

# THE NEED OF USING KNOWLEDGE MANAGEMENT STRATEGY IN MODERN BUSINESS ORGANIZATIONS

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## **Abstract:**

*The modern society, in order to reach its current stage of development, has been through stages whose patterns have been stocked as important archives, which they constituted and built up a chain of values that allow us to call/ name the modern society a society of knowledge. The knowledge has become, by far, the most important asset and resource to which we report ourselves to into the organized and non-organized fields of our nowadays society, and the nature, evolution, dynamics of these organized domains of business entities have become a subject of fundamental importance to maximize their competitive advantage. In that matter, the scientific, theoretical, practical knowledge or the one resulted from experience, is the key determiner to acquire modern corporate success, at least in the more global context of markets and business processes. This paperwork comes to complete the idea, according to which, the competitive advantage of modern business entities/ corporations can't be reached unless the general management strategy would include: processes, principles, techniques to make/ to create this knowledge productive, meaning to include the knowledge management strategy into the general one of the specific corporation. Another important aspect we want to emphasize is the importance of reporting ourselves to knowledge as a key factor for the development of the academic environment/ domain, as well as for the one of business organizations. In the present, workers are using more and more their minds rather than their hands, and the idea of knowledge worker in the business area has its roots, as we believe, in the institutional education. The high level of absorbing individuals who own intangible active stocks/ knowledges is bigger and bigger, and this thing wouldn't be possible without looking towards the academic domain as the main determiner in developing **the human factor**, and also being the supplier that fuels the quality of employment, mostly in modern corporations on all the organizational levels.*

**Key words:** knowledge management, strategy, knowledge, business entities, competitive advantage.

**JEL classification:** D83, J24, M10, M12

## **1. INTRODUCTION – KM FROM THE ORIGIN TO PRESENT TIMES**

We are living in a world full of tangible things, from our home and office, tiny objects to the city buildings, bridges, buses, trains and airplanes. We are living also in a world full of intangible things, from the knowledge we learn in schools to the great discoveries of science. For many people the life equation is very simple: the more tangible one has, the more happiness she or he can get (Bratianu, 2011). The change produced in the reference to non-material resources instead of the material ones, has revolutionized the strategy of economical growth making possible the Economics transition from an economy dominated by material, physical, tangible resources to one of intangible things that appeals in a constant and dynamic way to the role of human factor as an intensifier of the economical increase, without diminishing the role of classical production factors or underestimating the material investments. This change, which has been evolving for a couple of decades so far, brought with it new concepts, theories, principles and models/ patterns that constitute what we call today Knowledge Management (KM), a study subject as well as practice in the realm of business. Knowledge management is a multidisciplinary field of study, due to the fact that during the time were published a number of definitions, that easily exceed one hundred, about what this field can mean and how many domains are gathered thru its existence. However, the field of knowledge management does suffer from the Three Blind Men and an Elephant. In fact there are likely more

than three distinct perspective of KM, and each leads to a different extrapolation and a different definition (Dalkir, 2011).

From our point of view, certain terms like: knowledge worker, knowledge work or KM strategy, aren't well enough defined in terms of specific literature domain, as now it leaves the possibility of creating a slight confusion; this is because of partial definitions, in certain situations, or on the contrary, in other cases there is an overlaying of concepts, precisely due to the profound content and practice of this discipline that presumes, at a general level, the management of human knowledge. In this context, the difficulties that appear are thought to be precisely the result of the fact that KM is a relatively new discipline/ area of research, having a couple of decades of existence, and as a real practice it began to be known/ used in the more economical developed countries; at a global level, of course, the KM practices have become "active" at the same time with the international growing business processes. On the other hand, in an unconscious and non-structural way, the economical agents have appealed to KM from a long time ago, before this was known as a practice of its own; as a matter of fact, we can talk about the existence of KM that dates back with the existence of knowledge and its usage in organized fields of business entities, even if it wasn't at the same level of intensity as it is today. Knowledge at the work place is the ability of humans and organizations to understand and act effectively...it forms fundamental resources for effective functionality and supplies valuable active assets for the sales and exchange (Innerarity, 2007).

