Effects of Capacity Knowledge Management and Entrepreneurial Orientation on Organizational Effectiveness in the Best Tunisian Companies: Moderating Role of Social Capital

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This research addresses the question of explaining the organizational effectiveness of the company through the knowledge management capacity, entrepreneurial orientation, social capital and innovation. Researchers still do not adequately understand the relationship between these phenomena and the nature of their effects on organizational effectiveness. This research uses data obtained from a sample of 150 Tunisian companies to test a complex model of knowledge management capacity and entrepreneurial orientation, assuming that the level of social capital plays a moderating role on the effects of entrepreneurial orientation and the knowledge management capacity on organizational effectiveness. Using structural equations, the proposed model is tested and data analysis reveals that there is a significant relationship between independent variables and organizational effectiveness.

Keywords: knowledge management, entrepreneurial orientation, innovation, social capital, organizational effectiveness.

Introduction

In recent years, there has been a real buzz in organizations and research about knowledge management. The complexity of the competitive market,
new technologies, research of organizational effectiveness are the cause of the birth of the knowledge management. As such, "knowledge management can lead to decreased cycle times, help firms avoid obsolescence, streamline processes and give firms a sense of how to respond to change" (Hoffman et al., 2005).

Therefore, to meet the new requirements of competitiveness, companies must learn to manage their intellectual capital to regularly improve their organizational capacity. Knowledge management allows one hand to optimize operations by the expertise and secondly to optimize the transfer of knowledge through new techniques and methods. Hence, this new methodological approach and organization of production improvement requires to explore and quickly acquire critical information and market knowledge to the organization (Zahra and George, 2002).

This recourse to knowledge management is justified by the fact that researchers strongly believe in a positive correlation between knowledge management and organizational effectiveness (Gold et al., 2001). Beyond this, the major challenge is to explain what are the critical variables that can affect and improve the relationship between knowledge management and organizational effectiveness. Previous work provides some answers. Thus, Zheng et al. (2010) verify that the strategy, culture and organizational structure have a history of management capacity of knowledge promoting organizational effectiveness. Darroch (2005) noted that having a knowledge management capability simultaneously increasing organizational effectiveness and innovation of the firm. For their part, Collins et al. (2010) show the need to align the capacity of knowledge management with the management of the value chain to promote organizational effectiveness. Other studies have focused on the direct relationship between the ability of knowledge management and innovation (Li and Calantone, 1998; Moller, 2007; Miller et al., 2007; Cantner et al, 2011) the ability of knowledge management and entrepreneurial orientation (Burton, 1999), entrepreneurial orientation and innovation (Li et al., 2008; Zhou et al., 2005) and the capacity for knowledge management and capital social (Hoffman et al., 2005). But it has not yet been examined simultaneous interrelations between entrepreneurial orientation, the ability to manage knowledge and innovation on organizational effectiveness by considering the moderating role of social Thane. Is an exception, the study of Lee and Sukoco (2007), in spite of the wealth of their initiative, we note that their study is limited to
one hand large companies and the other includes more variable improving competitiveness. The latter made the more complex study.

To fill this gap, we had the idea to develop a reflection on the impact of knowledge management capability on organizational effectiveness by studying the critical variables for better interaction of this relationship. One of the most important phenomena affecting this relationship is that of entrepreneurial orientation that reflects the managerial capabilities by which firms implement proactive and aggressive initiatives to change the competitive scene to their benefits. Mobilization of knowledge is characterized by variety, risk-taking, the exceptions rather than the routine and this depends on the entrepreneurial orientation of business leaders. Contractors will move towards the center of the organization, to design and develop applications that become turning points of knowledge management (Seonghee, 1999). The combination of these concepts is important for the exploitation of opportunities (Wiklund and Shepered, 2003). Moreover, innovation and social capital prove two important concepts for the study of the relationship between knowledge management capability and organizational effectiveness. Next Teresa et al. (2006), when a company has the ability to acquire knowledge and to integrate existing knowledge with new knowledge, the company can produce process innovations or product. However, innovation is considered the most important variable for improving the efficiency of the firm (Iyer et al., 2006). On the other hand, social capital has an explanatory principle of several economic and social phenomena. And Hoffman (2005) al., Argue that social capital facilitates intellectual development as it helps to make the most efficient collective action and reduce transaction costs. This implies a management process more efficient and effective knowledge.

It is in this context that this paper will try to help deepen the understanding of the mechanisms and pathways through which different concepts interact with each other. In addition to our knowledge, research on knowledge management in Tunisia are rare. More specifically, our work will have major ambitions to answer the following questions: what is the relationship between the ability of knowledge management, entrepreneurial orientation and innovation? How these phenomena act on organizational effectiveness? What is the power exercised by the internal social capital? What impact is there on business?
With the aim to answer these questions, we will undertake a review of the literature on these concepts. This will lead to the formulation of the theoretical assumptions constitute our hypothetical model. The contributions of this research are manifold. It is an original way to bring greater understanding of knowledge management capacity and entrepreneurial orientation are seen as increasingly critical to the survival and success of enterprises. It proposes the construction of a research model exploring the causal relationships between variables. Finally, test the moderating role of social capital on innovation and organizational effectiveness. To do this, it should define the different concepts of our research, the construction of research model is then carried out by presenting the different levels of analysis and the corresponding assumptions. It is then possible to analyze the results of the study of 150 companies.

Review of the literature

This section aims to show the relevance and usefulness of the various concepts of our research.

Knowledge management is representative of the transition to a content-oriented communication, the meaning and the development of knowledge networks. To this end, organizations in their ongoing efforts to create and support a sustainable competitive advantage in rapidly changing environments and unpredictable, must effectively manage their intangible assets (Penrose, 1980). It is thus necessary to provide the needs of individuals and businesses by finding the right information and introduce an effective system for decision support. To understand the phenomenon of knowledge management we will in a first step, we attach to precisely define the term knowledge object of knowledge management. In a second step, we will seek to define the knowledge management and finally we will explain aspects of knowledge management capacity.

