
ORGANIZATIONAL SOCIALIZATION AS A SUPPORT TO THE CONSTRUCTION OF KNOWLEDGE AND INNOVATION PROCESSES

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Abstract

This work aims to discuss the factors involved in the organizational socialization that contribute to the processes of creating knowledge and innovation at four food enterprises in the city of Marília-SP. The need of this study is clear from the point of view of the organizations' human dimension, because it is considered that the inset of people into their labor, use and acceptance of the available technological tools, consciousness of cooperation and into other factors that build the environment, contribute either to execution of the activities or the construction of knowledge. Therefore, the psychological and behavioral aspects can make easier or hamper the innovation process, although it has being essential to the survival of the organizations, regarding the levels of competitiveness dictated by the current market. The research has a qualitative approach using the multiple study case in four food enterprises from the city of Marília/SP, each one of them of a size: micro, small, medium and large enterprise. The people of the research were the employees and the owners of the enterprises, who answered a semi-structured questionnaire, containing open and close questions, at their work place. The analysis of the results showed that in the innovation processes fulfilled by the enterprises there were difficulties in different natures, including those caused by low qualification of the work force when facing the new patterns of doing their activities. However, through the development of the socialization practices focused on the innovation that occurred, those difficulties were overcome and that allowed them to accomplish new procedures and to reach the expected results.

Key words: *Organizational Socialization; Knowledge Management; Innovation Processes.*

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1. Introduction

The innovation is a fundamental movement to the modern organizations, seeing that it maintains a narrow relation to important elements of generation of knowledge and cooperation processes to compete in the market. Thus, the development of new processes and products is considered an essential instrument to the companies' competitiveness, whose benefits can become greater financial return rates and wider participation in the market.

It is noticed that a lot of researches evince the statistic measurement to make a model of management and practices. Other approaches prefer to feature the presence of people, because it is assumed the knowledge is created by individuals, that is, an organization can not create knowledge by itself without the individuals that are part of it. Ergo, it is important to support activities which can provide the creation of knowledge, or to provide the appropriate contexts for those activities that will be developed into organizational environments. The only alternative to take advantage of the knowledge and convert it into benefit to the rest of the organization, is the creation of appropriate conditions to manage it, and the adequate context through the socialization process, in order to become accessible and shared for all the organization.

Thus, the management of knowledge, model of indelible management of the organizational practice, shows a direct bond with innovation, because it assumes as necessary the presence of information flows and the construction of knowledge. In this way, the knowledge management precedes the innovation. However, the models of management need to comprehend different dimensions: economical, structural, informational and human.

The involvement of the individuals is fulcrum to product knowledge that is responsible for the innovation. In this way, the socialization is a socio-cultural and management process that aims to insert the individuals into unknown contexts, models, tools and technologies, that is, making the structure, policies, norms, values and other elements that are present in the organizations, intelligible and internal.

Talking about inserting people into new contexts of the organization, in its socialization it is included either formal training, focused on the specialized work, or informal explanations, linked to the acquaintance with the co-workers.

So, the general aim of this work is to discuss the factors that embrace the organizational socialization which contribute to the process of creating knowledge and innovation at four food enterprises in the city of Marília/SP. The need of this study is clear from the point of view of the human dimension of the organizations, because it is considered that the inset of people into their labor, use and acceptance of the available technological tools, consciousness of cooperation and into other factors that build the environment, contribute either to execution of the activities or to the construction of knowledge. Therefore, the psychological and behavioral aspects can make easier or hamper the innovation process.

The research has a qualitative approach using the multiple study case at four food enterprises in the city of Marília/SP, each one is a size: micro, small, medium and large enterprises. The people of the research were the employees and the owners of the enterprises,

who answered a semi-structured questionnaire, containing open and close questions, at their work place.

2. The knowledge into the organizations

The evolution of the human being is linked to its characteristic of living in groups, that is, an individual's learning is shared with the other members of the group. The transmission of information became easier by the creation of a system of symbols and language, and it is through that system that the experiences are registered and past to the others, in many dimensions like time and space. The creation of this symbol system allowed the ordination and the preview of phenomena which occur in the life of all individuals.

But, by transmitting what one has learned, each individual adds something about his own experience. That happens due to the ability of thinking, which allows a reflection on the meaning of things that are part of one's life. We can call this set of reflections: knowledge.

Valentim (2008) defines knowledge as follows:

Knowledge is the product of a cognitive subject which, from the internalization of different information and perceptions, makes or remakes its new knowledge. I believe that a knowledge built by an individual feeds the construction of collective knowledge, and, on the other hand, the collective knowledge feeds the construction of the individual knowledge in organizational environment (VALENTIM, 2008, p.19).

In this thought, knowledge as a reflection on an experience, Davenport; Prusak (1998) present the following definition for knowledge:

Knowledge is a mix of condensed experience, values, contextual information and experimented insight, which provides a structure to evaluation and incorporation of new experiences and information. It comes from and is applied in the mind of the connoisseurs. At the organizations it is used to being in either documents and repositories or routines, processes, practices and organizational norms (DAVENPORT; PRUSAK, 1998, p.6).

One can notice that either Valentim (2008) or Davenport; Prusak (1998) agree to understand knowledge as a result of an individual's internal process, who processes reality from his own experiences and transmits the results to the ones who live with him, in an infinite whorl.

Takeuchi and Nonaka (2008, p.22), think there are two kinds of knowledge: the explicit one and the tacit one.

Explicit knowledge can be explained as follows:

Explicit knowledge can be expressed by words, numbers or sounds, and shared by data, scientific formulas, visual resources, audio tapes, products specifications or manuals. The explicit knowledge is transmitted rapidly, formal and systematically to people (TAKEUCHI; NONAKA, 2008, p. 19).

Tacit knowledge can be defined as follows:

The tacit knowledge, on the other hand, is not easily explained or visible. On the contrary, it is highly personal and hard to make it

formal, thus communication and sharing become difficult. The feelings and the subjective guesses are a rubric of the tacit knowledge. It has its roots in the actions and body experience of the individual, ideals, values or emotions that a person embodies (TAKEUCHI; NONAKA, 2008, p. 19).

