models, values, experience, information, context and intuitions (MITRI, 2003).

Nonaka and Takeuchi (1995), Davenport and Prusak (1998), as well as Leonard-Barton and Sensiper (1998), contemplate knowledge through 2 dimensions: tacit and explicit. The tacit knowledge is based on experience, thoughts and feelings within a specific context, and consists of technical and cognitive elements. The cognitive component refers to the individual mental models, maps and beliefs, paradigms and points of view. The technical component refers to the abilities and to the knowhow. Due to the importance of the cognitive abilities, experience, ideas, and hardly noticed techniques, the tacit knowledge is an indispensable resource to innovation (POLITIS, 2003).

On the other hand, the explicit knowledge is articulated, codified and communicable through symbols, numbers and formulas; or tangible in the form of equipment, models and documents. This type of knowledge can be found in the format of rules, routines, norms and operational procedures (POPADIUK; CHOO, 2006).

Popadiuk and Choo (2006) discuss a third type of knowledge: the cultural one, in other words, beliefs that are used to describe and explain the reality, as well as conventions and expectations used to provide value and meaning to new information. This is about non-codified knowledge, however, it is spread through group relations. Although Nonaka and Takeuchi (1995) do not discuss the knowledge characterized as cultural, the authors elaborate a distinction between group and individual knowledge, as Leonard-Barton and Sensiper do (1998).

Individual knowledge is created according to one's opinions, attitudes and factors that influence one's personal formation. Group or social knowledge resides in collective actions of a group (NONAKA; TAKEUCHI, 1995). This one involves norms that guide the group communication and coordination (LEONARD-BARTON; SENSIPER, 1998). Considering both views, it is noticed that the group knowledge is directly related to cultural knowledge.

Yakhlef (2005) contemplates knowledge as cumulative, built over and from knowledge created before. Different from other organizational activities, the creation of knowledge does not need to be located in a certain place and time, and does not need to be monitored. Creative ideas and insights are not necessarily created during work. In contrast with physical resource, ideas are transferred and at the same time are not lost, the individual share them and continue having them.

The knowledge typologies presented are used as a way of giving evidence of the following relations proposed in the discussion.

9.1 Knowledge typologies and the relations between cognitive property, individual competences and innovative teams

In order to detect business opportunities and create innovative ideas, it is necessary to have intuition. Intuition requires understanding, and understanding requires a level of knowledge (FILION, 1991). Based on this premise and on the studies highlighted in this review, it is possible to catch a glimpse of the relations of the knowledge typologies with the concepts of cognitive properties, individual competences and the work of innovative teams.

Therefore, this study associates:

- Individual level: Cognitive property associated with tacit knowledge;
- Individual level: Individual competences associated with the individual and cumulative knowledge;
- Group level: Innovative teams associated with the explicit, cultural and collective knowledge.

Table 1 synthesizes the relations between cognitive properties, individual competences and innovative teams under the emphasis on knowledge typologies.

Table 1 – Evidence of the relations on the individual and group levels

Relations	Knowledge typologies	Characteristics
Cognitive property and tacit knowledge	Not codified, based on thoughts and feelings.	Inherent in the individual, cognitive disposition and beliefs
Innovative teams and explicit knowledge	Articulated, codified and communicable, easily transferred.	Knowledge shared through structured information
Individual competences and individual knowledge	Associated with opinions, attitudes and the individual's experience.	Collection of information, concepts, ideas, and personal academic degree
Innovative teams and group knowledge	Resides in collective actions of a group.	Knowledge exchange through documents, meetings and computer communication
Innovative teams and cultural knowledge	Beliefs that are used to describe and explain the reality.	Clear goals and purposes and creation of the team's identity
Individual competences and cumulative knowledge	Built on and from knowledge created before.	Knowledge appropriacy and continuous expansion of individual competences

Source: Authors' elaboration

Thus, it is believed that the innovative ideas (essence of the entrepreneurial process) are created by the capture of opportunities, which consists in the individual's influence, his group relations and the ways of acquiring knowledge through facts, opinions, theories, principles, models, values, experience, information, context and intuitions.

10 FINAL CONSIDERATIONS

The study aimed at contributing with evidences that the best performance is founded on knowledge, competence and people's personality, the only ones capable of linking creativity in the formulation of innovative ideas.

