

Knowledge Based Strategy

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Abstract: The paper is focused on the essential of knowledge-based strategy taking into consideration the theoretical and practical development during the last 10 years and especially knowledge revolution. It demonstrates the specificity of the company knowledgebased strategies and their necessity. More than this it presents essential elements regarding how to elaborate and to implement a knowledge based strategy starting from well know research in the field.

JEL Classification: L100

Keywords: knowledge based strategy, knowledge based organisation, strategic knowledge, knowledge 'gaps', strategy methodology

Introduction

During last two decades in USA, Japan, European Union and other areas has developed knowledge revolution, which means the fundamental change from the economy based mainly on tangible resources to the economy based mainly on intangible resources, on knowledge. As the result in the most developed countries has started to develop a new type of economy. The names used for it are the: new economy or knowledge which represents a basic raw material, essential production means, new type of products and the principal component of intelectual capital¹. Competitive advantage of economy and company depends largely and increasingly on knowledge use. The main component of knowledge-based economy is knowledge-based organisation, which presents specific features². For this organisation has emerged a new type of management – knowledge based management. Its characteristics are quite different from professional management used usually in the most part of the companies today. Without any doubts knowledge-based management incorporates – as a major component – knowledge

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based strategy. Its characteristics are crucial for the quality of the management practice in companies and for their performances and competitiveness.

Hypothesis

In our paper we have started with the following hypothesis:

- If the knowledge based strategy is really a new type of strategy, different from classic strategy, it should have specific features and content;
- if the knowledge is the essential element of the knowledge based organisation and knowledge based management, it is possible to have in the strategy a particular type of knowledge strategic knowledge and it should have specific features;
- the variety of knowledge based organisations and managerial approaches reflects on the crystallisation of different types of knowledge based strategy;
- the knowledge based strategy, because it is different from classical strategy, should present certain specific methodological elements.

Based on our own research and using papers elaborated by specialists from USA, Japan, South Korea, Great Britain, Romania and other countries we have analysed the validity of the above mentioned hypothesis.

Prerequisites and Features Defining SMEs' Knowledge Based Strategies

The deep changes that occur in economy, within companies and within knowledge – based management, are reflected, in a natural way, in a new approach addressing the organization strategy. It is thus outlined – as it has been very strongly proved by Smith Zack³ – the so-called knowledge – based strategy, which is based on two new elements that are not usually found within the classic strategies:

- knowledge becomes increasingly important as a strategic resource of the company
- learning becomes the most important capacity of the organization

Apart from this, there are two essential elements, associated to the first ones, such as:

- company finalises its activities into products knowledge and / or service knowledge

- achieving innovation becomes critical for the organization, being conditional not only upon performances but even for the company existence

Knowledge based strategies, regardless category, differentiate from the strategies approached by a classic company due to the following essential elements:

- including, within each component of the strategy – mission, objectives, options, resources, deadlines and competitive edges – of knowledge as a core ingredient; the objectives of the strategy needs to address the use and capitalization of the knowledge at an express manner
- placing a major focus, within the elements of the strategy, along with the knowledge, on the main human resources, who have possession of this, use and capitalize them
- absolute and relative growth in the modern means approaching communicational information and techniques within the whole set of resources dimensioned within the strategy
- including, within the strategy, apart from endogenous elements, well known, of various external elements, starting from the vision of the extended value chain based on knowledge and on the participation of the main stakeholders of the organization
- outlining an increased flexibility of the strategy, both within the working out process, and – particularly – in terms of having it operational
- large scale use of the sliding strategic approach, which consists in periodical updating, in general on annual basis, of its components
- large scale dissemination of the creative elements within all the components of the strategy, which result in this having a strong innovative dimension, regardless the category
- outlining a strong participatory dimension within the process documenting, helping working out and implementing the strategy, which secure the participation of quasi each and every employee based on knowledge, within a company, as well as its other stakeholders
- attaching a strong motivational content of the strategic processes of elaboration and implementation, using specific means, adequate to the decisive role that the knowledge – based experts play within the organization
- reduced formalization degree becomes the outcome of part of the knowledge and its fluidity becoming intangible.