Taking into consideration the historical report, we can talk about another clear evidence of the KM, particularly the library, whose appearance, from a couple of millenniums way back, was necessary in managing the clay tablets that had notes associated with fees and taxes and much more information. The libraries play a crucial role in the present time, being indispensable in the process of disseminating the knowledge when we look at KM as a study subject; we see that they remain essential also for any type of organization, even in the context of extensive internet, of social networking etc. This is because the libraries have stored and they are still storing on physical support, the essence of human knowledge during centuries, making possible the transfer of a special type of knowledge from one generation to another. Thus, from 5 decades so far KM has become not only a discipline and a practice, but also of a highly interest matter due to the fact that it has been acknowledged the importance of immaterial/ knowledge resources and of the intellectual capacity (as a mixture of rational and irrational thinking) of the person and which it, the human factor, can amplify and pass it over to other ontological levels: other individuals, groups, organization, etc, making possible the bridge from personal to organizational knowledge. Furthermore, the individual creates the possibility of a competitive advantage/ winning for the organization he works for. In this context, a series of questions come up, for which the KM literature wasn't able to conceive a clear enough answer or that the authors in this specific domain couldn't reach to a general agreement.

## **2. KM - PRACTICE AND DISCIPLINE**

Through time two fundamental associations have been shaping up when referred to knowledge: scientific knowledge, having its roots in the research done via academies or centers/ institutes of research and the knowledge an experienced person possesses (we can name this category "the pragmatic science") (Mertins et al, 2003). The odds of economic gain doubles/ multiplies for the company the moment that among the experimented people inside it are also included well educated/ qualified employees who show and initiate- individuals with initiative (Nonaka, 1995). In our opinion, we can't give a clear and complete definition regarding the knowledge in the KM area, as we understand so far, to a lesser extent, the mechanism that stands at the base of human thinking (by definition, the human thinking was and remains inaccurate, vague, non-structured and completely differs from the capacity of inference of a computer). Considering the same angle of approach, we believe that nevertheless, the work of knowledge can be defined

and quantified even within boundaries, independent from the fact that we encounter a certain difficulty, caused by the imprecision and the impossibility of measuring human thinking.

Regarding KM, the knowledge shape up in two fundamental dimensions from the epistemological point of view: tacit knowledge and explicit knowledge (Nonaka, 1995; Polanyi, 2009) (the concept of tacit knowledge was, for the first time, proposed by Michael Polanyi who discuss about “the tacit dimension of knowledge” and brings arguments to the fact that knowledge is always personal/ individual) and when we place ourselves in the ontological dimension of human knowledge it becomes essential the classification of “individual knowledge versus collective knowledge” (Lam, 2000). We appeal (from a philosophical perspective, for now) to a classification that has become a reference regarding KM, specifically:

- Explicit knowledge, this being the one found in books, manuals, data bases and can be measured and transmitted from one person to another (including from one generation to another);
- Tacit knowledge, this being the one that belongs to the experience, intuition and imagination of a person, being much difficult to measure up (sometimes impossible) and pass over from one person to another;

Taking into account the two philosophical dimensions regarding human knowledge (epistemological and ontological), we can talk, theoretically, about four different categories of knowledge (embrained knowledge/embodied knowledge and encoded knowledge/embedded knowledge). Still, we believe that certain classifications proposed in the KM theory are sometimes slightly confusing therefore it can lead to contradictory conclusions (there is no standardized terminology, it’s used the term of dimension for the category of knowledge, etc.). The four categories or types of knowledge from Table 1 may be described, in a simplified way, as it follows:

