ACHIEVING COMPETITIVENESS IN KNOWLEDGE ECONOMY ERA

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Abstract: In knowledge economy have changed factors and conditions of business activity, as well as management approaches. Intellectual capital have become key strategic resource for competitiveness. This paper deals with relevant determinants of competitiveness in „new economy”.

Key words: knowledge economy, intellectual capital, competitiveness.

Introduction

Fundamental changes have been appeared in the global economy. Globalization is changing the basis of firm level competitive advantage. New information technologies, changes in using energy and new materials, achievements in biogenetics and biogenetical engineering, increasing international competitors, and other factors influence the stronger flows of globalization. The traditional differentiation on local, regional, and national markets has become less relevant, since the world has become a huge global market. The global economy reaches everywhere. Enterprises in the global economy provide cost-and-feature competitive products and services wherever they find customers, and also seek partners and suppliers wherever they can obtain the most advantageous cost-and-quality combinations. Everyone has access to the same markets and the same suppliers. Enterprise in global economy affirms frequent and numerous changes in almost each business area, which brings many changes in internal and external business environment. The decreased cost of information flows, increases in the number of markets, liberalization of product and labor markets in many parts of the world, and deregulation of international financial flows is stripping away many traditional sources of competitive differentiation and exposing a new fundamental core as the basis for creation of shareholder value.

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1. Determinants of business activity in knowledge economy

Positive aspects of globalization provide new opportunities for enterprises and individuals throughout the world, including developing nation states. Globalization causes work to become more complex. Work must satisfy requirements for improved effectiveness and provide deliverables with new features and increased capabilities that provide the needed competitive value in the global marketplace. Competitive enterprises prepare their workforces better, automate or outsource many routine functions, and organize work in ways that produce new deliverables. Work becomes more sophisticated and expands to take advantage of new capabilities brought about by increased availability of personal and structural knowledge [1, p. 4]. Efficiency of business organizations is improved by automation system that performs routine tasks that free people from to applying greater expertise to more demanding and value-creating work.

Main feature of economic prosperity in the global economy in the 21st century is competitiveness based on knowledge. In an economy where the only certainty is uncertainty, main source of lasting competitive advantage is knowledge. After the era of industrialization, we have to tell about a new paradigm. The paradigm shifts because a sufficient proportion people change their way of viewing the business activities and foundations of competitiveness. The new way of viewing the business is knowledge paradigm. When markets shift, technologies proliferate, competitors multiply, and successful enterprises are those which consistently create new knowledge, and disseminate it widely throughout the organization, and quickly embody in new technologies and products [2]. The knowledge or new economy age differs from the “old economy” [3]. Knowledge economy is information (Internet) and intangible age, in which intellectual resources have been dominated for contemporary business activities. Thomas Steward wrote that the knowledge economy stand on three pillars [4, p. 5]. The first, knowledge has become what we buy, sell, and do. The second, knowledge – that is, intellectual capital – have become more important to companies than financial and physical resources. The third, to prosper in new economy and exploit knowledge as vital resource means that business community requires new management techniques and strategies.

Globalization is the first economic trend of intangible or knowledge economy [5, p. 7]. In contemporary business condition, competition is becoming increasingly global. The second economic trend is the far-reaching deregulation in key economic sectors such as telecommunications, transportation, energy, and financial services. Tariff and no tariff barriers have been increased. Final goods, intermediate goods, services, and resources can flow globally. The third trend is the exponential growth of technological changes, especially the emergence of new information and communication technologies, which enable the global access of information and knowledge.

In late 19th and early 20th century the industrial revolution was dominated which considerably pointed out that wealth could be increased by productivity in industrial production. Nowadays, the wealth of nation and entire regions depends on
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Increasingly accumulated knowledge and its effective and efficient utilization. The economy of the knowledge era offers unlimited resources because the human capacity for creating knowledge is infinite. The guiding principles for contemporary knowledge organization have been presented on Table 1.

Table 1 Key principle of the knowledge organization or transition from industry paradigm to knowledge paradigm [6, p. 27]

<table>
<thead>
<tr>
<th>Item</th>
<th>Seen with an industrial paradigm, or from an industrial perspective</th>
<th>Seen with a knowledge paradigm, or from a knowledge perspective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managers’ power base</td>
<td>Relative level in organization’s hierarchy</td>
<td>Relative level of knowledge</td>
</tr>
<tr>
<td>Production</td>
<td>Physical laborers processing physical resources to create tangible products</td>
<td>Knowledge workers converting knowledge into intangible structures</td>
</tr>
<tr>
<td>Manifestation of production</td>
<td>Tangible products (hardware)</td>
<td>Intangible structures (concepts and software)</td>
</tr>
<tr>
<td>Knowledge</td>
<td>A tool or resource among others</td>
<td>The focus of business</td>
</tr>
<tr>
<td>Purpose of learning</td>
<td>Application of new tools</td>
<td>Creation of new assets</td>
</tr>
<tr>
<td>Stock market values</td>
<td>Driven by tangible assets</td>
<td>Driven by intangible assets</td>
</tr>
<tr>
<td>Production bottlenecks</td>
<td>Financial capital and human skills</td>
<td>Time and knowledge</td>
</tr>
</tbody>
</table>

In the 21st century the most valuable strategies resources for business enterprises will no longer be physical assets such as land, machines, etc., but rather intellectual capital as capabilities, skills, methodologies, processes, procedures, relations with key stakeholders, trademarks and other elements of intellectual property. Namely, the creation of new technological know-how and knowledge improves existing products and is supposed to give the inventing company a competitive edge on the market, necessitates considerable investment [7, p. 1].