Nonaka and Takeuchi (2008, p.57) made two dimensions of knowledge:

- a) Ontological Dimension – an organization can not create knowledge without individuals, because it is created only by people. The generation of organizational knowledge may only be understood as a process that widens the knowledge created by people, making it part of the organization's knowledge web.
- b) Epistemological Dimension – based on the established distinction by Polanyi (1966, *apud* NONAKA; TAKEUCHI, 2008, p. 58) between tacit and explicit knowledge. The explicit knowledge is transmitted in formal and systematical language and can be easily transmitted by the individuals. The tacit knowledge is personal, specific to the context, it is hard to be made and transmitted because it involves intangible factors.

According to Nonaka and Takeuchi (2008, p. 59), those two kind of knowledge complements themselves and the interaction between them both generates the dynamics of creation.

Still according to those authors, the creation of knowledge happens in three levels: individual, group and organization. Both ways of interaction – between tacit knowledge and explicit one and between the organization and the individual – will lead to four main processes of conversion of knowledge, which, together, form the creation of knowledge: 1. Socialization: from tacit to tacit; 2. Externalization: from tacit to explicit; 3. Combination: from explicit to explicit; 4. Internalization: from explicit to tacit.

Pérez-Montoro Gutiérrez (2008, p.54) proposes a distinction of six different kinds of knowledge, each one has a special nature and can be arranged in three pairs:

- A) Tacit knowledge / Explicit knowledge
- B) Individual knowledge / Organizational Knowledge
- C) Inner knowledge / External knowledge

For that author, initially, the same knowledge can be simultaneously classified as tacit, individual and inner, and it doesn't have a process of mutual exclusion between the three pairs.

By explaining the relation between the first pair (tacit knowledge / explicit knowledge), Pérez-Montoro Gutiérrez (2008, p.54 - 59) make use of the concept created by Nonaka and Takeuchi (2008).

Pérez-Montoro Gutiérrez (2008) presents the following definitions to explain the differences between individual knowledge and organizational or corporate knowledge:

As Individual knowledge we understand all the knowledge a person who make part of an organization has, in his mind. Therefore, the individual knowledge of a person is formed by the synthesis of all his knowledge, tacit an explicit ones. One's individual abilities, contacts and personal relations or one's technical knowledge can be identified (PÉREZ-MONTORO GUTIÉRREZ, 2008, p.60). (Our griffin)

The *organizational or corporate knowledge*, on the contrary, is the knowledge attributed to an organization, or that it has. That kind of

knowledge is used to being represented in some kind of document. The data base earned by an organization, or an intellectual property and the patent that it develops are two clear examples of this kind of knowledge (PÉREZ-MONTORO GUTIÉRREZ, 2008, p. 60). (Our griffin)

The author adds that, at a strict sense, the organizational or corporate knowledge doesn't exist indeed. If the knowledge is a special kind of mental state that a person has, the organizations, as they don't have mental states (by the fact they don't have a material brain which can maintain them, literally), they can't possess any kind of knowledge neither. Anyway, in a wide sense, it is said about organizational or corporate knowledge to make reference to the information which corresponds to some concrete knowledge (that someone possesses), and whose representation is owned by the organization.

Despite that conceptual tension, in the subject Organization's Theory we work in order to attempt a definition to a concept of collective intelligence or organizational intelligence. The main focus of the ones who defend those ideas is that the organizations are mental entities that are able to think, that they are information processing systems. This thesis is based on the fact that it can be defined strong resemblance between the organization of the brain's neurons and the organization of the activities inside the organizations. This similarity let us defend that an organization, as well as a brain, can be realized as a (neural) web. In this way, the brain presents a structure formed by neurons which respond to stimulus, activating or inhibiting them. That is what configures the behavior of the whole brain. Equally, in the organizations there is the same structural model: it is made of units (individuals); this individuals respond internally, activating themselves or inhibiting themselves, and from their actions comes the global actions attributed to the whole web of individuals (DAVENPORT; PRUSAK, 1998, p. Xiii).

The authors add that:

An organization can be conceived as a set of people who are organized to produce something, like products, services or a combination of both. Its capacity to produce depends on what it knows and on the submitted knowledge in the routines and production equipment. The material active of an enterprise will only have real value if the people know what to do with it. If "knowing-how-to-do" defines what an enterprise is, so knowledge is the enterprise in an important sense. Understanding the role of the knowledge in the organization can help to answer why some enterprises are systematically successful (DAVENPORT; PRUSAK, 1998, p. Xiii).

About those affirmations, Pérez-Montoro Gutiérrez (2008, p. 61) makes a question: When is it possible to consider that the action of someone who is part of the organization is not an individual action anymore and becomes part of a group action from the same organization?

According to the author, in this investigation line, an individual action must be considered as a part of the organization when the following conditions are fulfilled:

1 – the person from the community in discussion, the protagonist of the action must act like he is part of a group, like there were internal social forces and like there were a central brain which coordinates the actions of the group; 2 – each person of the community can not act isolated; they must take into account the others' actions and the relations among them; 3 –

There must have a real interrelation among all the actions of the group; 4 – Considering that the effects of the interrelated activities may vary due to the style and strength that they are linked together (PÉREZ-MONTORO GUTIÉRREZ, 2008, p. 62).

So, according to Pérez-Montoro Gutiérrez (2008), inside that conceptual model, in the interior of an organization, as well as in the brain, knowledge is not strictly located at the unities which form that web (at the members of the organization), but, at the connections that are established between them.

From one point of view, the activity of each unity is regulated by the activities of the others around it. But then, the superposition of individual thoughts, in many occasions redundant, induct them to balance and restructure themselves (principle of consistence between knowledge) and end up offering as a final result a better quality knowledge which is associated to a global structure (the organization).

The improvement of this organizational knowledge allows to enrich the adaptation strategies in the organization and to induce an increase of the capacity of comprehension when interrelating more activities and when articulating connected activities in more levels. Regarding the last pair of kinds of knowledge, Pérez-Montoro Gutiérrez (2008, p. 62) defines them as follows:

The internal knowledge is the one we can consider critical to the operation of the organization. In other words: the knowledge that without it, it would be impossible for the organization to operate and reach its goals. [...] The external knowledge, on the contrary, is a knowledge that the organization uses to relate with other organizations (PÉREZ-MONTORO GUTIÉRREZ, 2008, p. 62-63).