- Knowledge embrained- it is the knowledge from one person’s mind particularly that of tacit nature (but it can’t be “split” from the experience and the ability of that person);
- Knowledge embodied –itis mostly the explicit knowledge, explained by the nature of some abilities, qualifications or perceptions that a certain employee/ person has; obviously, the applicability of such abilities to do something in particular can’t be conceived and/ or imagined separately from the participation of the mind and will of that person;
- Knowledge encoded – it is mostly tacit knowledge that during time managed to suffer a form of “encoding” and through this it becomes somehow (unclear, little understood as a mechanism via which this transfer occurs) transmittable from one individual to a bigger social group (for instance, the ability of driving a car with maximum capability requires, even today, a certain amount of tacit knowledge of the embrained knowledge type and this ability was not broadcast to larger groups a century and a half ago; in time, certain abilities to drive a car were encoded and became transmittable and, furthermore could be retained through study, observation and practice by most of the people);
- Knowledge embedded – it is mostly explicit knowledge that goes with the ability/ qualification/ skillfulness of a group of people to solve a social issue, to accomplish something useful and repetitive during time; it reflects group abilities but it applies via N individuals and therefore it can’t be conceived/ imagined separate from the mind/ self-will/ desire of the people involved.

**Table no. 1. Cognitive level: types of knowledge**

Epistemological dimension	Ontologic dimension	
	Individual	Collective
	Tacite	Embrained Knowledge
Explicite	Embodied Knowledge	Embedded Knowledge

Source: Alice Lam, 2000

Thus, as a result of the things presented by us in Table 1, we understand that it remains essential to devise knowledge on explicit versus tacit, no matter the philosophical dimension of analysis on this subject. Indeed, for the KM domain it is and will be of maximum interest the mechanism through which different types of knowledge could be transmitted from the individual to groups from the same organization and not only.

The KM literature offers a series of conceptual frameworks, but also working patterns applicable in the practice of business entities, these presuming working with the people's knowledge. We estimate that working with knowledge supposes catching it where it's being created, sharing/ disseminating it amongst individuals and using the resulted new knowledge for a better deployment of business activities. Being known the fact that in a business entity almost every worker is a knowledge worker (Pasher et al, 2011), we believe that it's highly important to understand what knowledge worker, respectively knowledge work actually mean, and where they are placed in terms of ranking in the development of the organizational structure. Another main aspect is the way that KM strategy can be correlated with corporate strategy, to be able to discuss about the practice of KM in the business entities and about the impact of using this strategy into modern corporations (even if previously we mentioned the fact that business organizations management appeals involuntarily to KM for centuries, we need to analyze the manner in which voluntary approach to KM might be beneficial to business activity). What it's certain is that most of the nowadays managers easily admit the fact that knowledge management counts, especially if their business is built to produce innovation or exactly the opposite, it depends on it, in both cases appealing to knowledge management could be considered the most probable resource for a competitive advantage.

### **3. THE KNOWLEDGE WORKER VS. KNOWLEDGE CREATING WORKER**

In a business entity almost every worker is a knowledge worker (Pasher et al, 2011). The manual worker is yesterday—and all we can fight on that front is a rearguard action. The basic, capital resource, the fundamental investment, but also the cost center of a developed economy, is the knowledge worker who puts to work what he has learned in systematic education, that is, concepts, ideas, and theories, rather than the man who puts to work manual skill or muscle. (Drucker, 1986). From our point of view, the individual remains, first of all, the most important active of an organization, even in the context of computer revolution, but only the extremely educated employee manages to make the most of the resource called knowledge at a very high standard (to be innovative for himself and for the organization). The question that pops up without wanting is: where this kind of worker is placed on the map of organizational structure?

