Abstract: Strategic knowledge is considered as an important determination of an organization’s value creation potential in dynamic, knowledge-based markets. Hence, this article presents an approach how to develop model which is base on strategic knowledge market learning and knowledge adjustment. This approach is aimed to respond effectively to changes in the external environment. Current process of globalization is associated with creating the new fields of economy which are covered by term “knowledge economy” (economy based on knowledge, or economy of knowledge). Information and knowledge are in the theory and the practice more and more consider as immediately productive force and long time have been viewed as strategic factor of production. Through information we acquire the new knowledge about environment. Information minimizes risk and uncertainty, or, as K. Errow said “information is term which is direct opposites to the term uncertainty”. Knowledge, information, skills, and innovation, revolutionary moved the borders of social and economic growth and development. They become the key wealth and a production resources which dominantly influence movements of so called “global order” to post-industrial era. The new business environment is characterized by interlink technologies of telecommunications, cable, satellite, computer equipment, software, and complex operating protocols, and the global information infrastructure. It is easy to minimise volume of changes and present them as installation of computers, computer net ware, and cables. But, even so narrow view of changes shows that in the new economy increase speed - in commerce, travel, communications, and innovation. It creates uncertainty, complexity and turbulence. At the level of companies, need for new knowledge appears as means which will provide effective response to environment changes. Questions without answers are numerous. We don’t have ambitions to cover all of them, because of limitation of space and ourselves, but through generalisation we will try to give mythical approach acquiring the new knowledge which helps increasing of dynamic capabilities of firms.

Key words: knowledge, risk, learning, knowledge, dynamic capabilities, learning loop, innovation.

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1. Introduction

Process of globalization is firmly tied with creating the new fields of economy, which was marked as term “knowledge economy” and “information economy”. Knowledge and information have been treated as immediately productive force and long time has been considered as strategic factor of production. (Compain, 1988, p. 10). Who would have thought just ten years ago that the Moscow stock market could so drastically affect U. S. companies and share values as it did in 1988? The consensus among experts then was that what has begun as a financial crisis in Asia was becoming a global economic problem as serious as any the international community has faced since the end of World War II. A global marketplace can function only with diverse and confidence-worth information infrastructure capable of accommodating a lag volume of transaction and communications. Composed of interlink technologies of telecommunications, cable, satellite, computer equipment, software, and complex operating protocols, the global information infrastructure constitutes the central nervous system of the global economy. In the emerging cyber era “without information nothing has meaning”. Economic globalization and the proliferation of advanced information technologies have transformed the national security risk field and called into question the efficacy of government leadership in an environment that is essentially commercial. Not just economic trends or technological fads, economic globalization and the proliferation of advanced information technologies represent the bases of the international regime that has replaced the cold war structure. Operating under still evolving rules, logic, and structure, these forces are driven by free market capitalism, rather than an ideological and geopolitical struggle. In the words of Thomas L. Friedman: “The defining document of the cold war was the Treaty (negotiated by governments), but the defining document of the post-cold war era is the Deal (negotiated by banks and corporations). The defining calculus of the cold war was territory and throw weight; the defining calculus of the postcold war cyber era is speed—in commerce, travel, communications, and innovation. Einstein’s $e=mc^2$ has been replaced by Moore’s Law that states the computing power of computer chips will double every 18 months”. Innovation is driving force of global movement in economy.

A new knowledge-based economic order characterized by on-going innovation and rapidly changing market conditions seems to be emerging. Many directors and managers no longer see their world as static or slowly evolving. Increasingly, they see it as part of a global entity that is uncertain, turbulent, complex, and fast-changing. There is now a clear need to develop organizational capabilities and processes that will respond effectively to changes in external environment. This response must be far-reaching: it must include adapting to the both: changing customer needs and changes in the political, physical, economic, social, technological, and trade fields. What is the critical change in relations between organizational structure, management, and internal processes and its current market environment? New knowledge is critical change. Conceptual framework of the discussion in the paper is shaped through argument that struggle to attract knowledge is the key base of strategic responsiveness. We must encourage continuous learning by people at all levels of the organizations, and across it.

Obviously organization’s superior performance arguably depends on corporate capabilities that enhance the ability to learn about the current market environment and thereby allow corporation to consider adapting its strategic position in response to changing market conditions. Accordingly, this article adopts organizational changes, organizational learning, knowledge creation, and strategic responsiveness perspectives to develop a model that stimulate the performance effects of new market insights and corporate repositioning.