It is important to notice that the internal and external concepts are not two sets of different knowledge, because there is the possibility to identify some knowledge that is simultaneously considered internal and external. An example of this particular case is when an organization produces techniques or technologies by itself and afterwards registers them, for instance, it becomes a patent. As a result, the enterprise can commercialize the innovation.

From this point, it is clear that the knowledge construction depends on an environment where the people are either prepared to transform the kinds of knowledge, or to effectively participate in the sharing process. In this case, the creation and the dissemination of people's and group's knowledge return to take space regarding the insufficiencies and partial consolidated promises linked to the information and communication technologies.

Thus, the social-cultural conditions of production and dissemination of knowledge become integrant of the theoretical and practical discussions. They are in the management literature, because they represent considerable part of the difficulties to obtain positive and adjusted behaviors regarding making knowledge part of the processes and a resource to make decisions. The construction and adjustment of the individuals' knowledge who act in informational environments are fundamental to actualize several processes which are dependent either on the internalization or the externalization of knowledge, for instance, the innovation.

3. Innovation: conceptual basis

It is thought that the proactivity and the achievement of the current organization's goals depend on three factors: knowledge, innovative capacity and people that are ready to act in the process of construction and use of knowledge toward innovation. Among the different

strategies adopted by the organizations, the innovation has been presented as essential to competitiveness. In Brazil, that need became more evident with the commercial opening in 1980, and, mainly, during the 90's (BAHIA, 2009).

By seeing this change in the country's economic structure, Di Sergio and Vasconcellos (2009) point that only the macroeconomic conditions are not enough to create values to the enterprises' business: it is necessary that the Brazilian enterprises have increasing gains in productivity, which come from technological innovations. So, they would be prepared to compete successfully in the global market.

Therefore, the use of technological resources is fundamental to face the challenges of the national and international competition, specially regarding the new patterns of consumption, deriving from the change in the life style and the consumer's preferences, which have been caused by the intensification of the globalization process.

Furthermore, the information must be equally considered as a peremptory resource to the process of innovation, since it is a fundamental resource to the construction of the organizational knowledge. In general, the innovation is associated to the use of informational and communicational technologies, and it is related to information.

From the perspective of Schumpeter (1984, 1988), and that is the most up-to-date one about that subject, the innovative process is made of three sequential phases, which are the invention, the innovation and the diffusion. The invention is the creation of new knowledge, whose application can be whether economically viable or not. The invention is different from the innovation because the second one is basically an economical phenomenon whereon the commerce of a new product happens or a new process is deployed.

According to OCDE (2004), innovation can be divided into two categories: technological innovation of a product, which can be subdivided in new products (a product whose technological characteristics or intended uses differ significantly from the former produced products) and improved products (it is an existing product but whose performance was significantly improved or updated) and technological innovation of process (it happens when it is adopted new or significantly improved technological methods, including methods of presenting the product).

Rogers (1995) defines innovation as an idea or an object that is noticed as new to an individual. The process of developing innovation is made of all decisions, activities, and its respective impacts, which happens by recognizing a need or problem through research, development and commercialization of an innovation, or yet, through the diffusion or adoption of the innovation by the users.

Thus, the generation or the adoption of an innovation requires not only a technical process to get to a positive result, but also a set of competencies and abilities, as well as internal organizational routines that provide the competitive basis at a certain market or different markets.

3.1 Learning processes and technological adoption processes for innovation

The technological innovations represent the result of a wide range of learning processes. To Fleury (1990), technology can be defined as a package of organized information of different kinds (scientific, empirical), originating from many resources (scientific discovery, patents, books, manuals) which can be obtained from different methods (research, development, copy), and used in the production of goods or services. Thus,

technological learning is a process from which the enterprises create and develop the capacity to product those technological packages.

According to Rosal and Figueiredo (2006), the concept of technological learning is defined in two senses, in general. The first one refers to the trajectory of the accumulation of technological capacity, which to Bell and Pavitt (1995) is defined as the necessary resources to generate and manage technological improvements in the production processes, in the products and in the operational activities. The second one comprehends the various ways that the technical knowledge is acquired by people and transferred to the enterprise, that is, the way that the tacit knowledge becomes internal technical capacities of the enterprises.

To Coriat and Dosi (2002), the processes that the enterprises use to purchase, build and modify its capacities are called organizational learning, and they can occur in two levels: through the exchange of knowledge and experiences with the members of an organization or through the introduction of new members who are knowledge providers the enterprise haven't had before.

Garvin (1993) propose five axis to the organizational learning: (i) systematic resolution of problems: it privileges the use of scientific methods to diagnose problems instead of the traditional felling; (ii) experimental: it consists in searching and experimenting new knowledge, using scientific methods; (iii) learning from a past experience: it is based on the systematic review of the past experiences, considering the success and the failure; (iv) learning with the external environment: it is based on the use of external experiences, getting a new perspective by analyzing the experiences other organizations have lived; (v) knowledge diffusion: it comes from the transference of knowledge to the entire organization, by using educational techniques, training, standardization to diffuse this knowledge.

The human capital is considered a factor of expressive importance in the processes of innovation, which emphasizes the importance of formal education and training in external institutions. Although for many times the enterprises are essentially seen as users, and not as a creator of human capital, some more specific abilities and knowledge are only gotten inside the enterprises, by investments in learning-by-doing¹ and training (BELL; PAVITT, 1993).

Bell (1984) says that the technological learning at an organization depends on two variables: mechanisms that represent a lower production cost of the product and, allocation of assets as systematic mechanism to return information, training and people recruitment. Thus, according to the author's conception, there are six different kinds of information or knowledge that form the learning, as follows: (i) learning by operating: it is a combination of stimulus to make a change and improvement of the process understanding; (ii) learning from changing: it is related to the learning that comes from many types of technical changing, and it is not related to the learning which is generating when making the operations; (iii) system performance feedback: it is about applying institutionalized mechanisms to create, register, review and interpret the experience; (iv) learning through training: it consists of formal trainings that are important as technological capacity resources; (v) learning by hiring: it consists of hiring people who give life to the abilities and knowledge that are already available in the company; (vi) learning by searching: it depends on the organization's active effort to use assets to fulfill the search for technologies that are internal, that is, that are formalized in the departments or teams.