Several authors have cleared the difference between information, data and knowledge. According to Mitchell (2000), "information can be considered as made significant data used in a particular context, while knowledge as data made meaningful through a set of beliefs about the relationship between actions and their likely consequences and acquired by the experience. " According to the theory of resources, to sustain a
competitive advantage, a resource must be valuable, rare, inimitable and non-substitutable (Barney, 1991). The type of resources with these characteristics is knowledge. Its importance is increasingly recognized. Liao et al. (2003), ensure that the source of sustainable competitive advantage is knowledge. In the literature of "Knowledge Management" the term knowledge is used most often. Knowledge is an important dimension of the capacity of the company, it is necessary for the implementation of resources, it also allows evaluation how they will be developed, harmonized and structured (Penrose, 1980). Reix (1995) summarizes this change by stating that in the models of strategic analysis "knowledge held by a business is a major part of its competitive advantage." The management of this resource, known for knowledge management, then became a necessity for companies (Drucker, 1993).

Several types of knowledge have been proposed in the literature. They determine the knowledge to capitalize. Based on the work of Nonaka and Takeuchi (1995), we distinguish two types of knowledge, tacit knowledge and explicit knowledge: Explicit knowledge is knowledge disseminated in a formal language, while tacit knowledge have a personal nature that makes difficult to formalize and communicate. We can see these two types of knowledge in all organizations. Organizations encourage learning and tacit knowledge in order to improve skills and creative abilities of their employees and also benefit from explicit knowledge to maximize their own effectiveness (Dieng et al., 2000). In addition, there are differences in the definitions of knowledge management which can be explained by the divergence of the privileged insights by the authors, according to Hamilton and Ives (1982), knowledge management is a process of creation, transmission and use of knowledge to improve the performance of the company. Tisseyre (1999), this knowledge management as "the conscious, coordinated and operational management of all information, knowledge and expertise of the members of an organization to serve this organization." This definition is based on three concepts of knowledge management, namely: awareness: knowledge management is an existing concept, but it was not revealed. So this is an evolution, not a revolution coordination. Importance of new tools to facilitate the rapid exchange of information worldwide network operating profit expected. The goal of "knowledge management" is to have concrete results. Hansen et al. (1999) propose the following definition of "a set of practices and tools for the identification, retrieval,
sharing, transfer and creation of knowledge and skills to do knowledge as a source of competitive advantage for the company. " Knowledge management as Dieng et al. (2000), it is the resource management of knowledge in an organization (databases, electronic documents, multimedia document etc.) to facilitate access, sharing and reuse. For the present work, we adopt the definition of Liao et al (2003), That the ability of knowledge management is the continuous process of managing all the knowledge to anticipate current and future needs of identify and exploit existing and acquired knowledge as well as develop new opportunities.

Researchers have identified many key aspects of knowledge management capacity: acquisition, transfer and use (Delong, 1997); acquire, collaborate, integrate and test (Leonard, 1995); create, transfer, assemble, integrate and operate (Teece, 1998). This study refers to the Alavi and Leidner (2001) description, which group these capabilities in five broad dimensions that create, store, retrieve, transfer, apply, and finally protect the process of knowledge. For a successful knowledge management system, managers play a crucial role since they must encourage employers to share their knowledge and experiences (Kuo et al., 2011). Capacity for knowledge management oriented acquisition refers to the effort of the organization to gather information and new knowledge from internal and external sources. The acquisition of knowledge is based on the ability of an organization to find and create knowledge (Leonard, 1995). Many terms have been used to describe acquire, find, produce, create, capture and collaborate. Innovation, another acquisition aspect is the creation of new knowledge. This requires a good experience to identify and capture new knowledge (Nonaka and Takeuchi, 1995). The improved use of existing knowledge and the efficient acquisition of new knowledge are also a main aspect of the acquisition (Inkpen and Dinur, 1998). We can cite two examples of learning that are benchmarking and collaboration. On the one hand, by benchmarking an organization identifies exceptional practices of organizations (including itself), and assesses the current state of a particular process to identify gaps and problems (O'Dell and Grayson, 1998). Once these practices are identified, the organization can then capture the relevant knowledge for indoor use. On the other hand, the creation of organizational knowledge requires sharing and dissemination is to say, the collaboration of personal experiences (Inkpen and Dinur, 1998; Brewer and Brewer, 2010). Collaboration takes place at two levels in the organization: between
individuals and between the organization and its network of partners. Collaboration between individuals brings together different aspects (e.g., cognitive style, favorite tools, backgrounds, experiences) and can be used to create knowledge (Leonard, 1995). This implies that the interaction between individuals enhance learning (Teece, 1998).