Whereas sustainable competitive advantage is assumed to rest on existing firm-specific competencies, the focus on dynamic capabilities suggests that ongoing value creation is associated with learning processes that enhance the corporation’s ability to be strategically responsive (Teece, Pisano and Shuen). However, these contentions have not been systematically investigated vis-à-vis the corporate value creation potential in dynamic markets. As argued by Ilintch, D’Aveni and Lewin: “Further research is needed on...how...to manage organizations that can respond to the uncertainties...of hypercompetitive environments”. Hence, a key motivation of this study is to investigate ways enhancing of organizational capabilities to cope with complex and turbulent environment. Accordingly, this article will stress the value creation effects of learning as a knowledge adjusting process that provide the organization with market insight that allow it to change strategic position in the face of changing market conditions. It is necessary investigate the effects of changing market conditions. This article
stress importance investigating the effects of learning and adjustment of market knowledge that provide the basis for alternative strategic responses and eventual corporate decisions to change market position. Uncertainty is incorporated as ongoing stochastic changes in market conditions as reflective of hyper competition while periodic cash generation and the volatility of the cash flows constitute central outcome variables.

2. Knowledge vs. risk, turbulence and complexity

New knowledge-based economic has been creating new rules for business. As represented by neo-classical production function, production in the old economy results from the inputs of land, labor and capital. While these traditional inputs still plays a role in “new economy”, knowledge has emerged as the most important factor of production. Under old economy, the traditional factors of land, labor and capital are predominant as source of comparative advantage. In the “new economy” the comparative advantage is based on innovative activity. An important source of these innovative activities is knowledge spillovers that cannot be easily diffused across geographical space.

While the old economy depend upon continuity (Chandler), the “new economy” provokes and thrives on changes. Innovation is present under both change and continuity. The difference is shaped by a distinction between incremental and radical innovations. The “new economy” is characterized by a tremendous degree of turbulence. It is economy in motion, with massive number of new firms entering each year. The new economy is based on heterogeneity. A world of homogenous economics agents promotes diffusion but not innovation. In a heterogeneous population each individual has unique information set. New ideas are mere likely to emerge from communication in a heterogeneous that in homogenous world.

The central future of work is dealing with uncertainty as uncertainty replaces predictability as the main characteristic of the work environment all who deal with uncertain situations are more valuable in the “new economy”. Thus, in “new economy” motivating employees to participate in the creation and commercialization of new ideas matters more then in simply controlling and regulating their behavior.

In an era where uncertainty is high and information is imperfect, market exchange tends to be more deficient than intra-firm transactions efficient relative to market exchange. In old economy, which was dominated by a high degree of certainty and predictability of information, transaction within firms tends to be more efficient than market exchange. This is consistent with work of Coase (1937) and more recently by Williamson (1975), an analytical distinction was made between exchange via market and intra-firm transaction. Coase (1937) and later Williamson (1975) argued that the size of an enterprise will be determined by answering what Coase (5, p. 30) articulated as “The question always is, will it pay to bring an extra exchange transaction under the organization authority?” Both Coase (1937) and Williamson (1975) emphasize that uncertainty an imperfect information increase the cost of intra-firm transaction. My view is that they increase risk. Risk is uncertainty of outcomes. Many organizations are faced with the next questions:

- How to increase confidence in achieving its desired outcomes;
- How to effectively constrain treats to acceptable levels, and
- How to take informed decisions about exploiting opportunities.

Every organization should have a risk management strategy, designed to reduce uncertainty. The application of the strategy should be based on organization learning.

3. Organization learning and strategic response capabilities

Organization learning has been conceived in a number of ways. A predominant perspective describes learning as action improvement from changes in organizational behavior induced by perceived performance shortfalls and more complete knowledge (Argyris and Schon). Under-performance is ascribed to misperceptions, miscommunication, and the inertia of organizational routine and, therefore, learning takes place when organizational members confront these ‘espoused theories’ with their ‘theories-in-use’ (Argyris) or ‘mental models; (Senge). That is, when individual perceptions are confronted with reality and the managers’ beliefs are aligned with reality, then the organization learns. This view implies that managerial perceptions can be uncovered and adjusted through learning process to capture underlying true settings. However, the firm’s creative behaviour and constructive responsiveness to a changing market environment may be just as important This conceptualization of learning is consistent with hyper competition where
ongoing innovation constantly changes the competitive environment.