¹ It consists in way of learning that occurs during the process of production and materializes itself in the development of abilities, reduction of costs with work force and decrease of problems regarding the products quality (FORAY. LUDVALL, 1996).

In this context, we can observe that the learning processes don't limit themselves to the activities of Formal Research and Development of the enterprises only, but they also approach the company's capacity to establish mechanisms of interaction and socialization, and with them it sustains the activities that create and provide essential knowledge to innovation.

3.2 Actors and learning in the innovative process

The current paragon of international competitiveness has demanded the enterprises to develop the technological training, innovation and flexibility at an increasingly intensity. Consequently, the countless advances in the field of technology have roused significant effects in the way people participate on the construction of organizational knowledge. On one hand, the technologies make easier and agile the information flow; on the other hand, it makes the informational behavior of the people dependent of the presence of technologies. This way, the production of knowledge which is focused on the innovation, may reflect a more creative and visible process, even if it is planned.

As innovation involves a fundamental element of uncertainty, which is not explained simply by the lack of information about new events happening, but due to the existence of technical-economic problems whose solutions are unknown, the psychological and behavioral aspects which involve fears, hopes, desires and frustrations regarding to the adoption and use of technologies make evident the need of identifying the disposal of these professionals in developing and using technologies (GRAEML, 2003). In a certain way, the agents involved in the innovative process may have some kind of perception concerning the technical and economic opportunities of something unexplored, seeing that the technological innovation process involves a series of possibilities.

Therefore, the psychological and behavioral aspects, which involve uncertainty, hopes, desires and frustrations related to the adoption and use of technology by the professionals that play the decisive role at the enterprise, represent one of the factors that can make easier or hamper the innovation process. If an enterprise has a favorable to changing organizational culture, norms and regulations that stimulate the innovation and an organizational climate that is able to deal with such processes, but it has people who don't have the entrepreneur and pro-active spirit, the innovation may be strained. At this point, it is essential to notice the need of establishing the process of organizational socialization in order to let the people who are dissonant from the organizational culture conform their behavior to the needs of the organization, which are, a regular innovative process that embraces every area and levels of the organization.

In this way, it becomes clear the need of applying instruments that use variables which are able to identify the disposal of those professionals in developing, adopting and using technologies and the main factors which are involved in this process (GRAEML, 2003).

Parasuraman (2000) studied the behavioral variables, and proposed the use of an instrument of measurement called Technology Readiness Index (TRI), whose objective was to measure the people's propensity to adopt technological innovations. With that instrument, it would be possible to identify the action of mental conductors and inhibitors, that collectively, determine the decision-makers' predisposal towards the factors that lead to the adoption of technological innovations.

According to Parasuraman and Colby (2001), the readiness to technology is made of four dimensions: (i) optimism: it represents the positive positions concerning the innovation;

(ii) innovativeness: it indicates a tendency of the enterprise to be a pioneer in the adoption of technological innovation; (iii) unease: it shows people will notice the lack of controlling the technological innovation and the feeling of being suppressed by it; (iv) insecurity: it demonstrates the suspicion of the technological innovation and skepticism about the abilities to use it in a proper way. From those four dimensions, optimism and innovativeness are the conductors to the readiness to technology, that is, they indicate factors that motivate the enterprises to adopt the technological innovations. The inhibitors are the dimensions of unease and insecurity, representing factors which postpone or block that adoption.

The authors show the readiness to technology varies from company to company once the path that leads to adoption and its implications depends on the degree and nature of the readiness of the enterprises and it is multifaceted, because different kinds of beliefs and feelings create the general readiness. Nevertheless, it must be considered that the available socio-cultural conditions in the enterprise may create either conductors or inhibitors, once some cultural elements, such as negative or ambiguous values, could stimulate behaviors of aversion and fear, while values that are destined to recognize the technological tools as essential to the organization's processes, may be decisive to the construction of an environment which enable the adoption of technologies, specially those toward the communication and information.

To Rogers (1995), the steps of the decision process to adoption of a new technological innovation involve knowledge, persuasion, decision, implementation and confirmation. The knowledge step starts when the enterprise receives stimulus, awaking it to a technological innovation. At the persuasion step, there is the creation of favorable or unfavorable attitudes towards the technological innovation related to the noticed risks. The third step (the decision one) is about the choice of adopting or rejecting the technological innovation. The next stage, implementation, refers to the effective use of innovation, while the fifth stage concerns the confirmation or reinforcement of the decision about the adoption already chosen. In general, the decision process regards the searching activities and information processing, through that the enterprise gets the information to decrease the uncertainty about the innovation.

We can observe that, according to Roger's model (1995), the adoption of technological innovation concerns a decision process on which prevails the cognitive elements of the company's behavior to explain that. However it is known that the decision process of the adopting company comprehend different psychological answers and those include either cognitive or emotional aspects.

The creation and propagation of cultural elements that are able to ease the adoption of innovations and technologies is a task fulfilled by, for instance, the socialization. Various strategies can be incorporated to the enterprise's practices, whose intention is to promote the culture of innovation. In order to do that, it is engendered strategies to socialize the individuals, convincing them to behave in favor of the adoption as well as of the creation of knowledge regarding the innovation process.

4. Organizational socialization process

A latent difficulty in the organizational theories is to calculate behavioral and cultural aspects with structural, technological and economical variables. The human dimension has been an interest source to the organizational environment since the twenties, when the first studies about the impact factors in the human behavior started to be investigated. At first, the approaches were limited to notice the behavioral answer of the individuals regarding the

alteration of environmental factors. Hereupon between the 30's and the 40's there was an advance concerning to the leadership role, knowing that in the next two decades there was an evolution to a situation that didn't include isolated individuals, but the interaction between one another, changing to a more complex approach about the process. Thus, beyond a psychological perspective, the anthropologic and the social ones were incorporated to the frame of theoretical contributions of the human management in the organizations.