2. Intellectual capital as a strategic resource for enterprise competitiveness in knowledge economy

The value of the company is any case primarily influenced by its financial, physical, and intellectual assets. Intellectual resources are not material, and have the growing importance in new economy. Intellectual assets, mainly, have a several common features: difficult to quantify or measure, not tracked through accounting in appropriate way, cannot be bought or imitated, have multiple applications without reduction of value, short life when they are not used, etc. [8, p. 7]. Edvinsson and Malone have defined intellectual capital as “the possession of knowledge, applied experience, organizational technology, customer relationships and professional skills that provide a competitive advantage in the marketplace” [9, p. 40]. Roos et al. have defined intellectual capital as “all no monetary and no physical resources that are
fully or partly controlled by organization and that contribute to the organization’s value creation” [10, p. 19].

Many researchers give different concepts of intellectual assets, intangible assets or intellectual capital. There is substantial heterogeneity in the classification of intellectual capital (assets) in enterprise. Among others, above mentioned authors and Steward argue that intellectual capital consist of: human, structural and customer capital. Human capital refers to the acquired skills, knowledge, motivation, creativity, attitudes, and abilities of human beings. In order for organizations to maximize their value of human capital, they have to assess their investment were made in building the skills central to their competitive advantage. Structural or organizational capital belongs to the organization completely. It can be reproduced and shared and is connected to legal rights of ownership. For example, technologies, inventions, processes, data publications can be patented, copyrighted, or protected by trade secret laws. Besides, structural capital incorporates strategy, culture, structures and systems, organizational routines, and procedures. Structural capital is a significant foundational component of intellectual capital because it provides the framework for the transmission of knowledge. Customer or relational capital including all those relationships that the organization has with outside entities the organization and those outside entities have the influence on organization’s ability to create value and improve competitive advantage. Relational capital encompasses relations with key stakeholders (customers, suppliers and partners).

Corporate value and competitive advantage are result of interaction among three components together. Intellectual resources could be acquire and generate external (cooperation arrangements, buying, licensing) or internal (R&D activities) [11, p. 46]. Intellectual capital of an enterprise should be on the central consideration in formulating strategy and on of the primary constants upon which an enterprise can establish its identity and frame its strategy. Intellectual capital is the primary sources of the enterprise’s profitability and business success. Therefore, enterprises have to strategically identify and develop their intellectual resources in order to gain a competitive advantage and to increase their performance. The key to strategy formulation is to understand the relationships among intellectual capital, competitive advantage, and profitability. [12, p. 55]

3. The basis and determinants of business activities and competitive advantages in knowledge economy

In knowledge economy era, the nature of business has changed, and the competitive environment is more demanding as a result of changes caused by many factors. First of all, that is increased dependence on intellectual capital to create and deliver competitive customized products and services. The second factor sublimates pressures from globalization. Quality and highly competent suppliers from all over the world are able to overcome geographical boundaries to compete nearly everywhere. Besides, competitive differentiations based on product uniqueness,
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which is increasingly being based on product capabilities, supported by related service arrangements which are highly targeted and customized. Better informed customers who have improved understanding of their need and therefore they have greater requirements on suppliers. Nowadays, customers also have a greater choice of suppliers than before. Competitors are increasingly becoming more sophisticated and smarter. Achievement competitive advantage in the knowledge economy era means adoption of the new perspective which points out the concept called value based on knowledge management [13, p. 68]. According to this concept, competitive and business success of enterprise in knowledge economy is based on four principles. The first is increase enterprise value. The second principle is increase value for our customers. The third principle is increase value for society. Finally, the forth principle is increase value for employees in organization.

Key of business success of any enterprises in knowledge economy would be ability to constantly increase their value, but no building up knowledge only for the sake of knowledge. This abilities incorporate following: a) Ability for produce goods and services with adequate implementation of knowledge in the scope appropriate structures and processes; b) Ability to quickly response to market changes and requirements; c) Ability to predict discontinuity of served market and response to its trends and to technologies changes in the industry; d) Ability to create knowledge using activities of R&D for making new product and technologies, or by using current knowledge in a new way; e) Ability of employees to learn from their own experiences and practices, from colleagues, from competitors and other participants at markets; f) Ability to create, codify, warehouse, connect and innovate knowledge.