Analysing the content of the features identified by us outlines that most of them are strongly connected to the human factor. This finding is in line with the outcomes of a survey conducted by the British advisory company, Prodata, on a sample of

European companies active in the sector of cutting-edge technologies, according to which the best practices in knowledge based management are documented on the acknowledgement of the fact that people and processes they participate in are placed before technologies.

According to the Japanese experts Nomura and Ogiware⁴, the features of the strategy – first, the focus on the expected knowledge and objectives – needs to be visible for all the company stakeholders. This is the prerequisite for them to become aware and implicitly, for achieving a full and highly performing operational strategy.

Nevertheless, the elements outlined do not cover the whole range of specific features of strategies used in knowledge – based companies, but they include, beyond any doubt, those that are most relevant, with multiple significances and impacts that are worthwhile considering.

Strategic Knowledge

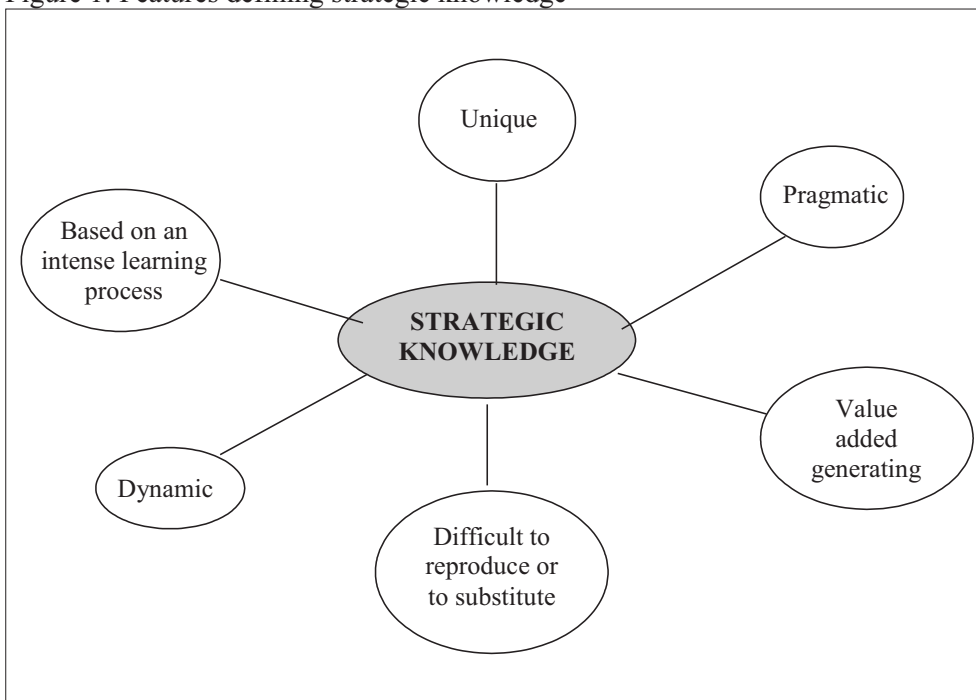
Within the general framework of the strategic processes in knowledge – based companies, not each and every knowledge has the same impact. The analysis of the actual situations in the most developed and highly performing companies, based in knowledge, outlines the occurrence of a new category of knowledge – strategic knowledge. These have a key importance in terms of sustainable company development and they consist in – according to those outlined by the expert A. Grunwall⁵, combination of knowledge for orientation, explicit knowledge and action guidance knowledge. Generating this category of knowledge is a new category of challenge for the scientific system.