Regarding the human dimension management, it is possible to find theoretical elements in it, which come from the former areas, and most of them have an interaction with important management models in a second moment only. One of them is the socialization, which is a present expression in the lines of management, whose practical meaning is not well explored, despite being present in the enterprises' routine.

First, the socialization was a term used in discussions about knowledge sociology, particularly by Berger and Luckman (2004), who pointed the relevance of the process regarding inserting people in social relations, constructed in a shared way, thus they divided that into two stages: the primary stage, when the individual does not have knowledge about the environment the he/she is into ; and the secondary stage, when the person is inserted in social contexts, but he/she already has pre-established knowledge about many situations and subjects. For instance, when a child is born it receives intense primary socialization, from which it gets cultural, linguistic and behavioral knowledge that concerns to family and more restrict contexts which it has more direct contact.

At the secondary socialization, for instance, there is the insertion of people who has lots of knowledge which was formed into the employees' frames from public or private institutions, and each one uses different insertion strategies that are proper to the organizational goal².

The socialization is seen in two manners at the literature. The first one concerns the inset of people in the organization, noticing it little active at the process. While at the second one, the socialization considers the presence and performance of the person.

The pure inset approach is limited, because it is based on the functional perspective of the Social Psychology, when treating the socialization as a process of content absorption by a person when he contacts a certain environment. In other words "[...] as the maintenance process homogenization reproduction" (BORGES; ALBUQUERQUE, 2004, p. 332-333) this perspective excludes that the individual himself can influence the process, once it is treated as an empty container and deprived of filters.

The symbolic interactionist perspective has the vision that the interaction is inserted in many groups, made of historical contexts and cultural identities. Thus, the symbolic interactionist perspective thinks about the individual as the main character of an evolutionary transformation process, and it benefits the process by being more dynamical.

On the other hand, besides the symbolic perspective, there is the organizational approach which corresponds to the level of institutionalization of the aspects regarding the socialization, which can vary from formalized and not formalized. When someone is hired for the organization and gets knowledge through training or practicing, trial and error, he/she is in the process of socialization.

² Berger and Luckmann (2004) defined socialization into the knowledge sociology discussions, area that studies the production and establishment of knowledge from the construction of the social reality. Thus, they resorted to the relativity to discuss the manners from what much knowledge is built, accepted and incorporated to people.

Borges and Albuquerque (2004, p. 332) suggest that the separation between those approaches has a didactical function, because the theoretical concepts are found in a collective action, depending on the goal of the socialization application.

Considering the social aspects involved, the socialization goal must foresee the duplicity of the situation: the biggest or the smallest need to narrow the social relationships linked to the presence of a bigger or smaller institutionalization of the social aspects of the socialization tactics involved (BORGES; ALBUQUERQUE, 2004, p. 334). In other words, the greater the need for stimulating narrowing and standardization of collective actions, the greater the need for applying formalized (institutionalized) socialization tactics.

In essence, it is said that the socialization plays another role besides the inset and exposition of work context to individuals. The act of minimizing the uncertainty, as Baker (1995), Miller and Jablin (1991) and Sacks and Ashforth (1997) apud Borges and Albuquerque (2004, p.332), say, is a second role which implies a greater or minor efficacy concerning the socialization tactics that were adopted.

Following this thought, it is attributed to the individuals the success of the socialization, seeing that the pro-activity has become fundamental to the inset and stay in the job, what makes the enterprise free from the responsibility of participating in the process.

The enterprises are immersed into a competition context, with models of management that propose solutions to information problems. Among them, it is possible to list: the information organization, with proper indexation processes; the information storage, following standard sequences and arrangements; the recovery, which needs functional informational behaviors regarding the needs of an individual's role; at last, the information systems, with planned architecture and planned how to organize and build the hierarchy of the information for later availability and distribution. Besides, all of this problems impact on positive behaviors in the innovation process.

The information flows are also part of the organizational problems, and they are divided in formal and informal. At this point, the success of the information flows is attributed to an information system. However, in this work, that proposal is alienating, because it marginalizes the individuals' role, as well as their contribution and creative capacity.

As a matter of fact, the information is not considered a problem, but an essential resource to the maintenance of organization's activities and to the knowledge construction. Thus, the competitive reality of the modern organizations is based on the production and distribution of knowledge among the people who make part of an enterprise's environment.

In this way, the organizations became aware of the need of preparing the individuals that are part of it in order to collaborate with the relevant knowledge construction. On the one hand, there are the informational and knowledge needs of the enterprise and a greater and greater demand for producing those resources; on the other hand there is the socio-cultural reality of the enterprises, which is important to point out, indicates a separation from the necessary conditions presented in the literature.

Then, the process of organizational socialization steps in, in order to adapt or insert individual in different contexts or realities, including management models and technological tools.

In general, the socialization is a process that considers the presence of a context and an individual, the transmission and the internalization of a culture's elements. It concerns the act of transmitting knowledge to the individuals and of preparing them to the social reality of the organization and it helps the perpetuation and change of the so installed cultured.

Rewording Dias (2003, p. 64), the process of socialization has the function of perpetuate the organizational cultural by transmitting: “[...] norms, values and basic tenets of the organization which are transmitted to the new members, in a way that they share them in order to make part of the group, otherwise, they won’t remain and will be excluded.

The organizational socialization plays different roles; sometimes it assumes the function of maintainer of the status quo, and sometimes it prepares people to the change. One way or another it could be accomplished through the combinations of many strategies that are proposed by Van Maanen (1996).

Chart 1: Socialization Strategies

Strategies	Goals
Formal	The individual is separated and receives standout in relation to the others (physical space, nomination to a post).
Informal	The person learns by experience and sometimes by the relations he establishes with socialization agents, from an unstructured process.
Single	It is directed to an individual, but it might have a high cost. However, it is useful to transmit the cultural elements of the organization.
Collective	It is applied to a group of individuals.
Sequential	There are lots of learning stages, because the job is complex.
Random	It doesn’t depend on the learning of a sequence.
Fixed	Its use is to determine the necessary time to learning (internship).
Variable	It is used when period of the process is not determined (vertical career).
By exams	It depends on the performance of the person.
Competition	It make use of groups that compete to demonstrate abilities, ambition and experience.
Serial	It is used in order to stimulate the permanence of a state when it is attributed to an elder member to transmit the values and precedents to a beginner.
Disjunctive	Without the presence of precedents or people who helps with the process of socialization. It can be useful to the innovation.
Divestment	When the individual accomplishes works that are considered as minor importance during a test time, in order to hereupon being accepted in the group.
Investiture	The goal is accepted and all members try to make their learning and entrance into the culture easier.