The organizational structure of an entity, at a very general basis, is divided in two subsystems: the executive subsystem and the operational one, and these highly qualified/ educated employees are placed, basically, among managers, especially in the middle of the average ones who are also named middle managers, practically the knowledge work is specific for the middle management. (Drucker, 1986; Nonaka, 1995). (but who can count out the presumption according to which in the operational part wouldn't be found true talents/ individuals with potential, but moreover, in most of the countries, at a regional level the insertion of youngsters on the job market after graduating college is a very delicate subject that shows what kind of young people and with what background takes a job in the operational side; the experience proves us the fact that many of the individuals/ young people who have stored an impressive pack of theoretical knowledge via the educational system or the scholar studies they had undertake, end up to be manual workers, meaning who work more with their hands than with their mind, maybe, on this line we should take them out from the category knowledge workers? Although, as we mentioned previously, they own a special type of knowledgewithout which the other category of experience, the practical one to be more precise, couldn't evolve properly). In fact, we think that is obvious the assumption that knowledge workers are definitely among qualified individuals, with experience/ expertise, capable of innovating acts/deeds, who use intuition, logicaland illogical thinking but also talent and who get

to accumulate stocks of knowledge under the shape of an expertise, *but not only there*. As we pointed out before, it's less probable to understand which are the mechanisms, the triggers from the base of human thinking and that make the individual think in a certain way, as human thinking remains, in fact, very personal. Nevertheless, we are absolutely convinced that even among people who don't accumulate impressive stocks of practical or theoretical knowledge (theory according to which they aren't enough prepared to hold a leading position) there are individuals whose rational but also intuitive capacity could have, in certain interactive contexts/ situations, a sparkleable to bring about innovation more than any other employee of knowledge worker type, that was found in the executives' area (sure fact is that most of the times, for these workers the entity doesn't create an environment with sufficient inspiration/ motivation, in spite of the fact that they are seen as people who use more their hands than their minds).

On this line, we want to complete the affirmation (Polanyi, 1962), according to which knowledge/ knowing (tacit knowledge in particular) is extremely individual/ personal and we state the fact that we can't shut out any employee from a business entity when we refer to them as possible vectors that could intensify the developing knowledge at the organizational level, because the individual by human nature, no matter of the place he has in the organizational hierarchy, works with his own knowledge even if the percentage, quantity and quality is different from the base of the pyramid to "level 0" in an hierarchy. We think that all workers of modern organizations are knowledge workers (with, probably, extremely few exceptions) especially being given the existence of tacit knowledge that some people have and it isn't shared or couldn't be shared. The tacit knowledge is that particular knowledge that can't be entirely explained not even by an expert and which can be transferred from one person to another only via a long process of apprenticeship. By contrast, the explicit knowledge is relatively easy to articulate and communicate and in the same time passed-over among individuals of an organization (ChingChyi Lee et al, 2000).

Being given the coordinates taken into account previously, we consider of crucial importance the understanding of difference between an employee of knowledge worker type from the executive subsystem and another one of the same type but from the operational subsystem, because, in our acceptance, the knowledge worker can be placed with certainty in both subsystems, and this aspect is mentioned in favor of the knowledge stocks that individuals have, at a general level, and must have in order to get a job under the current development of business processes. The difference between these two categories of employees is given by the fact that a knowledge worker who is also a manager, finds himself put in front of a done thing as he is part of the knowledge creating crew, together with executive individuals from the other levels of management, such as line managers or top managers (Nonaka, 1995). In this way, we consider beneficial and appropriate, strictly from our point of view, renaming and integrating them in a specific category of knowledge creating workers; in the same time, an employee/ worker of the executor type should remain at the status of knowledge worker precisely because of the reason and intuition he is gifted with by his human nature, beside the amounts of knowledge he beholds, at least at a theoretical level. As a matter of fact, among them it can be found individuals with initiative who could make possible the transition from the position/rank of knowledge worker to knowledge creating crew. Knowledge work, therefore, needs far better design, precisely because it cannot be designed for the worker. It can be designed only by the worker. (Drucker, 1986). We cannot deny the fact that, nevertheless, supported by examples, there are various cases of modern companies, at least those of MNCs types, which activates in certain industries and oblige the workers, at an executive level, to use to a higher extent, their hands rather than their minds. In fact this is a subject of introspection and research, which will be thoroughly debated in some later research studies.