Based on our surveys, the strategic knowledge have an array of specific features, outlined in figure 1, regarding which we would like to point out several aspects:

- Unique resources means that they either cannot be found in other companies, or it is only a low number of organizations that have their ownership. The rarer the strategic knowledge are, the more they present a stronger strategic advantage for the organization
- Hands – on and user – friendly, in the sense that they may generate new products and services within the company or they trigger an innovative and significant improvement to the existent ones. This features reaches its maximum when the knowledge itself becomes a product, traded in the market
- Value generating, which means that by using them, added value is brought into the company, a value that is acknowledged by the market. The strategic knowledge are included within the organization value vector

- Difficult to reproduce and/or substituted by other knowledge, a feature that secures company sustainability and profitability on medium and long run. The more that within the company, tacit and strongly innovative knowledge account for a larger share, the more this feature of the knowledge is increasingly intense and their strategic nature is more obvious

Figure 1: Features defining strategic knowledge



- Dynamic, in the sense that they can be updated and amended in keeping with the changes within the endogenous and exogenous environment of the organization, particularly in line with the market requirements. Their dynamic nature refers both to the content of the knowledge and to the type and manners of approach
- Based on an intense learning process, whose ongoing operationalisation is a decisive condition to preserve the other features of the strategic knowledge. The intense learning process, in spite of being difficult and in spite of consuming resources, is the best protection to maintain and amplify the strategic nature of the knowledge.

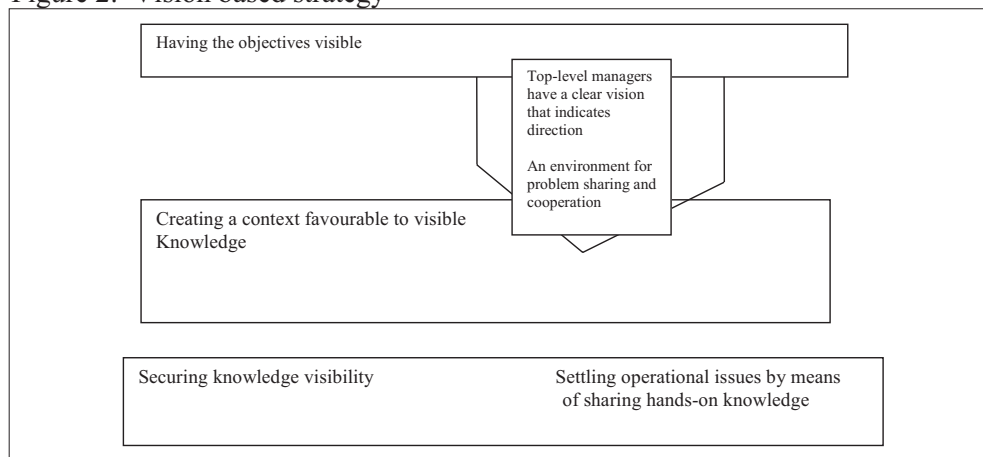
Thus, the content, working out and implementation of the strategy, change radically, leading to knowledge – based strategies.

Types of Specific Strategy Based on Knowledge

Rather few specific knowledge – strategies have been shaped until so far, most of knowledge – based companies using the well known categories of strategies, with certain adaptations, that were addressed in the previous paragraph. In this respect, one may find relevant the outcomes of a survey conducted in 6 European countries – UK, France, Italy, Germany, Sweden and Switzerland – where 1004 general managers and managers⁶ have provided answers, which outlines that only a few companies have knowledge – based strategies, in spite of 87 per cent of them being confident that they could result in increased competitiveness within the companies they work for.

A first hierarchy of the strategies based on specific knowledge belongs to the Japanese experts that were mentioned in this paragraph, Takohiko Nomura and Naoki Ogiwara⁷ who, depending on the level the targets considered are, delineates three categories of strategies.