Collaboration between organizations is also a potential source of knowledge (Gold et al., 2001). Sharing technology, the movement of personnel, the links between the partners of the organization, alliances and joint ventures allow the accumulation of knowledge (Inkpen and Dinur, 1998). Management capacity of conversion-oriented knowledge tends to make existing knowledge useful. Processes that allow the conversion of knowledge is the ability of a company to organize, integrate, combine, organize, coordinate and distribute knowledge (Gold et al., 2001). However, without common standards of representation, no consistency or common dialogue of knowledge does exist. This would make it difficult to control capital efficiently. Knowledge in a particular subject can reside in different parts or systems of the organization. The combination or integration of this knowledge reduces redundancy, increases the consistency of representations and improves efficiency by eliminating the excessive volume (Gold et al., 2001; Grant, 1996). These processes also allow the organization to replace the knowledge that has become obsolete. Different knowledge of individuals must be integrated to maximize efficiency. Thus, a primary goal of any organization is to integrate specialized knowledge of several individuals (Grant, 1996). Four commonly cited mechanisms to facilitate integration are the rules and directives, sequencing, routines and problem solving group (Gold et al., 2001). Nonaka (1994) distinguishes four modes of knowledge conversion by which he bases his theory of organizational learning: socialization, externalization, combination and internalization. Application of the capacity that is oriented towards the actual use of knowledge. Little discussion has been devoted to the results of the effective application of knowledge. Gold et al. (2001) assume that once knowledge is created, it will be effectively enforced. Process characteristics that were associated with the application of knowledge in the literature, include the storage, retrieval, application, contribution and sharing (Almeida, 1996). Effective mechanisms for storing and retrieving allow the organization to access and apply knowledge quickly.
Finally, the ability of knowledge management oriented security to protect the knowledge of the organization against the illegal use or theft. For a company to survive and preserve its competitive advantage, it is necessary that his knowledge be protected (Liebeskind, 1996). As enforcement capacity, it has also received little attention in the literature. Many may assume that a firm can protect its knowledge through patents and trademarks (Liebeskind, 1996). However, more reliable measures can be taken to protect the capital, such as rules of conduct for employees, encouraging work systems and develop technology that tracks or limit access to the essential knowledge (Gold et al., 2001). In addition, for that intangible capital is the source of competitive advantage, they must be rare, inimitable and non-substitutable (Barney, 1991). Without security processes, knowledge loses these important qualities. Thus, the protection of knowledge creates value for the organization so that they can continue to innovate without fear of imitation by competitors. Through the limitations imposed by external laws, the organization should develop better policies to prevent illegal actions of internal members, as clearly stated in contracts of employment relating to employee monitoring (Liebeskind, 1996). Knowledge is also difficult to protect because it is difficult to detect its illegal expropriation or imitation. Unlike most tangible capital, knowledge is mobile, because it resides in the heads of individuals (Grant, 1996). Employee monitoring is used to reduce its mobility and thereby reduce the mobility of knowledge they possess (Liebeskind, 1996). This is costly for the firm to protect knowledge, it is for this reason that the costs and benefits of knowledge must be weighed carefully. To save money, the firm must protect only the knowledge of value, which will repay the costs of protection (Liebeskind, 1996).

Indeed, the ability of knowledge management provides the organization with a competitive advantage and allows to solve problems and seize opportunities (Plessis, 2005). Without shared knowledge, the firm cannot reap the competitive advantages and invest in the creation and capture of knowledge (Nielsen, 2006). According to him, organizations that control knowledge can combine their experiences, innovate and implement new ideas quickly. It is important, in the context of this research, the answer to the following question: what are the means for applying knowledge management to business reality? Perrin (2011), provides some answers, he makes a case study on the practices of the people in charge of political
knowledge management. Indeed, the results show that these practices relate to a set of initiative related to a portfolio of knowledge, the implementation of the sharing rules, animation of a network of local contacts and to the accompaniment of change. Inspired by the work of Riley (2003), the use of knowledge depends on three criteria: availability, accessibility and applicability. Availability of knowledge is possible only through the network of computers and communication links. Accessibility requires the appropriate technology to generalize knowledge in the format for dissemination. There are several file formats, which must use software to be accessible. Similarly, to make available the knowledge we need different hardware solutions as readers of specialized support (for CDs and floppy disks, etc.) and accessories (such as speakers and printers).

Finally, the applicability of knowledge depends on the expertise of individuals, and must know how to use the features needed to accomplish the task. In addition, it is important to focus on the concept of entrepreneurial orientation that is essential for a successful capacity management knowledge.

Entrepreneurship appears as a search field crossed by various streams are not interested in the same objects of analysis. Messeghem (2002) identifies two main lines of research based on different definitions of entrepreneurship: Entrepreneurship can be defined in terms of entrepreneurship. The work is part of this current are successively interested in profile of the entrepreneur and the creative process. Companies must pursue new opportunities by adopting an entrepreneurial orientation (Rauch et al., 2009). Entrepreneurial orientation has thus become a central concept for the ability of the firm in competitiveness, adaptation and performance in a purely competitive environment (Simsek et al, 2010; Slevin and Terjesen, 2011). Miller (1983) points out that entrepreneurial orientation requires the combination of three variables: innovation, proactiveness and risk-taking. Some researchers have wanted to supplement the work of Miller and suggested other dimensions, such as competitive aggressiveness and autonomy that can also be key components of entrepreneurial orientation. In this study we have identified four dimensions with reference to the study of Lumpkin and Dess (2001), which marked the literature related to this concept. Risk taking, proactiveness, autonomy and competitive aggressiveness. The main factor that separated entrepreneurs employees was uncertainty and risk taking (Lumpkin and Dess, 1996). The concept of risk-
taking is an essential feature of the entrepreneurial orientation. The risk has several meanings, depending on the context in which it is applied. In the context of the strategy, Baird and Thomas (1985) have identified three types of strategic risk "venture into uncertainty," "commit a relatively large part of capital" and "significant debt". The first type is generally applicable to certain risks often discussed in the literature of entrepreneurial orientation, such as personal risk, social risk and psychological risk. However, Sitkin and Pablo (1992) in their model of risk behavior, distinguish between perceptions of risk, risk preferences and risk appetite.

Approach in which they opt for projects where expected returns were safe. The second factor that proactivity refers to that of the initiative. The term proactivity is defined in Webster's Ninth New Collegiate Dictionary as "action to anticipate problems, needs or changes". Lumpkin and Dess (1996), assume that proactivity is characterized by taking the initiative to pursue a new opportunity in the market. In addition, new firms are more likely to fail than existing businesses. Aggressive competitive position and is critical for the survival and the success of new entrants (Porter, 1985). Competitive aggressiveness, which is frequently mentioned in the literature, is a fundamental dimension of entrepreneurial orientation. Competitive aggressiveness refers to the propensity of firms to directly and intensely challenger competitors to enter the market and improve their competitive position in the process of launching new activities (Lumpkin and Dess, 1996). There are a multiplicity of forms of competitive aggressiveness, for example Porter (1985) offers three different ways: doing things in a different way with new configurations, change the context by redefining the product or service or distribution channels and spend more than the industry leader. Finally, based on the work of Lumpkin and Dess (1996), the concept of autonomy is a major dimension of entrepreneurial orientation. Autonomy refers to the independent action of an individual or a team bringing a new idea or a vision and executing it. In general, it means the ability and willingness of individuals to pursue opportunities. According to these authors autonomy in firms may change depending on the size, style of management or ownership. Nonaka and Takeuchi (1995) argue that autonomy enables the organization to increase its chances of introducing unexpected opportunities and individuals to motivate themselves to create new knowledge. In addition, there are some debates and some differences around the interdependence of this dimension with others. A recent study
confirms that autonomy is an important dimension of entrepreneurial orientation and it has no relation with innovation, risk taking and proactiveness (Lumpkin et al., 2009).