Resource: Adapted from Van Maanen (1996, p. 47-60)

Chart 1 shows which the main strategies are and how each one works. Some are useful to the organizations which work in change contexts, while others must be avoided.

Dias (2003, p. 65-66) suggests that the socialization goes through lots of processes of the organization. From the moment the individuals are selected, in the daily practices of the directors, towards the reinforcement employed to recognize the individuals’ accuracy according to the behavior and the results. As a result, the formal techniques of recruitment, selection and evaluation are fundamental as socialization mechanisms.

The relation between the organizational socialization and the incorporation of the management practice of knowledge is established as the socialization allows the adjustment of the current organizations which are typified as organic.

Thus, that process is fundamental to the organizations that perform in environments in which change is frequent, and mainly have the need of inserting individuals in the creative context of the innovation, without formalizing or narrowing the choices and behaviors, and that guarantees information flows and knowledge production.

It is important to consider that socialization is a socio-cultural process that is generally used unpretentiously and without planning by the organizations. However, as Van Maanen (1996) points out, it is a process that could be developed according the goals of the

organization, and then help at processes that depend on the individual’s compromise, just like the case of knowledge and innovation management. Therefore, in Brazil, it is suggested that despite the emphasis is attributed to the informal behaviors, the formality ends up demanding greater attention and planning, because it makes easier the incorporation of structured roles and specific knowledge about work.

5. Results and discussion

The city of Marília/SP is recognized as a large production pole of food, once called the National Capital of Food. This title is attributed to the city because it has a huge number of enterprises in the food segment with a high monthly quantity production distributed in Brazil and in many other countries abroad, what generates a great number of direct and indirect employments.

The enterprises from the city present variable sizes. In order to cater to the objectives of the research, four enterprises of different sizes were chosen: micro, small, medium and large. Table 1 presents the main characteristics of enterprises from this research.

Table 1: General Characterization of the enterprises in study

Size	Number of employees	Time in the market (years)	Type of management	Market	Products
Micro	14	8	Family	Regional and Northeast	Peanut candy and wheat chips
Small	40	8	Family	National	Candy coated peanut, candies and wheat chips
Medium	220	33	Family	National	Jelly beans, Japanese and candy coated peanuts, wheat chips
Large	2000	45	Family	National and International	Jelly beans, Japanese and candy coated peanuts, drops and caramels

Adapted from: Abreu (2007)³

Those four studied enterprises have presented a development in innovative activities, through innovation in the product, the process or in both at the same time, but mainly in products: three enterprises developed new products and two developed innovation in the process. From those innovations, only one product and one process are new to the market. Nevertheless, only the medium and large sized enterprises presented internal culture regarding the continuous technological innovation. The other two develop innovative activities occasionally.

From the eleven products that were introduced in the market, seven were brand-new to the enterprise and four were extensions of the existing line of product. Only the small enterprise didn’t make the extension line, probably due to the quantity of products lines was still small comparing to the larger companies’ lines.

Only one product was completely new to the market: natural peanut honey coated which were developed by the large company. This product is a result of an extension of the line, therefore, most part of the abilities to its development was already known. We observed internal efforts in order to develop new products, and this fact demonstrates the capacity, in

³ Analyses from data of a Master’s dissertation

terms of human abilities, of manipulate resources and knowledge. That effort is more meaningful concerning the absence, in small and medium enterprises, of a formal Research and Development department. Once more the individuals' preparation, from different levels of organizational structure, is essential to work toward the innovation. At the large company there is a tendency in accumulating knowledge, and that shows the adequacy and insertion of individuals in the context of innovation. However, the situation which was evidenced doesn't demonstrate relation to specific socialization strategies, it only shows that people have experiences and knowledge to perform according to the organization's demands.

The process innovations were developed by the small and medium sized enterprises. The main reason to the reduced innovations in process is the use of the available and already dominated technology by the enterprises, even for the most innovative products. There were four new processes that were introduced by the large company, considering that one was focused in a new product which was still being developed, and two processes to existing products. Among those processes, three are new to the enterprise, because they are existing technologies in the market. The other one, although it is new to the market, it is a result of adapting a previously existing technology and that is common situation inside the food enterprises whose process innovation are used to happening through adapting the machines and equipment that are there already.

As previously discussed, the improvement of the structure shows the capacity of people's adjustment concerning the organization's needs. Nonetheless, even without revealing specific aspects of the socialization process, the innovation processes show total dependency on the socialization, because, as Van Maanen (1996, p.45) points out, it is about processing people, and that makes easier the transition to a new model, to another task, to another ritual.

It is not a standard practice of the micro enterprises to train its employees. The exception happened because it has bought a new equipment. The trainings occurred at the enterprise and were developed by the employees of the supplier together with the production employees.

It is not in the plans of the enterprise to offer trainings about other purposes or more extensive issues, which could reach more employees.

Although that training has been relevant, we can observe that, in general, trainings are characterized as less relevant to the perspective of the enterprise we studied. Thus, the socialization process is most commonly informal, random, varying between collective and individual, and, eventually, Disjunctive. The construction of knowledge and the behaviors concerning the innovation depend on the accumulation and on the capacity of sharing knowledge among people, that is, tacit and explicit.

As a consequence of purchasing new machines, the small enterprise needed to have trainings with its employees. The trainings were internal and external. The external training for the food technician happened at the suppliers industry. The knowledge the technician received was transmitted to the employees from the production area. Therefore, the internal training was a responsibility of an own employee who was externally given the knowledge he transmitted.

There are two justifications given by the enterprise to explain the choice it has made. First, the low cost due to sending only one employee to attend the external training, and considering the possibility of easily transmitting the knowledge to the production employees. Second, knowledge is relatively simple, since it is about working the machines.