Figure 2: Vision based strategy

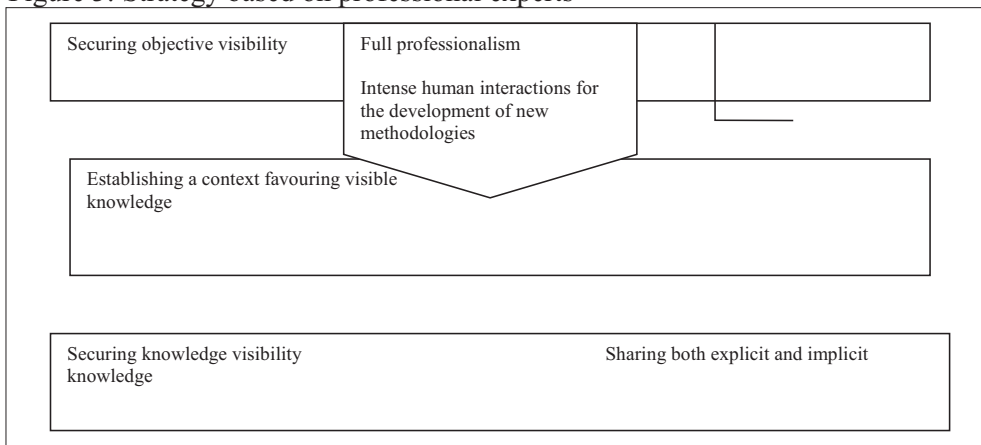


A vision substantiated strategy, whose content is represented by the settlement of issues by combining the knowledge of a large number of persons. Since one cannot anticipate what knowledge are needed in the future, working out a clear vision, by means of which one guides development, a vision that the persons involved have been informed about, is the main driving force of growth. Such a strategy is specific to

companies Toyota Motors, British Petroleum, Northrop Gruope. Figure nr. 2 outline the elements defining this strategy.

Strategy based on professional experts is mainly meant to develop experts' abilities, resulting in increased company competitiveness. Unlike the previous category of strategy, this relies on more in-depth tacit knowledge, which it capitalizes by means of strategies, technologies and/or advisory services worked out. A specific element that can be noted within this technology is represented by knowledge brokers. Figure 3 outlines its main features.

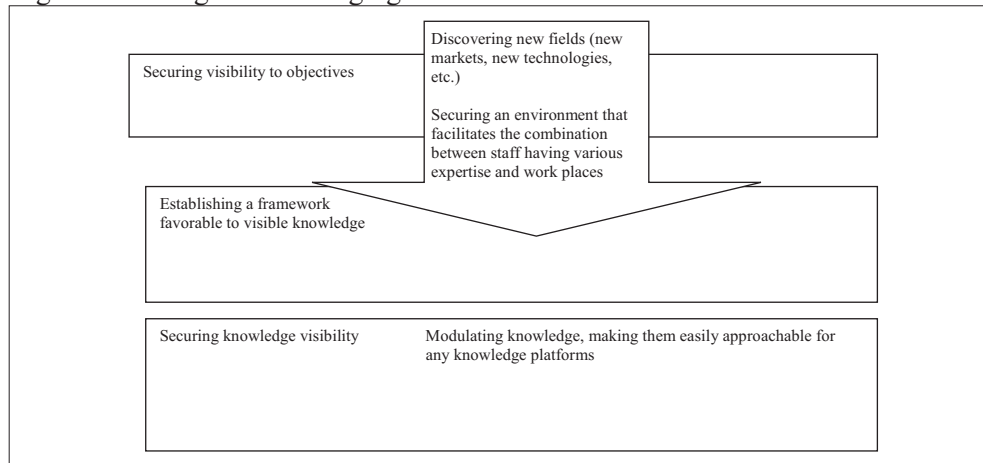
Figure 3: Strategy based on professional experts



This strategy is most frequently used in companies that render professional services, advisory services, etc. Such a strategy is common practice for PriceWaterhouse, World Bank, etc.

Strategies for emerging situations. Their feature is focus on innovation, using intensely the clients' and employees' knowledge. The prerequisite that documents this strategy results from the understanding of the fact that the major sources of innovations are represented by the combinations of persons working in different fields. The main role of top managers consists in making employees aware on the importance of tasks and activities that are not common practice as well as in facilitating contacts and cooperation of persons working in different sectors within and outside the company. The core aspect of this strategy is presented in figure 4.