Different nomenclature is still used by the authors in the discussion of the entrepreneurship, and frequently confusion is found in the definition of concepts of competence, strategic aptitudes, abilities and knowledge.

It was noticed that the individual is potentiated in the environment at which he has competence and that it has to be permanently updated in function of the demands of the environment in which the company acts.

It was aimed to focus the value of knowledge within the entrepreneurial process as the definer of the route of this research, more specifically in the capture of opportunities. This proposal is justifiable since the individual should:

- Learn with the experience and apply the acquired knowledge;
- Treat complex situations and solve problems when there is important information missing, determining what it is important;
- Have the capability to think, react quickly and correctly to new situations;
- Comprehend process and manipulate information to change it into knowledge and be imaginative and creative.

In order to a company becomes competitive, it is necessary to develop not only organizational competences, but also human competences. Those provide relationships, create and implement new technologies, product and services. Considering that the current scenario is one of increasing specialization of great competitiveness and scarce resources to be optimized, the team work shows up as one of the possible alternatives to take the organization to desired performance levels.

Within an organization, the individual develops himself to become a better employee, and at the same time he is developing to become a better person, in relation to his personal satisfaction. The individual executes different functions in the several spheres that make his social life and, thus, he plays different roles. When this individual acquires greater capability and personal development, besides benefiting the company, he also benefits the society he lives in. If on one hand the term competence aggregates economic value to the organization, on the other hand it also aggregates social value to people, for while they are developing essential competences to the success of the organization, they are also investing in themselves.

Faced with the phenomenon complexity, future studies could concentrate in analyzing judiciously (methodological horizon), through the individual and group levels, processes through which knowledge is created, spread and materialized in the form of innovation. Moreover, it is suggested applied research that helps entrepreneurial organizations to make use of the knowledge sought and turn it into products and services.

A ESSÊNCIA DO PROCESSO EMPREENDEDOR E A COMPLEXIDADE DO INDIVÍDUO: PERCEPÇÕES SOB A ÓTICA DAS TIPOLOGIAS DE CONHECIMENTO

Resumo

O cenário descrito pelas recentes concepções teóricas sobre competitividade empresarial reflete um momento de transição do paradigma industrial para o paradigma do conhecimento. Surge uma grande expectativa acerca dos indivíduos responsáveis por definir contextos, promover a inovação e identificar oportunidades. No intuito de abordar um conceito mais amplo do processo empreendedor e o entendimento desta atividade nos níveis individual e coletivo, o artigo promove uma discussão sobre a sinergia entre competência e as características inerentes ao indivíduo, bem como a sua inserção no trabalho de equipes, baseado nas dimensões das tipologias de conhecimento.

Palavras-chave: Processo Empreendedor. Propriedade Cognitiva. Competências Individuais. Equipes de Inovação. Tipologias de Conhecimento.

Artigo recebido em 23/06/2011 e aceito para publicação em 25/11/2011

REFERENCES

BARKER, M.; NEAILEY, K. From individual learning to project team learning and innovation: a structured approach. **Journal of Workplace Learning**, v. 11, n. 2, p. 60-67, 1999.

BARON, R. A. Cognitive mechanisms in entrepreneurship: why and when entrepreneurs think differently than other. **Journal of Business Venturing**, v. 13, n. 4, p. 275-294, 1998.

BEATTY, R. W.; SCHNEIER, C. E. New HR roles to impact organizational performance: from "partners" to "players". **Human Resource Management**, v. 36, n. 1, p. 29-37, 1997.

BECK, J. S. **Cognitive therapy for challenging problems: what to do when the basics don't work**. New York: Guilford, 2005.

BRUYAT, C.; PIERRE-ANDRE, J. Defining the field of research in entrepreneurship. **Journal of Business Venturing**, v. 16, n. 2, p. 165-180, 2001.

BYGRAVE, W. D.; HOFER, C. W. Theorizing about entrepreneurship. **Theory and Practice**, v. 16, n. 2, p. 13-22, 1991.

DARROCH, J.; MCNAUGTON, R. Examining the link between knowledge management practices and types of innovation. **Journal of Intellectual Capital**, v. 3, n. 3, p. 210-22, 2002.

DAVENPORT, T. H.; PRUSAK, L. **Working knowledge: how organizations manage what they know**. Boston: Harvard Business School Press, 1998.