Innovation is a concept that has long been closely linked to entrepreneurship. Schumpeter (1934) was one of the first authors to show its importance. In an organization, innovation is to engage in a process of generating new ideas, exploitation and development opportunities that allow the design of new products, services or technologies (Lumpkin and Dess, 1996). Innovation is defined here as the ability to introduce a new process, product or idea in the organization (Hurley et al., 1998). Innovation is mainly distinguished entrepreneurial orientation because it does not require market entry (Lumpkin and Dess, 1996). Much of the innovation of the company hinges on the extent to which managers acquire and act on the knowledge. Without the ability to innovate organizations can invest the time and resources studying the markets but can not translate this knowledge into practice (Hurley et al., 1998). The adoption of innovation is generally expected to contribute to the performance or effectiveness of the firm (Hult et al., 2004). The resource-based theory (Wernerfelt, 1984), helps to explain how firms achieve competitive advantage by using the resources in the development new products and processes.

The identification of the role of social capital as a basis for discussion for the study of factors that may affect the conduct of a project management knowledge leading to efficiency. The capital is widely described by researchers as capital embodied in the reports of individuals, communities, networks or companies (Burt, 1997; Nahapiet and Ghoshal, 1998). Several authors have tried to give a definition of social capital, as part of our research we will look at the approach of Nahapiet and Ghoshal (1998), who considered an organizational component. So they have structural, relational and cognitive social capital components that support the creation and exploitation of knowledge. In our study, we focused on the relational dimension of social capital. The choice of this dimension comes from the fact that we consider the human and social factors are crucial in the promotion of an entrepreneurial orientation and knowledge sharing factors. This component of social capital is based on the nature of the relationship between members of the organization. According to Nahapiet and Ghoshal (1998), there are variables to characterize the nature of this relationship are: trust, norms and mutual interaction. Confidence "is expectations that are
within a community governed by a regular behavior, honest and cooperative, based on standards generally shared by other members of the community" (Fukuyama, 1995) 2. This promotes confidence in the commitment of cooperative actions and the sharing of knowledge and expertise. The confidence level of social capital depends on the efforts of communication and coordination between firms (Luño et al., 2011). The nature of the relationship between members of the organization can also be explained through the compliance collective. The presence of standards eliminates opportunistic behavior of members (Bayad et al., 2006). Finally, individuals who are strongly bonded identify themselves as members of the same entity. Indeed, the identification of significant members act on all forms of cooperation and exchange in the organization (Paturel et al., 2005). This identification allows good cooperation between the staff of the company, which promotes the sharing of the labor force, sharing and creation of knowledge within the organization. Bridging social capital is taken into account in our model to help us understand the moderating role of social capital through trust, commitment and mutual identification.

In the management literature, there are many concepts have the same meaning as the performance and efficiency (Payette, 1998). In this study, we believe that the efficiency and performance variables are substitutable. Organizational effectiveness can be interpreted through several indicators that assessment can be distinguished according to the profile manager, availability, risk-taking and its orientation within or outside of the company (Beaudin and al., 1994). To assess organizational effectiveness, this study adopts the financial efficiency (market share, the overall profitability, sales growth) and non-financial (improved coordination effects, the frequent introduction of new products a better ability to predict the change in the market). This will allow us to examine the influences of a number of antecedents on organizational effectiveness.

The conceptual model of research

According to research, the goal of entrepreneurial orientation is to bring something "new" to the market, with most of the new derived from the unique combination of existing knowledge and new knowledge (Ahuja and Lampert, 2001). Organizations should identify and acquire information and special knowledge (Teece, 2000; Zahra and George, 2002) in order to
improve their competitive advantage. Before the combination of knowledge, organizations must convert any external knowledge which can then be used to produce innovations (Cartner et al., 2011). This suggests that an organization with an entrepreneurial orientation can increase its capacity to convert and combine knowledge to develop new products or processes.

When an organization has more entrepreneurial orientation, its innovation process should be better and should be more generally effective as an organization accordingly. To respond quickly to emerging needs, conversion of knowledge should be applied and disseminated throughout the organization (Gold et al., 2001). Moreover, in response to market changes the organization should require the application of existing knowledge around the organization (Liao et al., 2003). So, have an entrepreneurial orientation should increase the capacity of organizations to convert knowledge into innovation and make it generally more efficient. In this regard, the protection of knowledge is critical against the competition on the market. The external protection laws, such as patents and property rights is not perfect (Berry, 2000).

However, with an entrepreneurial orientation organization takes protective measures to secure an advantage in innovation (Burton, 1999). Similarly, according to Nonaka and Takeuchi (1995), "while an independent group begins to establish the limits of its own tasks and begins to interact with its external environment, accumulating tacit and explicit knowledge." This means that the autonomous individuals publish their original ideas in teams that self-organize to create new knowledge. Indeed, entrepreneurial orientation provide the stimulus to undertake the activities of product design processes and ideas through the knowledge management capacity. This is because it embodies the qualities of proactivity, aggressiveness and initiative that may lead managers to action on various innovation projects. Consequently, entrepreneurial orientation could be considered the key to innovative action (Hult et al., 2004). Previous empirical results provide support for the positive relationship between entrepreneurial orientation and organizational effectiveness. Proactive companies can create benefits, target market segments better and enter the market before competitors (Zahra and Covin, 1995). Similarly, existing strategies can lead to an average or high efficiency, while risky strategies may be more beneficial in the long term (Wiklund and Shepered, 2003).
Based on this analysis, it is possible to produce the following hypotheses to be examined in this study.