Figure 4: Strategies for emerging situations



3 M and Kao are among the companies using this category of strategies.

Another approach for specific knowledge based strategies, a different one, was used by Professors Hansen, Nohria and Tierney⁸, which, based on surveys, delineated two categories of strategies:

- A coding strategy, by means of which detail coding of knowledge and their inclusion (storage) into databases are promoted, where they can be accessed by any category of employees. This type of strategy addresses explicit knowledge and it is characterized by massive investments in IT technique, with emphasis on valuable faculty graduates, group training of the staff and far distance e-learning, rewarding the employees for their contribution to the establishment of databases and their use
- Personalization strategy, which addresses the promotion of the knowledge that employees possess, which, by means of direct contact among employees, grow and are shared. It is obvious that this strategy considers tacit knowledge, whose specific nature and importance have been previously outlined. A distinct feature of this strategy is represented by moderate investments in IT, focus on the exchange of tacit knowledge and their debate, employing and using MBA graduates, who have a special interest in problem solving and who may cope well with ambiguity, staff training by individual coaching, focus on rewarding those employees who share their knowledge by direct contacts with the other employees.

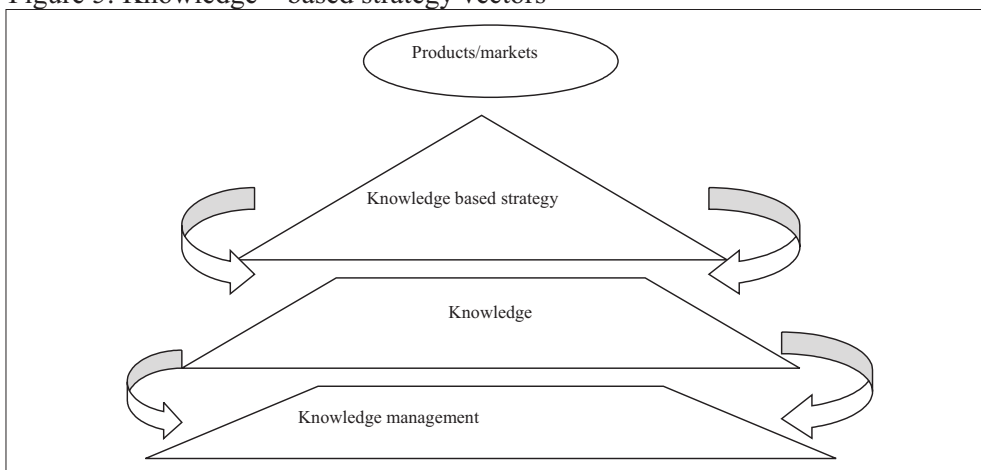
In a knowledge based company, these two strategies may be used either each of them, or both. In order to acquire high performance, one should use them

concomitantly and on differentiated basis depending on the breakdown of employees who are knowledge – based, on their share and level of explicit knowledge and respectively tacit, within the organization.

Methodological Elements for the Accomplishment of the Strategy

Regarding the design of knowledge – based strategy, a key specification needs to be made, which is still in an early stage. The strategic knowledge needs to be strongly integrated with the core concept of the business, with the products and services it has specialized it, which provide it a strategic advantage, and which, in fact, has led to its development and performances. This important connection, having the value of an axiom, is outlined in figure 5⁹.

Figure 5: Knowledge – based strategy vectors



In working out the knowledge – based strategy, one may use modern well reputed methodologies, whose main components are outlined in figure no. 6*, since the overall thinking would not change. Yet, it outlines certain new processes, stages and correlations, unless presented, one cannot design and implement an effective knowledge strategy, which means:

- knowing and documenting the strategy by knowledge accumulated within the organization
- finding the knowledge required for documenting and making strategic options operational

- identifying knowledge ‘gaps’, both internal and external ones, among competitors
- establishing modalities to acquire strategic knowledge
- integrating the new strategic knowledge within the overall strategic process, including by intense learning processes, with a steady concern to generate value added within the company.