Organization learning has been classified as process refinement and search to change existing routines. These kinds of learning are variously referred to as ‘learning I’ and ‘learning II’, ‘single’ and ‘double loop’ learning, and ‘first’ and ‘second’. In the first order learning, existing competencies are made more efficient by perfecting current practices. Under first order learning existing competencies are improved by perfecting current practices. In contrast, second order learning creates new knowledge that allows the organizations to change practices. Singular adherence to particular distinctive competencies can become a ‘trap’ that withholds the organization from considering new responses to changing market conditions. That is, knowledge updating through learning is imperative to enable an organization to respond to market changes and probably should comprise elements of both ‘first’ and ‘second order’ learning to strike a reasonable balance between exploitation and exploration.

4. Understanding the learning loops

Learning is both individual and conducted in the social fabrics of organization, involving both cognitive and social communication bases. Individuals are specialized to organizational ideologies and beliefs, values, and norms. This organization culture elements impacts both the formal organization, informal organization, and decision making. Ideologies/beliefs, values, and norms are antecedent to, as well as a consequence of, higher level and lower level organization learning.

Higher level learning is double loop (Argyris). Double loop learning seeks out contradictions, in order to resolve them. The detection of contradictions produces learning, resulting in changes in the individual and organization’s underlying ideologies/beliefs, values, and norms. Thus, higher level learning impacts the entire organization, develops understandings of causation and complex associations involving new actions, and is characterized by change in decision making, and organization itself. In contrast, lower level learning (single loop) accrues through repetition, in a well-understood context, focused on behaviour outcomes, and institutional formal rules. Single loop learning maintains the organizations’ ideologies/beliefs, values, and norms, seeking to detect a correct error within that system of rules.

Strategic response is possible by implementing learning process which is at higher level learning. This will allow the development over time of a corporate value that builds on the famous Ravens axiom. This holds that for any organism to survive, its rate of learning (L) must be equal to, or greater then, the rate of changes (C) in its environment L >= C.

This attitude becomes the central value for solving organizational issues. In these times uncertainty, this is a vital attitude to have for all levels of the organization, from board of directors to the unit manager’s meeting, from the out on the road sales team or maintenance engineers, to workers in the call-canter.

Figure 1. The inverted pyramid

In a complex and turbulent external environment, traditional hierarchal organization is not able to implement higher level learning. That type of organization is focused only “inside the organization”. An effective approach for strategic responsiveness is to turn the hierarchal pyramid upside-down in everyone’s thinking and behaviour, such as shown at figure 1. This provides outside insight. One important aspects of preparing organization for strategic responsiveness is that to provide organizational model which will allow knowledge updating.

5. Market learning and market positioning

Singular adherence to particular distinctive competencies can become a ‘trap’ that withholds the organization from considering new responses to changing market conditions. That is, knowledge updating through learning is imperative to enable an organization to respond to market changes and probably should comprise elements of both ‘first’ and ‘second order’ learning to strike a reasonable balance between exploitation and exploration.

The organizational learning perspective is consistent with the concept of dynamic capabilities that reflect a corporate ability to modify existing and
develop new competencies that create competitive advantage in turbulent environment (Lei, Hitt and Betis, 1996; Teece, Pisano, and Shuen, 1997). It is argued that competitive advantage arises from learning and knowledge creation that increase the range of possible corporate actions. The creation of potential actions resembles identification of 'latent' options that extend strategic choices available to management. The more the organization can consider alternative action, the higher the possibilities of changing market position in uncertain environments.

Constant search of external market conditions and openness to change are necessary for strategic response capabilities. The ability to learn about environmental change is influenced by managers’ cognitive understanding reflected in their belief structure. Hence, to learn and gain new insight organizations must be willing to discard parts of their existing environmental beliefs and managers unlearn when they are willing to change their ‘dominant logic’ Challenging prevailing beliefs facilitates knowledge adoptions and successful firms generally show an urge to change even when they are successful. Manager mental models may also decay over time as organizational practices gradually are taken out of use. Invariably, learning will capture a combination of these types of knowledge, creation, unlearning, and decay processes. Overall process of realising suggested approach of market learning and positioning is shown at figure 2.

Marketing learning should be permanent activity of marketing business process that seeks to match an organization’s resources – the human, financial, and physical – with the wants and needs of customers. This takes place within the context of its overall competitive strategy. It follows that if your company offers customers a closer match than that of its competitors, then you will have the advantage.

That matching process is complex and challenging, since it involves the skilful management of numerous variables. While some of these variables will be within the control of organization, such as availability, affordability, and suitability, others will be beyond its control: for example, interest rates, new laws, and economic trends. A successful match between what customer wants and what you supply therefore require a deliberate and organized activity. Monitoring and evaluation of the market environment is the primary matching activity.