**H1:** entrepreneurial orientation positively influences the ability of knowledge management, innovation and organizational effectiveness

- **H1-a:** entrepreneurial orientation positively influences the ability of knowledge management
- **H1-b:** entrepreneurial orientation positively influences innovation
- **H1-c:** entrepreneurial orientation positively influences organizational effectiveness

Organizational effectiveness of a company depends on its ability to integrate knowledge in an effective manner (Teresa et al., 2006). Similarly, Badii and Sharif (2003) suggest that without effective integration of knowledge, companies will need to spend more time and resources to manage and maintain the information, preventing thus innovation. The ability of knowledge management creates and operates synergies between products, consumers and managerial knowledge. These synergies affect the financial performance of the firm when these three variables are complementary and not managed independently (Tanriverdi, 2005). Similarly, several studies have shown the influence of knowledge management on performance (Zheng et al., 2010). Direct effects on the ability of knowledge management on the performance of the business concern is the impact on the ability of knowledge management on the value of business assets (financial performance) or the competitive positioning (performance competitive). Teresa et al. (2006) states that when a company has the ability to acquire knowledge and to integrate existing knowledge with new knowledge, the company can produce and process innovations or product. The capacity of a company to amend existing knowledge is a way to foster innovation (Grant, 1996). Innovation does not only depend on the development of new knowledge but also relying in particular on the existing knowledge by sharing and application of knowledge within the firm (Grant, 1996; Teece, 2000; Droge and al., 2003). If the internal process encourages individuals to act on one another and collaborate with others, facilitate the transmission and dissemination of knowledge, which will increase the likelihood of innovation and increase organizational effectiveness (Gold and al., 2001).
Based on the foregoing, the following hypotheses are developed:

H2: the ability of knowledge management has a positive influence on innovation and organizational effectiveness.

H2-a: the capacity for knowledge management has a positive influence on innovation.

H2-b: the capacity for knowledge management has a positive influence on organizational effectiveness.

The key to a successful innovation process lies in the mobilization and conversion of tacit knowledge. "Innovation results from the creative action of the players organized environment, that is to say, it is the implementation of the collective knowledge and skills of stakeholders to enhance or create new products and manufacturing processes" (Boutlitane, 2005). Innovation is considered the most important variable for improving the efficiency of the firm (Iyer et al., 2006). Therefore, companies with more innovations will generally be effective at least until imitators come out with similar products or processes (Burton, 1999). This suggests that organizational efficiency can be achieved through product innovation and process.

Based on this analysis, this study proposes the following hypothesis:

H3: innovation positively influences organizational effectiveness

"The presence of social capital can enhance knowledge capture, knowledge codification and knowledge transfer" (Hoffman et al., 2005). However, an organization with a high level of social capital, develops more knowledge which, in turn, should increase innovation in the organization, the more effective. On the other hand, companies can protect their knowledge by human property, patents, trademarks, or systems of incentives, but the protection is still limited (Gold et al., 2001). With high social capital, trust and standards tend to reduce the opportunistic behavior of transmitting knowledge to competitors (Kale et al., 2000). The capital and reduces the likelihood of theft or imitation by competitors. Indeed, social capital influences the process of knowledge protection. Better protection of knowledge, organizations can focus their time and energy for innovation and become more generally effective. Thus, social capital can increase the ability of firms to disseminate, use and disseminate resources in the organization, since the dimensions of social capital trust, commitment and mutual interaction tend to increase good willingness of members of the organization to share resources and information, which influences
organizational learning and thus the ability to convert knowledge. However, this study argues that in exercising the trust, commitment, and interaction between members of an organization, social capital will have a significant effect on the ability of knowledge management.

On the other hand, Miller (2011) suggests that social capital can be seen as an incentive for entrepreneurial orientation to increase innovation and risk-taking by improving relations with suppliers and thus facilitate the confidence. In addition, one of the main factors of entrepreneurial orientation is proactive which is characterized by the speed and initiative. In order to respond quickly to market changes, organizations should be proactive in the combination of existing knowledge and new knowledge and anticipate changes. Hence, the organization must be able to identify and disseminate new knowledge within the organization. This requires collaboration between members of the organization (Liao et al., 2003). Thus, the capital redundancy of information and the extent of the dissemination of knowledge tends to decrease (Burt, 1992). Some members of the organization "fill the hole" voluntarily to obtain and disseminate more resources or information. Therefore, social capital can moderate the effects of entrepreneurial orientation on innovation and organizational effectiveness. This study assumes that organizations with high social capital perform better outcomes for their companies in terms of innovation and efficiency.

Based on this analysis, we propose the following hypothesis:

H4: Social capital has a moderating effect on the ability of knowledge management and entrepreneurial orientation.

H4-a: The capital has a positive moderating effect on the influence of entrepreneurial orientation on innovation, and organizational effectiveness.

H4-b: The capital has a positive moderating effect on the influence of the management capacity of knowledge innovation and organizational effectiveness.

The theoretical framework conducted so far and allowed by a broad review of the literature, to build our conceptual model (Figure 1) and provide a theoretical argument that should lead to empirical research to test its practical relevance. The proposed theoretical model and assumptions made there under, will be faced with the field test to determine their
empirical validity and thus draw conclusions and managerial implications, both theoretical and practical.

**Methodology adopted for the implementation of research**

Our choice was based on a quantitative research based on the use of a questionnaire as a method of data collection.

This choice is explained first by the fact that the objective of the research is explanatory in nature to verify and explain the relationship formulated by theoretical assumptions. This requires interrogation of a large number of individuals to ensure significance of the model tested.

Thus, in what follows we will present the steps taken for the implementation of the quantitative approach. Our questionnaire is divided into two main parts based on axes treated theoretically understand the first part of 42 items and the second part represents the label of the company (industry and firm age, number of employees, the position and professional experience of the respondent) that will position it in relation to the characteristics of the selected sample and the parent population. On the other hand, the questionnaire is accompanied by an introduction in which we present ourselves, we explain the value and purpose of the research and we are committed to maintaining the confidentiality of responses. Thus, this study uses the items developed by Lumpkin and Dess (2001) to measure entrepreneurial orientation in organizations.