Figure 6: Strategy working out methodology

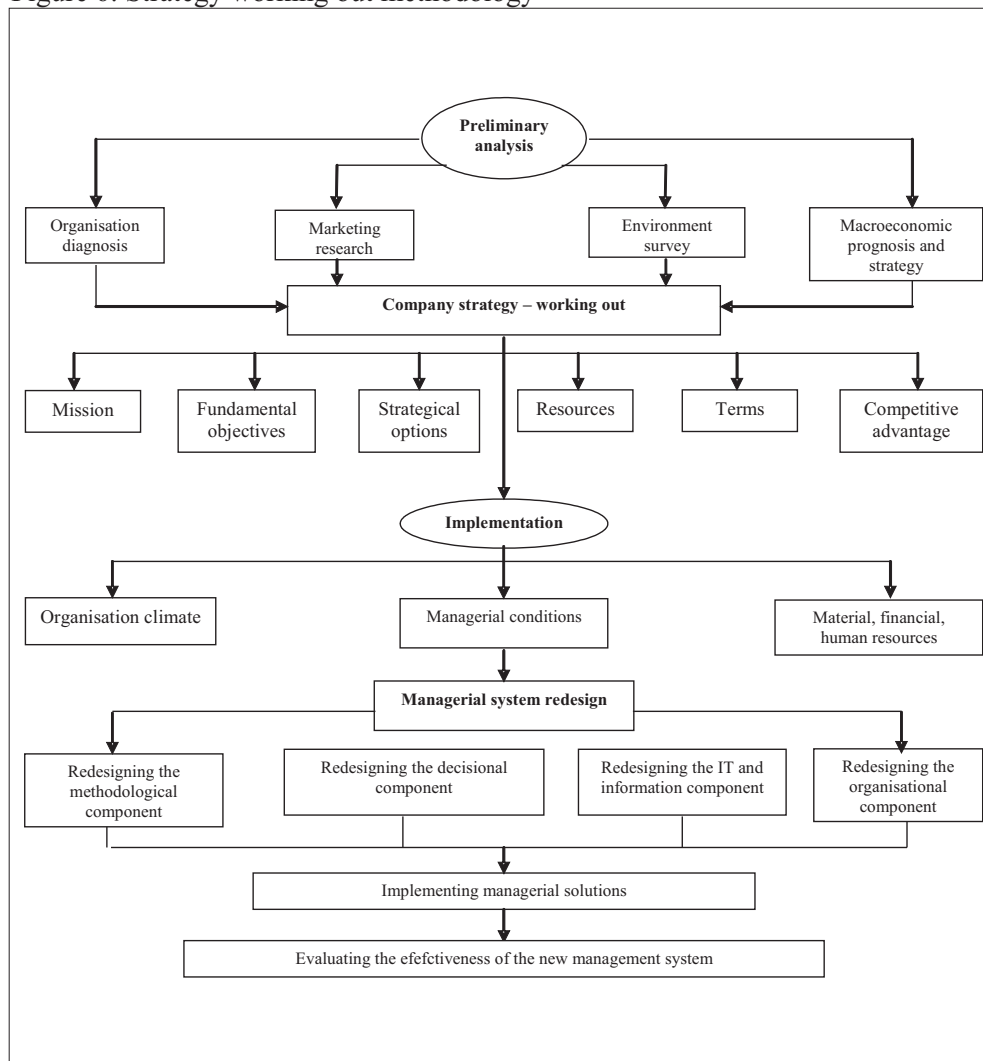
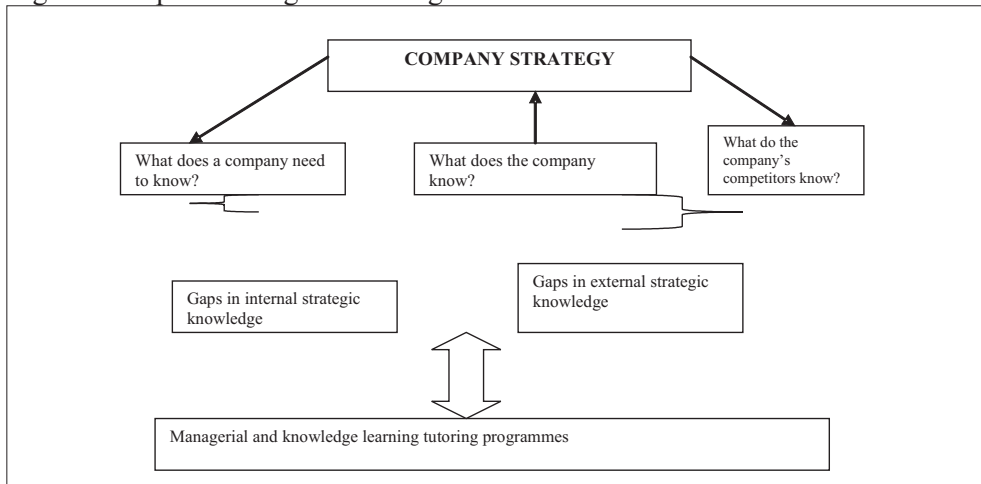