Marketing knowledge contributes to many managerial or policy decision. Corporate or strategic managers need reliable information about market environments and competitors to be able to set the overall strategic direction of organization. Given its importance, marketing information needs to be collected, collated, and reported in ways appropriate to the decisions it will support. When you request marketing information an research you must, therefore, understand clearly what you need to know in order to make the judgments for which you are responsible. Research topics can caver both internal and external areas. With the aim of enhancing marketing learning you should consider: market-share analysis, market potential, market characteristics, sales performance, business trends, economic forecasting, competitor products, pricing studies, product testing, and information systems. Integrated as it is with marketing action, marketing information is viewed as a resource, but one that is perishable and has a limited self-life. Like other resources, it has a value in use. The less a manager knows about a marketing problem and the greater the risk attached to a wrong decision, the more valuable the information becomes.

6. Process innovation

The rules have all changed. New management precepts espouse mass customization, cross-functional integration, employee empowerment, and self-managed work-teams. If an enterprise can be said to have a shape and structure, that is, a certain arrangements of resources, processes, and relationships with its environment that uniquely describes the organization at a outcomes of any significant innovation initiative is a change in that shape and structure. The playing field for the future will be created by harnessing knowledge, teamwork and process.

Altering the way that people think about organizations needs a radical change in the mind-set of us all. There has to be a shift in the organizational balances and reword from:

- Demanding certainty to accepting and using complexity and diversity;
- Only „hand-on“ managing to more „brain-on“ working;
- Praising logical reductionism to rewarding „both ....and“ creative thinking;
- Over-emphasizing the importance of organizational structure to acceptance of the importance of organizational processes.
- Seeing organizations as fixed, rigid, hierarchies to seeing them as complex adaptive learning systems;
Always accepting the need for a large "management" level to accepting more self-managed work groups that can function without top-down management.

Focusing on distinct functional groups to accepting integrative working and thinking;

Staff feeling helpless, trapped in a psychic prison to their becoming active, valued members of a learning organization.

7. Knowledge creation

We are at the point to understand what knowledge is. How does knowledge differ from information or data?

- "The temperature is 72 degrees", is data and is inert by itself.
- "That is pretty warm for this area" is information, a context into which data becomes meaningful.
- "Let's have lunch on the terrace" is knowledge, a conclusion or decision based on the information and data.

Nonaka describes more formally, how knowledge is similar to and yet different from information. "First knowledge, unlike information, is about beliefs an commitment. Knowledge is a function of a particular stance, perspective, or intention. Second, knowledge, unlike information, is about action. It is always knowledge 'to some end.' And third, knowledge, like information, is about meaning. It is context specific and relational. Tacit knowledge is personal, context-specific, and therefore hard to formalize and communicate. Explicit or "codified" knowledge, on the other hand, refers to knowledge that is transmittable in formal, systematic language." (9, p. 34).

Nonaka goes on to demonstrate that a knowledge creating company needs to convert tacit to codified or explicit knowledge in order to become more innovative, and more productive. Once knowledge is made explicit, it is easier to store, reference, transfer, and redeploy.

David Teece, the Director of the Institute of Management, Innovation & Organization at the Haas School of Business - UC Berkeley (better known informally as the Knowledge Institute) in an August 1999 paper "The role of Firm Structure and Industrial Context" (unpublished), describes some structural issues for the knowledge creating organizations: "The migration of competitive advantage away from tangible assets to intangible helps highlight some fundamental aspects of the business firm. In the global economy we now confront, it is intangible capital which are preeminent; but in addition to protecting such capital against reconstructing hazards, one must also focus on generating, acquiring, transferring, and combining such assets as to meet customers needs. In order to be successful, firms must have a set of attributes, which include: flexible boundaries - favoring outsourcing and alliances; high powered incentives - to encourage aggressive response to competitive developments, non-bureaucratic decision making - decentralized, or possibly autocratic, shallow hierarchies - both to facilitate quick decision-making, and rapid information flow from the market to decision makers, innovative and entrepreneurial culture which favor rapid response and nurturing of specialized knowledge. The modern corporation, as it accepts the challenges of the new knowledge economy, will need to evolve into a knowledge generating, knowledge integrating, and knowledge protecting organization" (15, p. 23).

So what is knowledge worth? Paul Strassman, VP of Strategic Planning for Xerox Corporation in the 1980’s makes the startling observation: “As individuals, the researchers at Xerox Palo Alto Research Center (PARC) were respected as being among the most knowledgeable researchers of their time. Years later, they stimulated the creation of a number of multibillion ventures. Yet, as employees, their contribution to the knowledge capital while employed by Xerox was zero - probably negative” (9, p. 44).