#### **4. WE NEED A STRATEGY FOR MANAGING THE MODERN WORKERS AND THEIR WORK**

##### **4.1. THE STRATEGIC VISION AND THE MOST POPULAR KM STRATEGY – THE SECI SPIRAL**

Labour, whether it is manual or intellectual, was, is and will be an impersonal task, in the organized fields of business entities, as well as the job/ the position or the entire organizational structure of an entity, not the work is the one that should be fit to the workers' requests, but quite the opposite, the individuals must have the abilities and knowledge to shape up on the demands of the job they wish to obtain. It is absolutely obvious that a bad organization of an entity could change an organization into an obstacle on the path of performance, and essentially, the structure of an organization can act as a catalytic agent in achieving specific strategic objectives or as an impediment towards performance/ success (Mellow, 2006). For this purpose, in order to analyze the way and the place where the main issues shape up as a result of faulty organization we need to reach the strategies, because the strategy establishes the goal of the organizational structure.

The strategy, particularly the strategic vision of the management, is a vital contributor that supplies the need of creating an identity of its own for each organization and the strategy is supposed to determine the manner in which certain actions should be done to reach the organizational aims/objectives. We think that the KM strategy is formed out of an assembly of processes, procedures, techniques and principles, which the management (especially the top team) must integrate into the general strategy and vision. In this way, given the fact that working with knowledge dates far back in the past, these KM principles, techniques, processes are included, partially, in an implicit way in the corporate strategy. Considering our previous approach, underlined aspect via Table 1, we believe that the top team stands as a unique team that creates a special type of organizational knowledge by conceiving a business strategy, on the most general basis (which can suffer changes from one case to another), being given the complexity/ importance and the impact of the strategy onto the entity viewed as a whole, onto its performance and its competitive advantage that it can confer. The knowledge vision of a firm arises from confronting the fundamental question: Why do we exist? While the strategy of a firm can change as the situation unfolds and uncertainty about the future decreases, the knowledge vision does not change so easily, since it stems from the fundamental ontological question of the firm's reason d'être. The firm's knowledge vision inspires the intellectual passion of the organization members so that they are encouraged to create knowledge...For the knowledge to be created and justified on the basis of the company's own vision, the firm needs concrete concepts, objectives or action standards in order to connect the vision with the process of dialogue and practice to create it. We name such standard concept/purpose/action a driving objective because it drives/ leads the process of creating knowledge (Ichijo et al, 2007).

##### **4.2. THE CASE OF THE CANON GIANT**

As we previously mentioned, one of the relevant models and much accepted in KM is introduced in the literature by Nonaka and his co-authors. The knowledge spiral model implies four modes of knowledge conversion from tacit into explicit and vice-versa (socialization - sharing experience, externalization- articulation of tacit knowledge into explicit, combination-systematization of concepts in a knowledge system and internalization- incorporation of tacit knowledge into explicit) connected into a spiral process which moves at the ontological and epistemological level and which amplifies the creation of new organizational knowledge in the form of innovation, by reusing the existing knowledge. We implicitly think that this model represents an important KM strategy that can be applied and adapted in the practice of any modern business organization because the management and the assessment of value produced by these intellectual capital goods is vital for the development of business organizations. This KM strategy also implies

a different organization of the management processes, different than traditionally of top - down or bottom-up type, which is named middle-up-down process management for knowledge creation and which can be understood by the success example of some renowned corporations.

Canon is a Japanese company with the headquarters in Tokyo and listed at the Tokyo Stock Exchange and produces and commercializes optical products, including photo and video cameras, printers and copiers. Between 1997-2006- the company was on the 2nd and 3rd places in the top of the companies with most annual **patents** in the USA, in 2010 on the 2nd place after IBM. Among many inventions are the automatic exposure bracketing cameras and personal copiers or mini - copiers. Trying to launch on the market a new type of copiers began in 1979. In order to appeal to this niche of the market, this product should have been small, shining and less expensive, and, above all, should have been used easily, without any kind of compromise from the point of view of quality.