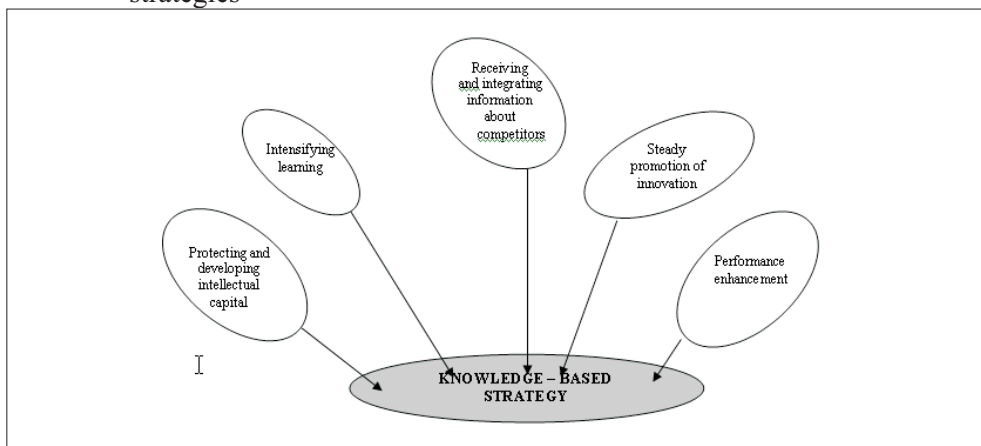
Figure 7, designed by Smith Zack, displays these elements in a highly illustrative manner.

Figure 7: Gaps in strategic knowledge



The development of a knowledge – based strategy requires, as Professor Leonard from Harvard University has underlined, special attention to be attached to a set of five factors, within the context of a knowledge – based company, indicated in figure no. 8.

Figure 8: Main factors in working out and in implementing knowledge – based strategies



At the end, one last highlight: each company, due to its unique feature within the whole environment, specific strategic knowledge existent in the company or which it needs, must design and implement managerial solutions based on own knowledge.

Thus, one secures that the real needs in the company are adequately addresses also within the context of capitalizing the potential available, including the knowledge accumulated and received within given conditions.

Another specific element that occurs in working out knowledge-based strategies is represented by the identification and integration of strategic knowledge into the company. It is for this purpose that expert Charles Seely¹⁰ proposes a new procedure, which includes the following stages:

defining the elements that have strategic importance for the company

identifying the owners of these elements and locating them

finding the knowledge which, in spite of being supportive for the company key activities, are not core elements in securing the company competitiveness, in the light of a possible externalization

identifying those knowledge that are obsolete, morally speaking, or have low importance for our company, assessing the use of their value for other companies or stakeholders, assessing the needs to capitalize by sale, joint ventures, etc.

In designing and in having the strategies operational, one must attach a major importance to securing an ethical behaviour. Consultant Sue Brelade¹¹ recommends documenting decisions and actions by means of using three ethical principles, which are:

- principle of reciprocity, which means generation of benefits, and advantages to all stakeholders participating in knowledge transfer processes
- principle of usage, which considers maximization in using the existent knowledge, preventing frustration among the participating knowledge experts
- principle of acknowledgement or reward for the parts involved in information treatment processes depending on each and every one inputs, up to granting them the capacity of company co-owner.