It is worth to jut out that besides those trainings which were directly referred to technological innovations that occurred in the enterprise, others with bigger range were

performed. Trainings about the 5S and Good Manufacturing Practice (GMP) reached a bigger number of employees, from different managing areas.

This fact demonstrates the enterprise's preoccupation in finding new and better ways to fulfill its internal activities, independently of whether innovations occur or not. In other words, there is a constant concern about searching for quality that characterizes this indicator as very relevant to the enterprise, mainly in terms of providing conditions to the construction and practice of the innovation. The training that is directly referred to technological innovations was equally considered very relevant to the enterprise, as well as the dependency regarding the behavior of sharing knowledge. In this way, the small enterprise manifests the use of socialization process in order to subsidize the innovation and the process involved with knowledge. Besides, the socialization follows the collective, formal and serial strategies.

As a consequence of developing new products, readjustments in the manufacturing processes caused by getting the seal from ABICAB, the medium enterprise had to accomplish trainings with its employees.

The trainings occur inside the enterprise and are given by the staff or outsourcers. The production manager and some employees delivered training in order to qualify the employees to the production of new products, transmitting to them information like time of production, quality control and other products development.

Technicians from institutions of the city, specialists in techniques such as Hazard Analysis and Critical Control Points (HACCP), Plague control, Good Manufacturing Practices (GMP), Quality Control, Personal Care Manners and Food Poisoning Prevention, delivered training which had as its goal to eliminate, in the production area, the employees subjective manners in order to a rational manner and according to the sector's norms.

There is a lecture hall in the enterprise, specially designed to internal trainings. Independently of the sector, all employees go through trainings which are specific to their activities. This fact demonstrates the enterprise's concern about finding new and better ways to fulfill their internal activities, independently of whether the innovations occur or not.

The characteristics that were previously mentioned demonstrate that delivering trainings is something that frequently occurs and the advantages that are provided by them are pretty relevant to the enterprise.

At the medium enterprise, the socialization receives attention regarding how it is done; it embraces the use of several strategies with clear objectives, sometimes they observe the need of adapting a whole group, and sometimes proposing the transition of isolated individuals. Thus, the tactics are: formal, collective and individual, sequential or random, variable and serial. Strategies which indicate the use of divestment and investment were not mentioned by the medium enterprise, as well as the other enterprises. It could be implied that the process of construction and sharing seems to receive support from the socialization process, because they intend to supply preparation in order to each person do the job and find information to reduce the uncertainty and to actively participate on the knowledge construction process.

As a consequence of purchasing new machines and new manufacturing processes, the large company delivered training with a view to qualify the employees and get the maximum capacity of them. The trainings were directed to areas like mechatronics, operation, process analysis, process engineering and technical maintenance of the manufacturing system.

The trainings were internal and external. They decided on external trainings because the enterprise didn't know the techniques and their developing them on their own would demand much more time and money they were inclined to spend. Thereby, the knowledge

was later transmitted to the other employees from the areas of interest. Hazard Analysis and Critical Control Points (HACCP), Electronic Instrumentation and Utilities (steam, electricity, and compressed air), were external trainings.

Internally, the trainings were delivered by the enterprise's employees and by outsourcers. The intern employees transmit techniques which were already known, like: Use of Personal Protection Equipment, Fire Brigade, Accident Prevention at Work, Good Manufacturing and Environmental Practices. The external training was delivered by the suppliers of the technology and by professional from specialized organs regarding the purchasing of new machines and equipment and the new processes.

Cost and Lead Time Reduction, productivity rise and reduction in the rejection index of the products in the end of the manufacturing process were the main advantages provided by the trainings, which were very relevant to the enterprise.

Besides a focused on technological innovation training, others with a larger range were also delivered, that demonstrates a concern in finding new and better ways to accomplish their internal activities, independently of whether the innovations occur or not, what makes the continued existence of this indicator at the enterprise.

In general, the large company uses socialization strategies which aim to reach most of the people, by combining them with regular recurrence. The most evident strategies are: formal, collective, sequential and random. However, other ways to socialize, mainly the Disjunctive one, in which there are no precedents or individuals that help with the insertion process, were not in evidence. That doesn't mean that there aren't other strategies that are part of the enterprise's practices.

The professional's qualification who are directly involved to the activities of R&D seems to exert influence in the occurrence of continued or occasional technological innovations. At smaller sized enterprises there are few qualified employees, while at the others, the qualification is part of the contract policy.

The organizational stiffness was relevant to the small and medium enterprises, mainly in adapting the employees to change. That justifies a greater need for institutionalization of the social aspects of the socialization tactics, providing narrowing and intense ritualized transmission of knowledge among the people. However, reminding that innovation is associated either to training or people's creativity or proactivity, it is notorious that the process is complex and needs to be meticulous in order not to promote barriers to the creativity. Thereby, intense training and patterned rituals of constructing and sharing knowledge can create less useful results.

6. Final considerations

The organizational socialization may receive two distinct perspectives in the organizations' practices: the first one is to socialize the individuals in a way that doesn't consider their capacity of reflection, opposition, whose behavior is the faithful results of they were put.

By avoiding that limited argument, the second approach attempt to supply autonomy to people, by proposing that they have proactive behavior and therefore they are able to accomplish the socialization more dynamically, and helping to build a new environment. Interpreting the situation of the four enterprises, that were studied, from only one perspective could have lead to a mistake by spurning the process's complexity, which was sometimes saddled and sometimes made by all the actors.

At the studied enterprises, socialization seems to be a process that takes advantage of most of the previous knowledge which are used as base to construct new ones. Thus, even though trainings come from planning and imposition by the enterprise, part of the process needs to consider that people will reflect and absorb things that make sense to them.

The organizations that took part in this research showed they would rather use formal trainings mechanisms. That demonstrates the need for maintain values and other cultural elements of the organization working following a pattern.

It is believed the socialization in this study has followed part of the conception which considers the individual in the insertion process a responsibility of the organization, considering it guarantees the learning by offering training preparation to the post the person was hired for. On the other hand, they demonstrate success when part of the socialization derives from the working routine, environment conditions and co-workers. Effectively, individuals are forced to be insert in the socio-cultural context, whose dynamic is permanent.