After many less formal discussions, a pretty tough image of a personal copier began to appear, an image expressed through five fundamental objectives:

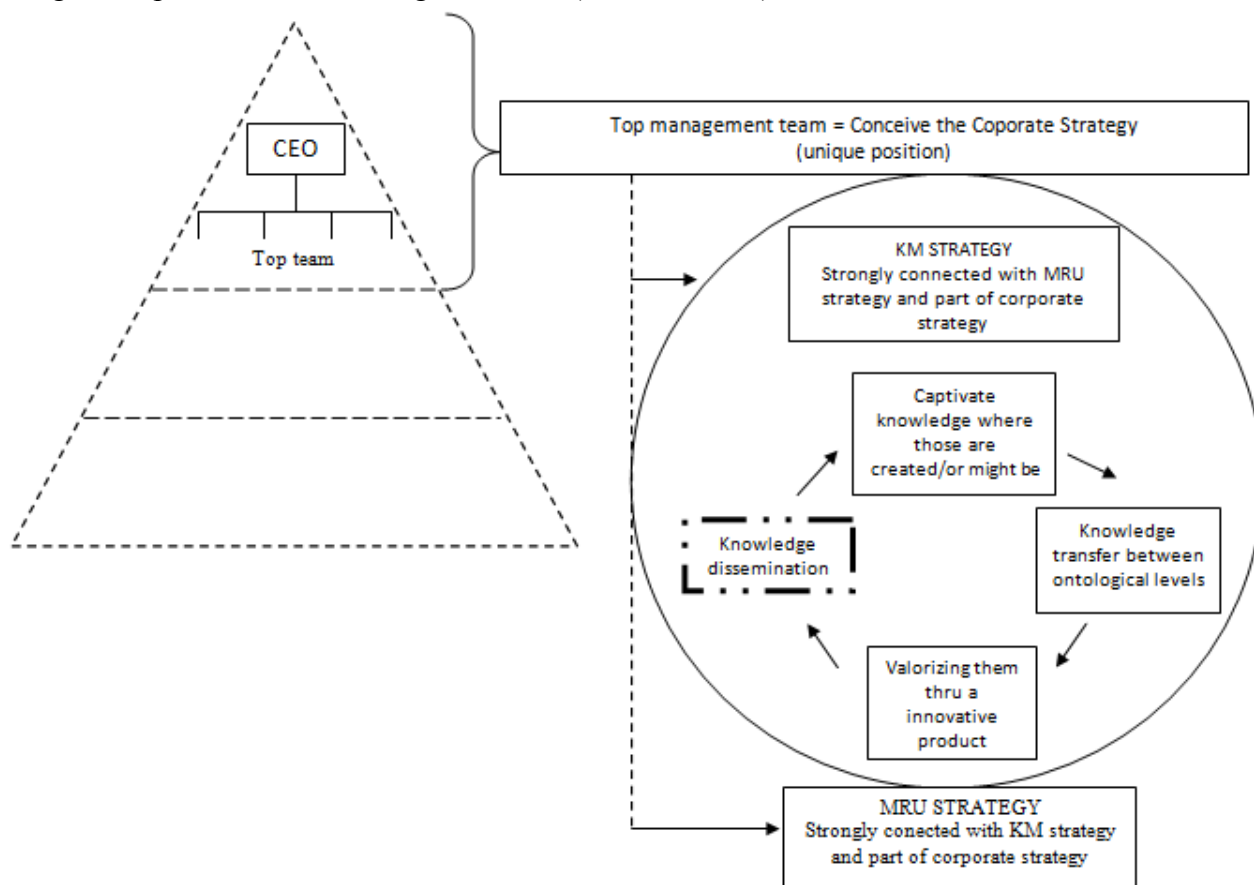
- a. Frequently clear production of copies
- b. The necessity of being the smallest and the most shining in the world
- c. It should have had a price at least halved in comparison with the prices of the similar products on the market
- d. It should have been easily maintained without service, regularly
- e. It would have been creative and containing entertaining elements like colours and various paper sizes (Nonaka, 1995).