DAVIS, K.; NEWSTROM, J. W. **Human Behavior at Work: organizational behavior**. New York: McGraw-Hill, NY, 1985.

DRUCKER, P. The discipline of innovation. **Harvard Business Review**, v. 76, n. 6, p. 149, nov./dez. 1998.

FILION, L. J. **Vision et relations**: clefs du succès de l'entrepreneur. Montréal: Éditions de l'entrepreneur, 1991.

GARTNER, W. B. A conceptual framework for describing the phenomenon of new venture creation. **Academy of Management Review**, p. 697-706, out. 1985.

GUÉRIN, F. et al. **Comprendre le Travail pour le Transformer**: la Pratique de l'Ergonomie. Paris: Éditions ANACT, 1991.

HISRICH, R. D.; PETERS, M. P. **Entrepreneurship**. New York: McGraw Hill, NY, 2001.

LeBORTEF, G. **De la compétence**. France: Editions d'Organisations, 1995.

LEONARD-BARTON, D.; SENSIPER, S. The Role of tacit knowledge in group innovation. **California Management Review**, v. 40, n. 3, p. 112-127, 1998.

LEUNG, S.; CHAN, J.; LEE, W. Team leaders, manufacturing strategies and competitive performances. **Team Performance Management**, v. 9, n. 7/8, p. 190-198, 2003.

MARTINEZ, M. A.; ALDRICH, H. E. Networking strategies for entrepreneurs: balancing cohesion and diversity. **International Journal of Entrepreneurial Behaviour & Research**, v. 17, n. 1, p. 7-38, 2011.

MINTZBERG, H. **Structure in Fives**: designing effective organizations. Prentice-Hall: Englewood Cliffs, NJ, 1983.

MITRI, M. A knowledge management framework for curriculum assessment. **Journal of Computer Information Systems**, v. 43, n. 4, p. 15-24, 2003.

NATALE, S.; LIBERTELLA, A.; ROTHSCHILD, B. Team performance management. **Team Performance Management**, v. 1, n. 2, p. 6-13, 1995.

NONAKA, I.; TAKEUCHI, H. **The knowledge creating company**: how the Japanese companies create the dynamics of innovation. New York: Oxford University Press, 1995.

NORONHA, D. P.; FERREIRA, S. M. S. P. Revisões de literatura. In: CAMPELLO, B. S.; CENDÓN, B. V.; KREMER, J. M. (Org.). **Fontes de informação para pesquisadores e profissionais**. Belo Horizonte: UFMG, 2000.

POLITIS, J. The connection between trust and knowledge management: what are its implications for team performance. **Journal of Knowledge Management**, v. 7, n. 5, p. 55-66, 2003.

POPADIUK, S.; CHOO, C. W. Innovation and knowledge creation: how are these concepts related? **International Journal of Information Management**, v. 26, p. 301-311, 2006.

SANTOS, F. C. A. Integration of human resource management and competitive priorities of manufacturing strategy. **International Journal of Operations and Production Management**, v. 20, n. 5, p. 610-628, 2000.

SHANE, S.; VENKATRAMAN, S. The promise of entrepreneurship as a field of research. **Academy of management review**, v. 1, n. 25, p. 217-226, 2000.

SILVA, S. L. Knowledge management: a critical review based on the knowledge creation approach. **Ciência da Informação**, Brasília, v.31, n.2, p.142-151, 2002.

STEVENSON, H.; JARILLO, J. C. A Paradigm of Entrepreneurship: Entrepreneurial Management. **Strategic Management Journal**, v.11, p. 17-27, 1990.

STEVENSON, H.; GUMPERT, D. The heart of entrepreneurship. **Harvard Business Review**, v. 63, n. 2, p. 85-94, 1985.

TIMMONS, J. A. **New venture creation**. Boston: Irwin McGraw-Hill, 4. ed., 1994.

TREMBLAY, M.; SIRE, B. **Rémunérer les compétences plutôt que l'activité?** Paris: Revue Française de Gestion, nov-dez, 1999.

YAKHLEF, A. Immobility of tacit knowledge and the displacement of the locus of innovation. **European Journal of Innovation Management**, v. 8, n. 2, p. 227-239, 2005.

ZARIFIAN, P. **Le Modèle de la Compétence**: trajectoire historique, enjeux actuels et propositions. Paris : Éditions Liaisons, 2001.