Figure 9: Destinations of the resources allotted for investments in strategies

Organizational	Technical means and technologies
Abilities (Explicit) <ul style="list-style-type: none"> • training and development • managerial processes • protection measures 	Use <ul style="list-style-type: none"> • repertories and instruments • software database • knowledge based systems
Features (Tacit) <ul style="list-style-type: none"> • rooms for meetings • events • communities 	Connectivity <ul style="list-style-type: none"> • video conferences • intranet

The allotment of resources, the investments foreseen within the knowledge – based strategies, need to be directed concomitantly toward tacit and explicit knowledge, toward organizational processes, technical means and technologies. This becomes obvious when looking at the information listed above.

We consider the elements presented contribute to the better understanding of the complex knowledge based strategy and help their development in the companies.

Conclusion

Elements presented in these papers demonstrate that the knowledge based strategy becomes reality, having numerous specific aspects. It is based on four new premises and contains at least nine specific elements. The main ingredient of the knowledge based strategy is the strategic knowledge which has an array of specific features: unique, pragmatic, value added generating, difficult to reproduce or to substitute, dynamic and based on intense learning process. All these features are mandatory for each strategic knowledge, which has an essential contribution to the company competitiveness advantage.

The main types of specific strategy based on knowledge are:

- a vision substantiated strategy;
- strategy based on professional experts;
- strategy for emerging situations;
- coding strategy
- personalisation strategy.

For each of them are mentioned the semnificative characteristics discovered by Nomura, Ogiwara, Hensen, Nohria and Tierney. They revealed the specific content and utility of each strategy.

Elaboration and implementation of the knowledge-based strategy involve a complex methodology, which is based on four premises, contains six components and needs threee phases. A special attention should be paid to the identification of strategic knowledge ‘gus’ taking into consideration of five essential factors protecting and developing intellectual capital, intensifying learning, receiving and integrating information about competitors, ... promotion of inovation and performance enhancement. Another specific elements that occur in working out knowledge-based strategy is represented by the identification and integration of strategic knowledge into the company using a specified procedure make of four stages. An important ingredient of this strategy is the allotment of resources needed

to be directed concomitently toward tacit and explicit knowledge, toward organisational processes, technical means and technologies.

Knowing and taking into consideration of a such particular aspects is for generation of performant knowledge based strategy.

NOTES

¹ Microsoft created by Bill Gates may be one of the best example of this new type of organisation. Its tangible assets, are environ 80 bilions of \$ and its market value about 285 bilions \$.

² For this details see O. Nicolescu, Luminita Nicolescu, Knowledge based economy, organisation and management, Economica Publisher, Bucharest, 2005; Nonaka, I., Takeuchi, H., The Knowledge Creating Company, Oxford University Press, New York, 1995; T.A. Stewart, The Wealth of Knowledge – Intellectual Capital and the Twenty-First Century Organisation., Nicholas Bready Publishing House, London, 2002.

³ S. Zack, Shuster, J.A., (1998), *Knowledge and Strategy Institute for Knowledge Management*, Williamsburg, V.A.

⁴ T. Nomura, N. Ogiwara, (2002), Building Knowledge – Centred Organizations, *Knowledge Management Review*, vol. 5, no. 4,

⁵ A. Grunwall, (2004), Strategic Knowledge for Sustainable Development: the need for reflexivity and learning at the interface between science and society, *International Journal of Foresight and Junovative Policy*, vol., no. "

⁶ Zack, S., Shuster, J.A., (1998), *Knowledge and Strategy Institute for Knowledge Management*, Williamsburg, V.A.

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⁸ Hansen, M., Nohria, N., Tierney, T., (1999), What's Your Strategy for Managing Knowledge, *Harvard Business Review*, no. 2

⁹ Zack, S., Shuster, J.A., cited sources

¹⁰ Ch. Seeley, Knowledge Preservations in Turbulent Time, in *Knowledge Management Review*, vol. 4, nr. 6, 2002

¹¹ Sue Brelade, Ch. Herman, Doing the Right Thing in a Knowledge Transfer, in *Knowledge Management Review*, vol. 6, nr. 1, 2003

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