We have taken the scale developed by Gold et al. (2001) to measure the ability of knowledge management. Scales developed by Yli-Renko et al. (2001), Kale et al. (2000) and Tsai and Ghoshal (1998) are used to measure social capital. Innovation is measured by items of Bartlett and Ghoshal (1989), Han et al. (1998) and Hurley and Hult (1998). Finally, the scale of Gold et al. (2001) is used to assess organizational effectiveness. Less 42 items represent a priori the five dimensions. We seek to validate this scale on our people. Likert scales with 5 points were chosen to measure the level of agreement of the respondents. These scales allow respondents to take refuge in a central position and limit the variability of responses (relative to a scale of 6 or 7, for example) (Thiétard, 1999). On the other hand, given the length of the questionnaire and the survey population, it seemed that a 7-point scale would have increased the number of dropouts which justifies the choice of 5 points. For the translation of items from English into French, we
referred to the method of reverse translation that "the researcher uses first time a professional bilingual translated into French language level in question, then the translated scale must be translated again in the opposite direction, this second version is compared to the original version" (Thiétard, 1999). This translation was validated by university professors. The face validity is the operative measure that capture different aspects or facets of the phenomenon studied (Evard et al., 2003). Hence, the questionnaire was pre-tested with 10 companies belonging to the parent population to verify the acceptability of items by the respondents. Discussions were needed with respondents in case of misunderstanding or non-clarity of items. This helped to make the necessary adjustments resulting in the final version of the questionnaire (Appendix 1).

Finally, since the method of administration of the questionnaire will affect the quantity and quality of the information obtained, we favored the "face-to-face" as a method of gathering information in order to minimize the risk of non-response and to ensure that the questionnaire is completely filled. This mode allows the interviewer to clarify certain concepts misunderstood or unknown by respondents. We tried not to influence respondents and ensure their anonymity which allows them to freely respond. The overall response rate was 100%. Data were collected over a period of two months. This short time limit biases at the time of questionnaire response.

The questionnaire was administered and validated respondents in the sample of our empirical study. We will present in the following reasons for the selection of the sample, then we describe the sample size and finally we will identify the mode of administration of the questionnaire. Selecting items in our sample is made on the basis of a ranking of the top 700 Tunisian companies (in terms of turnover), published in January 2008 in the "Economist Maghreb." We assume that these companies demonstrate an entrepreneurial orientation; with capacity for knowledge management can be applied in the field of innovation to improve organizational effectiveness. Needs factorial statistical analysis and structural equation methods, which will be used to analyze the data collected, define the sample size to choose from. Recommended for most specialists ideal size is 200 to 300 observations (Evard et al., 2003). It is clear that more samples are more broad statistical results are satisfactory (Roussel et al., 2002). For our work, our sample size 150 seems to be satisfactory. Regarding the characteristics of
the sample, descriptive statistics show first that 75.33% of industrial enterprises, 14.66% are service companies and 10% of commercial enterprises. In a second step, the number of less than 50 employees is 47.33%, 24% between 50 and 100, and 28.66% higher than 100. It should also be noted that 54.67% of respondents are executives and 45.34% are middle managers. Finally, we tried to describe the experience variable, respondents less than 20 years of age are 39.34% and those over 20 years of experience is 60.67%. Table 1 shows the demographic characteristics of our sample.

Table 1: Characteristics of the sample studied

<table>
<thead>
<tr>
<th>Variables</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sector</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industry</td>
<td>113</td>
<td>75.33%</td>
</tr>
<tr>
<td>Trade</td>
<td>15</td>
<td>10%</td>
</tr>
<tr>
<td>Service</td>
<td>22</td>
<td>14.66%</td>
</tr>
<tr>
<td><strong>Number of employees</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 50</td>
<td>71</td>
<td>47.33%</td>
</tr>
<tr>
<td>Between 50 and 100</td>
<td>36</td>
<td>24%</td>
</tr>
<tr>
<td>More than 100</td>
<td>43</td>
<td>28.66%</td>
</tr>
<tr>
<td><strong>Position of respondent</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Middle management</td>
<td>68</td>
<td>45.34%</td>
</tr>
<tr>
<td>Superior</td>
<td>82</td>
<td>54.67%</td>
</tr>
<tr>
<td><strong>Experience</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 20 years</td>
<td>59</td>
<td>39.34%</td>
</tr>
<tr>
<td>Over 20 years</td>
<td>91</td>
<td>60.67%</td>
</tr>
</tbody>
</table>

Analysis of results

In order to perform the test theoretical hypotheses, we followed the two-step approach advocated by Anderson and Gerbing (1988). That said, we
must in the first instance, consider the validity of the measurement model by principal component analysis indicating how each latent variable is operationalized by the manifest indicators. In a second step, we test our hypotheses using the methods of structural equations. Analyses were made in Statistica which is very famous software for this type of method. The results of the PCA allowed us to retain two factors of entrepreneurial orientation. We removed the item 3 of the second factor to improve the reliability of this dimension. For the ability of knowledge management, the ACP off as planned four factors. Regarding reliability, we see good Cronbach's alpha above all 0.7. Cette analysis also allowed us to distinguish two factors of innovation, social capital and organizational effectiveness. We removed the item 10 of the non-financial efficiency with low quality of representation. As regards the methods of structural equations they fall into two main approaches. First, the confirmatory test for the measurement model, which relates each latent variable with items that are associated with factor analysis. To make the AFC, we divided the model into 5 parts. For each model, we applied the AFC linking the various components and their indicators or items. If one refers to the main adjustment measures (Table 2), all the measurement models have a satisfactory quality adjustment. And FIGs CFI indexes above 0.09, less than 0.08 the RMSEA chi2 and divided by the degree of freedom is less than 5. In addition, items that have poor contribution factor were eliminated.