Besides, in moment of change, the organizations attempt to apply the socialization in a formalized and personal way at first, and then collective.

The organization is an agglomerate of people with defined roles and responsibilities, whose behaviors are, in most part, a result of the institutionalized structure. Many processes make the structure or are parallel to its maintenance. Thus, the socialization may be characterized: a process of perpetuation of the structural and socio-cultural conditions of the organization. But it assumes duplicity, because the process can also be responsible for the change.

This work proposed a discussion about the socialization in the context of innovation and as a fundamental process to the preparation of the individuals and groups to performance the knowledge management. The studied enterprises revealed great differences regarding the need to institutionalize the socialization. On the one hand, the microenterprise suggests the application of the process emphasizing the informality, while the others are closer to the institutionalized strategies, which are needed in organizations that intend to make changes in groups of people.

Thereby, it is considered that the discussion may treat the importance of the process of insertion and adjustment of people to the conditions and objectives of the organization, so that they can bring together innovative elements which are built from the change and without destroying the constitution of the organization.

REFERENCES

ABREU, A. **Esforço para inovação tecnológica: uma caracterização da indústria de alimentos do município de Marília/SP.** 2007. 185f. Dissertação (mestrado) – Departamento de Engenharia de Produção – Universidade Federal de São Carlos, São Carlos, 2007.

BAHIA, L. D. **Determinantes principais de inovação na indústria brasileira: uma análise preliminar.** Brasília: IPEA, 2009.

BELL, M. Learning and the accumulation of industrial technological capacity in development countries. In: FRANSMAN, M.; KING, K.(Eds) **Technological capability in the third world.** London: Macmillan Press Ltda, 1984. p. 187-209.

BELL, M.; PAVITT, K. Technological accumulation and industrial growth: contrasts between developed and developing countries. **Industrial and Corporate Change**, Brighton, v. 2, n. 2, p. 157-210, 1993.

BELL, M.; PAVITT, K. The development of technological capabilities. In: **Trade, technology and international competitiveness**. 1. ed. Washington, DC, World Bank, 1995.

BERGER, P. L.; LUCKMANN, T. **A construção social da realidade: tratado de sociologia do conhecimento**. 24.ed. Petrópolis: Editora Vozes, 2004. 248p.

BORGES, L. O.; ALBUQUERQUE, F. J. B. Socialização organizacional. In: ZANELLI, J. C.; BORGES-ANDRADE, J. E.; BASTOS, A. V. B. (Org.). **Psicologia, organizações e trabalho no Brasil**. Porto Alegre: Artmed, 2004. p.332-356

CORIAT, B.; DOSI, G. The nature and accumulation of organizational competences/capabilities. **Revista Brasileira de Inovação**, v. 1, n. 2, p. 275-326, jul/dez 2002.

DAVENPORT, T. H.; PRUSAK, L. **Conhecimento empresarial: como as organizações gerenciam seu capital intelectual**. Rio de Janeiro: Campus, 1998.

DI SERIO, L. C.; VASCONCELLOS, M. A. **Estratégia e competitividade empresarial: inovação e criação de valor**. São Paulo: Saraiva, 2009.

DIAS, R. **Cultura organizacional**. Campinas: Alínea, 2003.

FLEURY, A. Capacitação tecnológica e processo de trabalho: comparação entre o modelo japonês e o brasileiro. **RAE -Revista de Administração de Empresas**, v. 30, n.4, p. 23-30, out/dez 1990.

FORAY, D.; LUNDEVALL, B. The knowledge-based economy: from the economics of knowledge to the learning economy. In: OCDE (ed) **Employment and growth in the knowledge economy**. Paris: OECD, 1996.

GARVIN, D. Building a learning organization. **Harvard Business Review**, Boston, p. 78-91, jul./ago, 1993.

GRAEML, A. R. **Sistemas de informação: o alinhamento da estratégia de TI com a estratégia corporativa**. 2 ed. São Paulo: Atlas, 2003.

VAN MAANEN, J. Processando as pessoas – estratégias de socialização organizacional. In: FLEURY, M. T. L.; FISCHER, R. M. **Cultura e poder nas organizações**. São Paulo: Atlas, 1996. p.45-62

NONAKA, I.; TAKEUCHI, H. Teoria da Criação de conhecimento na empresa. IN: TAKEUCHI, H.; NONAKA, I. **Gestão do conhecimento**. Porto Alegre: Bookman, 2008. p. 54-90.

OCDE-MANUAL DE OSLO. **Proposta de diretrizes para coleta e interpretação de dados sobre inovação tecnológica**. Finep - tradução português, 2004.

PARASURAMAN, A. Technology Readiness Index (TRI): a multiple-item scale to measure readiness to embrace new technologies. **Journal of Service Research**, v. 2, n. 4, p. 307-320, 2000.



PARASURAMAN, A.; COLBY, C. **Techno-ready marketing**: how and why your customers adopt technology. New York: The Free Press, 2001.

PÉREZ MONTORO GUTIÉRREZ, M. **Gestión del conocimiento en las organizaciones**. Gijón: Ediciones Trea, 2008.

ROGERS, E. M. **Diffusion of innovations**. 5 ed. New York: The Free Press, 1995.

ROSAL, A. C. L.; FIGUEIREDO, P. N. Aprendizagem corporativa e acumulação tecnológica: a trajetória de uma empresa de transmissão de energia elétrica no norte do Brasil. **Gestão e Produção**, v. 13, n. 1, p. 31-43, jan/abr 2006.

SCHUMPETER, J. A. O processo de destruição criadora. In: **Capitalismo, socialismo e democracia**. Rio de Janeiro: Zahar, 1984.

SCHUMPETER, J. A. **A teoria do desenvolvimento econômico**. 3 ed. São Paulo: Nova cultural, 1988.

TAKEUCHI, H.; NONAKA, I. **Gestão do conhecimento**. Porto Alegre: Bookman, 2008.

VALENTIM, M. L. P. Informação e conhecimento em organizações complexas. In: VALENTIM, M. L. P. (Org.). **Gestão da informação e do conhecimento no âmbito da ciência da informação**. São Paulo: Polis/Cultura Acadêmica, 2008. p. 11-26.