Strassman, who later became Deputy Assistant Secretary of Defense, went on to establish what is the worth of an employee: “It is not how much you pay your workforce or how many computers you give them that matters, it is how well an organization leverages the latent capabilities of its workforce that yields economic value. Knowledge Capital is a reflection of how well an organization integrates the talents of employees, the needs of customers, the skills of the suppliers and its capacity to adapt to external conditions” (13, p. 12).

To prove his point, Strassman calculates the Knowledge Capital per employee of five pharmaceutical firms. As he points out, these firms are for all practical purposes undistinguishable. They are of comparable size; they employ people of similar qualifications, they draw from the same labor pools, they are located in geographical areas with similar socio-economic structures. Their research staff learn about progress from the same sources, they attempt
to satisfy the needs of similar groups of customers, they are subject to identical regulatory requirements, have access to identical computing technologies, and operate undistinguishable manufacturing processes.

 Yet, by Strassman's computation Merck & Co. Knowledge Capital per Employee is $1,423,916 and Warner-Lambert is only $261,847. Glaxo Welcome with $784,215, Abbott laboratories with $702,468 and Johnson & Johnson with $562,568 are somewhere in-between those two extremes. What can possibly explain the 544 percent difference between Merck & Co. and Warner-Lambert. Strassman's hypothesizes that “knowledge capital is the way an organization extracts wealth from its information resources.”

Strassman analysis drives home Drucker's earlier statement that “knowledge has become the key economic resource and the dominant - and perhaps only - source of comparative advantage.” What are firms doing to manage knowledge and what else do they think they should be doing, and what do they feel are the greatest barriers they face in their efforts? The Ernst & Young Center for Business Innovation, in 1997, conducted a study of 3431 U.S. and European organizations. The E&Y team first proposed eight major categories of knowledge focused activities:

- Generating new knowledge;
- Accessing valuable knowledge from outside sources;
- Using accessible knowledge in decision making;
- Embedding knowledge in processes, products, and/or services;
- Representing knowledge in documents, databases, and software;
- Facilitating knowledge growth through culture and incentives;
- Transferring existing knowledge into other parts of the organization;
- Measuring the value of knowledge assets and/or impact of knowledge management;
- Curiously the study failed to recognize a ninth category;
- Facilitating knowledge creation and distribution through the physical environment

As reported by Rudy Ruggles in California Management Review, Spring 1998, the survey provides some valuable insights. “The executives who responded did not hold high opinions of their organization’s performance in any of the categories. Only 13 percent thought that they were adept at transferring knowledge held by one part of the organization to other parts. Even “generating new knowledge,” the process about which respondents had the highest confidence in their organization’s capabilities, still received above-average ratings from
fewer than half (46%) of the executives. However, 94 percent of the executives agreed that it would be possible, through more deliberate management, to leverage the knowledge existing in their organization to a higher degree.” (12, p. 5)

8. Conclusion - The vision of applying

This part of paper will primarily focus on the practice. The approach in this paper contains theoretical elements of a future for companies. Success depends on ability of our companies to implement the new way of strategic thinking. In this new system strategic thinking, nor strategic planning, is the key skill for senior management. To help develop this, it is important to understand that strategic thinking revolves around the primary, and continuous manager's dilemma: „How do we drive the enterprise forward while keeping it under prudent control?“ Sadly, implementing strategy and learning from the feedback is last characteristics number of managers. Our personal dilemma is: “How forced managers to implement the new way of thinking and doing?” That dilemma is result of our non-readiness for the new game. We are trying to abandon approach describing past. We try to go further and propose model which will be basis for companies in the future. We must not forget the fact that many organization are working in the environment which is different than in the developed countries. They have just started to open the processes of changes, which already have happened in the capitalism. They must unconditionally accept and start opening processes that form a base of competitive advantages. Acting in the era of globalization, we should be driven by maxim: „Think globally, act globally!“ .

Today’s paradigm lies on holistic approached, i.e. approach of totality; we could name it systematic approach. Everything is connected and inter-related! Any isolated solutions to a problem, solution out systematic a comprehensive context con only cause new problems. This is completely opposite to the way we often solve problems. Nonsystematic, narrow-purposed and improvised approach cause failures in solving problems; problems are not being solved even after few attempts and that’s why we keep on dealing with same problems.

Literatura:

Zaključak