Table 2: Confirmatory factor analysis

<table>
<thead>
<tr>
<th>AFC</th>
<th>MODELS</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Entrepreneurial</td>
<td>Capacity</td>
<td>Innovation</td>
<td>Org Eff</td>
<td>Social</td>
</tr>
<tr>
<td></td>
<td>Orientation</td>
<td>knowledge</td>
<td></td>
<td></td>
<td>Capital</td>
</tr>
<tr>
<td>Chi2 / dof</td>
<td>3.77</td>
<td>2.54</td>
<td>4.61</td>
<td>4.54</td>
<td>3.38</td>
</tr>
<tr>
<td>RMSEA</td>
<td>0.009</td>
<td>0.04</td>
<td>0.08</td>
<td>0.062</td>
<td>0.07</td>
</tr>
<tr>
<td>GFI</td>
<td>0.978</td>
<td>0.96</td>
<td>0.97</td>
<td>0.91</td>
<td>0.96</td>
</tr>
<tr>
<td>CFI</td>
<td>0.877</td>
<td>0.93</td>
<td>0.92</td>
<td>0.98</td>
<td>0.90</td>
</tr>
</tbody>
</table>
Finally, a test of convergent validity was needed to assess the internal validity of this theoretical model and the Rho coefficient of validity must be greater than 0.5. The results were satisfactory for all constructs. Convergent validity should be completed by the discriminant validity which was verified using the test steps of Roussel et al. (2002). Second time, we proceed to test our hypotheses by structural method. The adjustment of the structural model quality is satisfactory, GFI and CFI indices respectively equal to 0.81 and 0.77 are encouraging and the RMSEA equal to 0.063 indicates that we should not reject the model. The ratio chi-square of the number of degrees of freedom equal to 2,040 meet the condition to be less than 5 (Table 3).

Table 3: Method of Structural Equation

<table>
<thead>
<tr>
<th>ASSUMPTIONS</th>
<th>Factor contribution</th>
<th>T Statistic</th>
<th>Proba level</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1a: entrepreneurial orientation of knowledge management capacity</td>
<td>0.4017</td>
<td>5.1</td>
<td>200</td>
</tr>
<tr>
<td>H1b: Entrepreneurial innovation orientation</td>
<td>0.8074</td>
<td>9.1</td>
<td>596</td>
</tr>
<tr>
<td>H1c: Organizational Effectiveness</td>
<td>0.6178</td>
<td>11.2030</td>
<td>8,8818E-16</td>
</tr>
<tr>
<td>H2a: knowledge management capability innovation</td>
<td>0.6816</td>
<td>10.3592</td>
<td>8,8818E-16</td>
</tr>
<tr>
<td>H2b: knowledge management capacity organizational effectiveness</td>
<td>0.5311</td>
<td>7.1</td>
<td>725</td>
</tr>
<tr>
<td>H3a: innovation organizational effectiveness</td>
<td>0.2145</td>
<td>4.3</td>
<td>733</td>
</tr>
</tbody>
</table>

Indeed, the results of the test theoretical hypotheses H1, H2 and H3 are supported. Figure 1 shows the test results of the measurement model and the structural model.
Regarding the moderation of hypothesis testing, we followed the method of Kenny and Baron (1986), which involves the estimation of four separate models by ANOVA. The first two models are related to the H4a hypothesis that social capital has a positive moderating effect on the influence of entrepreneurial orientation on innovation and organizational effectiveness. We divided the moderator variable share capital in two ways: high (SCH) and low (SCL). The same applies to the entrepreneurial orientation variable, we recoded into two low data bases and high notes (EOL) and (EOH) and we obtained four groups of interactions, EOH * SCH, EOH * SCL, EOL * SCH and SCL * EOL.

Contrary to what has been mentioned in the literature, H4a hypothesis is rejected, (F <2, p > 0.005) (Table 4). Indeed, social capital has no moderating effect on the influence of the capacity for knowledge management on innovation and organizational effectiveness. For the second hypothesis of moderation we followed the same procedure as the previous test, the variable capacity of knowledge management is divided into low and high conditions.
Table 4.: Test the hypotheses H4a and H4b

<table>
<thead>
<tr>
<th>H4a</th>
<th>Variables to explain</th>
<th>EOH*SCH</th>
<th>EOH*SCL</th>
<th>EOL*SCL</th>
<th>EOL*SCL</th>
<th>Fisher</th>
<th>P level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1</td>
<td>Innovation</td>
<td>0.022</td>
<td>0.0328</td>
<td>0.001</td>
<td>0.902</td>
<td>0.655</td>
<td>1.089</td>
</tr>
<tr>
<td>Model 2</td>
<td>Organizational effectiveness</td>
<td>0.085</td>
<td>0.0374</td>
<td>0.042</td>
<td>0.751</td>
<td>1.642</td>
<td>1.002</td>
</tr>
<tr>
<td>H4b</td>
<td>Variables to explain</td>
<td>CGCE*CS</td>
<td>CGCE*CSF</td>
<td>CGCF*CSE</td>
<td>CGCE*CSF</td>
<td>Fisher</td>
<td>P level</td>
</tr>
<tr>
<td>Model 1</td>
<td>Innovation</td>
<td>0.481</td>
<td>0.0841</td>
<td>0.141</td>
<td>0.052</td>
<td>0.056</td>
<td>1.651</td>
</tr>
<tr>
<td>Model 2</td>
<td>Organizational effectiveness</td>
<td>0.039</td>
<td>0.0374</td>
<td>0.239</td>
<td>0.021</td>
<td>0.419</td>
<td>1.510</td>
</tr>
</tbody>
</table>

We get four new groups to test the interaction effect on the ability of knowledge management on innovation and organizational effectiveness namely EOH*SCH EOH*SCL EOL*SCL and EOL*SCL. Both models do not meet the conditions of acceptability of the hypothesis (F>2, P <0.05) (Table 4). This leads us to conclude that the H4 hypothesis is refuted, the capital does not increase the influence of the management capacity of knowledge innovation and organizational effectiveness.