The research team was made up in order to examine what would be necessary to carry out this project. The members of this team certainly faced a big challenge, which, in order to be solved, needed members from different disciplines who had to leave their conventional thinking and create a totally new concept. After a long time of research and debate, they came to the conclusion that the old cartridge, after each copy module ended, had to be replaced, a matter that brought no service expenses. According to the two organized groups within the feasibility plan, the members of the feasibility team managed to transform everything into something practical but difficult to achieve for other competitors. The work team of the mini copier had a number of 130 members and was supported by some 200 scientists, engineers and marketing specialists. The president of the company stimulated them by speaking about the importance of the project and the need that Canon had to gain through technology.

The multidisciplinary nature of the work team brought benefits for its members in the long run. The vice manager of R&D saw that in any company, the good products are created when the engineering of the product and the design work together. Of course it is easier for the engineers to work separately from the designers, but not necessarily better. So the discussions of the designers with those from the production department, the effort to adopt their demands and to shape them according to their own ways, bore fruit in tangible, as well as intangible results. Nitada, who is the vice leader of R&D, together with work teams of Mini – Copier, attributed the success of the project to the open discussions between the members, irrespective of the posts that they held, the age or the functional groups they belonged to. He and other middle managers that were involved in the feasibility study was the integrating key through the different roles they had. A very evident and operative integration was that related to the fact that the work team involved many groups.

It is very important to mention that Nitada involved at the end of each project the top management. There was also an assessment program called: *In my house test*, in which they actually tested the mini-copier. In 1982 a few copiers were delivered at the residence addresses of the top managers, but none of the delivered mini- machines were returned, a sign that things went to a right direction. At that moment, of course, Nitada and other members of the work team felt that they already had an advantage. So, Canon introduced two versions of the mini-copier PC -10 and PC-20 around the year 82. The machines generated 470 licenses of which 340 for the new cartridge system. It is clear that a new knowledge at the organizational level was created which was used, of course, then in different fields. First, the knowledge was used in other automatizing offices of the

equipment, with all respect for what meant first of all the disposable cartridge. Secondly, the knowledge created through the Mini-Copier project paved the way so that the production of copiers be automatic. This change was more than main in stimulating the sale of copiers and in the industry of the machines. Third, the organizational knowledge created at Mini - Copier was possible through the role that the middle managers had and the work with different specialists - middle- up- down management process for knowledge creation. (Nonaka, 1995).



**Figure no. 1. The inclusion of KM strategy in corporate strategy**

Source: author contribution

We appreciate that the top management and its team still holds a unique role/ place in any business organization, given the fact that one of its main duties/ tasks (in all their complexity and number) is to ensure the creation and fulfillment of a solid corporate business strategy (in its assembly: effective vision, mission, objectives and strategy) in which we consider that there is a clear need of including KM strategy as the knowledge creation spiral in close connection with the strategy of human resources, as shown in Figure 1. This is because, during present times, the strategy of a business organization, generally, can't persist at the executive status in order to fulfill the key objectives and activities, but it's necessary for the individual development, in the first place, and for the dynamic of learning, which overall leads to the development of the organization and implicitly to an organization that learns.

**5. CONCLUSION**

The competitive advantage in the present can't be obtained unless the top management and its team acknowledge the clear need to appeal voluntarily and to implement KM as a business practice, and thus to include KM strategy into the corporate strategy precisely out of the necessity of an efficient management of human knowledge and to create new organizational knowledge (as innovative concepts, new products). In fact, we believe that possible contributors to the organizational development, in the way we mentioned previously, could found themselves on all



levels from the organization structure (and also in the operational subsystem), even if some of them, mainly the ones from the management levels, form in a more obvious way teams that conceive organizational knowledge (working intensively with their own stocks of personal knowledge). We think that it's necessary to see the difference between them, as well for the technical terms in the KM literature because its contribution is blazing (to each of the two categories of knowledge workers in the organizational assembly).

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