Discussion

The major contribution of this research is to have shown the effects of entrepreneurial orientation and knowledge management capability on innovation and organizational effectiveness. According to the results, entrepreneurial orientation significantly influence the ability of knowledge management, innovation and organizational effectiveness. Indeed, increasing the ability to exploit and explore new knowledge, encouraging members to be proactive, to look for new opportunities to take the risk in uncertain situations and to implement various measures Innovative allow one hand to increase the ability to exploit and explore knowledge and secondly to increase the innovation capacity of new products or services which will thus act positively on the share of market sales and the ability to anticipate market changes. A second result confirms the relevance and
importance of taking into account the causal relationship between the ability of knowledge management, innovation and organizational effectiveness. This result is that, for the sample studied, the ability of knowledge management has a positive effect on innovation and organizational effectiveness. The innovation of products and processes depend on the successful implementation of creative knowledge, the conversion of tacit knowledge that is a source of innovation, the protection of competitors imitators, the establishment of rules of conduct for employees, systems encouraging work and the development of technology that restricts access to the essential knowledge. All of these factors on the ability of knowledge management, explain the innovation of products and processes. Second, our results also provide arguments for the significant effect of innovation on organizational effectiveness. To cope with the changing environment, companies need to adopt innovations and the most important are those that allow them to achieve some sort of competitive advantage through the exploration and exploitation of knowledge thus contributing is its effectiveness.

Our analyzes have shown that in contrast to the sample studied, the share capital does not increase the impact of entrepreneurial orientation and knowledge management capability on innovation and organizational effectiveness. Perhaps this is due to the choice of scale to measure social capital. It is also possible that a high level of trust and commitment between the members of the organization does not necessarily increase collaboration, sharing of experiences and reduce opportunistic behavior. Hierarchical delegation also plays an important role, that is to say when decisions are shared between superiors and other employees, the structure of the network increases, which positively influence the trust and reduces conflict and opportunism. The reversal of this assumption can be explained by the fact that Tunisian managers are not very aware of the importance of this dimension in their managerial culture. Ultimately, our results seem to attest to the centrality played by knowledge management capacity and entrepreneurial orientation in the organization. The importance of these variables is reflected in the multiplicity of effects of their aspects and dimensions of innovation and organizational effectiveness.
Conclusions

The literature review helped us initially to better understand the concept of knowledge management. In summary, the various aspects of knowledge management capability ensure the availability and access to appropriate strategic knowledge about markets, products and services, competitors, processes and procedures, qualifications of employees and the environment for making more efficient and effective decision making. This ensures that the organization can act quickly to market changes before its competitors, i.e., it provides the organization with a competitive advantage with respect to agility.

The availability of knowledge through knowledge management capability also creates a learning environment for staff, raising the level of qualifications of the staff of the organization. All this increases the efficiency of the organization. We later tried to clarify the nature of the entrepreneurial orientation and its importance in an organizational environment.

Operational concept as multidimensional entrepreneurial behavior allows us to seize new opportunities, develop strategies, efficiently organize the resources of the firm and achieve competitive advantage. Entrepreneurial orientation is an organizational phenomenon that reflects the managerial capabilities by which firms implement proactive and aggressive initiatives to change the competitive scene to their benefits.

We have completed the review of the literature by clarifying the dependent variables namely organizational effectiveness and innovation and specify the moderating role of social capital between the dependent and independent variables.

This framework provides an analysis to develop the relationship between the ability of knowledge management framework, entrepreneurial orientation, innovation and organizational effectiveness. The results are as follows: Variable entrepreneurial orientation has a positive and statistically significant effect on the ability of latent variables of knowledge management, innovation and organizational effectiveness. This proves the role of entrepreneurs in the design and development of applications and creative knowledge to influence innovation and organizational effectiveness. The variable capacity of knowledge management has a positive and statistically significant effect on innovation and organizational
effectiveness, this allows to highlight the activities of knowledge management and organizational environment in significant impacts. The innovation variable influences organizational effectiveness. This is due to the adoption of innovations to achieve a competitive advantage, thereby contributing to organizational effectiveness. And finally, the variable capital does not enhance the effects of entrepreneurial orientation and organizational effectiveness. This phenomenon can be explained by the fact that Tunisian managers are not very aware of the importance of this dimension in their managerial culture.

Our findings are therefore in the direction of a confirmation of the idea that there is a strong and significant relationship between entrepreneurial orientation, the ability of knowledge management, innovation and organizational effectiveness. The handling of these organizational concepts is crucial for the company that wants to be able to effectively manage its knowledge. However, the company wants to have an environment conducive to knowledge creation should focus more on the negative effects of imitation in the innovation process. The risk of imitation and conflict are major obstacles in the adoption of creative ideas. They do not block general the emergence of innovation but also the upstream of creative innovation. It is necessary therefore, to establish rules of conduct for employees, encouraging work systems and develop technology that restricts access to the essential knowledge. The conceptual framework presented in our research should help companies to build the capacity of knowledge management and an entrepreneurial orientation to facilitate the process of creating new products or service and thus increase organizational effectiveness. At a practical level, this research provides a conceptual model for decision support that would help guide managers. This tool should facilitate the adaptation and change they need to develop the knowledge management process and improve their capacity through collaboration and the establishment of databases to facilitate the sharing of knowledge, this that fosters innovation and organizational effectiveness. It is worth noting that any research work faces some limitations. It seems that the main thing that could be in this research concerns the non-aware of some leaders of the usefulness of a research work which has an empirical range. They believe that academic research work does not give a value to overcome problems related to the sector. This is why access to certain companies was very difficult.
Particularly valued quality of all research is its ability to light in areas where there is the greatest need for future research. For these contributions and these limitations, this work calls for the exploration of other variables that may mediate or moderate the effect of orientation and capacity for knowledge management on innovation and efficiency, then we believe that future research will have to win by taking into account the model as developed for testing in companies belonging to different geographical areas in order to have external validity. Another line of research suggests is unidirectional relationships between variables. The reciprocal causal effect could be studied in future research. The modeling of the reciprocal causal effect is very complicated. All these possibilities are avenues of research that complement and extend the work that we started.

References