Organizational knowledge gives distinctive capability and may contribute competitive advantage. Organization knowledge is technical knowledge of the business and it is more easily captured by the enterprise when it results from the specific application of generally available technology. Organizational knowledge may have the form of organizational systems and routines. If an enterprise wants to add value, it has to create organizational knowledge of the skills of its members. Large competitive advantages come when the organizational knowledge is unique, appropriate to the firm, and relevant to a market which is large or a range of markets which is wide.

Knowledge of enterprise must be carefully codified and warehoused in electronic databases. The purpose is repeatedly usage of knowledge, enable quick access, and reduce cost. Connection knowledge about best practices is reflected in managing of knowledge which circulates among business units. Motivate business unit manager is to share knowledge is very important in order to use it frequently and for many aims. Innovation of knowledge has been realized, among other things, by sharing knowledge among individuals and teams. Experimentation and creativity are necessary competences for realizing new and valuable ideas, solutions and services/products. By new combinations of obtained knowledge and/or building up new knowledge is possible innovating business processes, products and services which make stronger competitive advantage of enterprise. [14]
Competitive advantage can be obtained from relationships with key stakeholders. Interconnectedness between the parties to the relationship may have created a unique asset. Developing knowledge and management capabilities built up for time being in a relationship can be difficult to copy and therefore treated to be sustainable. The value of relationship (partnership) is in the capability of enterprises to create organizational knowledge and routines, to respond flexibly to changing circumstances and achieve easy and open exchange of information. Enterprises may establish these relationships among their employees (internal relationships), their suppliers or customers (external relationships), or among groups of enterprise engaged in related activities (networks). Each of these is capable of creating significant asset of the enterprise – organizational knowledge which is more valuable than the sum of individual knowledge, flexibility, and responsiveness.

Customer relationship is a vital strategic resource and factor of sustaining competitive advantages. Understand customers and cooperate with customers to conceptualize and design new products and maximize customer value should be key activity of contemporary enterprise in knowledge economy. Managers of successful enterprises believe that leadership position could be kept by learning and innovating faster than their competitors in area of technology/product, strategy, management and operational practices. This is a way to constantly increase loyalty, satisfaction, market share and value for customer.

Cooperation among partners in strategic alliances can be the source of innovation and contribute to reduce the cost of technological development or market entry. Besides, there are many reasons for cooperation: reducing the risk of development or market entry, expanding product range and achieving scale economies in production, fast response to requirement of market and technology changes, reducing time to market, increasing innovativeness in product development and competitiveness.

In new economy people attach more and more importance to social criterions in valuing products on the market or investment, as well as the whole business activity of firms. Transparency of business activities of the enterprises contributes fast expansion of information by new technologies, especially by Internet. Namely, economic responsibility has been examined and it has been supplemented enterprise’s responsibility for society. Perceptions of social corporate responsibility by managers as useful activity have resulted in attitude that increasing the value for society contributes to competitive advantages and firm value.

All employees in an organization should be focused on relevance of knowledge as a factor for increasing value of firm. It is very important that strategic knowledge management and operating knowledge management should be effective. Strategic knowledge management has to connecting creating organizational knowledge with business strategy of enterprise or business unit. Operating knowledge management should connect employees to system which is used to share and transfer the knowledge. Adequate knowledge management assumes building up innovate organization culture or knowledge culture. Creating culture which
stimulates creativity and innovations of process/product is necessary for managing
the enterprise in 21st century. Success of business activities in the future will depend
on ability of using collective wisdom, which is a set of accumulated opinions,
perceptions, experiences, intuition, and intelligence of all employees in the
enterprise.

Conclusion

Process oriented organization and team work are assumptions for
successful functioning knowledge-intensive enterprise. It is very important in the
knowledge economy that teams would be connected in flows of knowledge
management in an enterprise. Enterprises have to use inter-organization and inter-
function teams for managing key business processes which are based on knowledge
and intellectual resources, and no core activities have been outsourced. In this way,
it increases managers’ focus to processes which create organization knowledge and
leave them more time and energy. Besides, it is necessary investment more in
information technology, information systems and databases. Different kinds of
information are necessary for connection some organizational units and business
functions in network which are interconnected and inter correlated entities, they can
contribute increased efficiency and improving competitive position of the firm. For
success of an enterprise’ products and its activities one should have information or
knowledge about dynamics on the market. This knowledge is a vital resource, as
well. Creating and transferring organization knowledge has being realized by
dynamic interaction of enterprise to suppliers, customers, competitors, community,
and universities. Business success of enterprise in new economy is greatly based on
creating new competences and productive use of intellectual assets. Sustained
advantage is result of innovation and combination of obtained and new competences
and other intellectual resources.

Literature

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OSTVARIVANJE KONKURENCTNOSTI U ERI EKONOMIJE ZNANJA

Rezime: U eri ekonomije znanja promenjeni su faktori i uslovi poslovne aktivnosti, kao i pristup upravljanju. Intelektualni resursi postaju ključni strategijski resurs za konkurentsnost preduzeća. Stoga su u fokusu ovog rada relevantne determinantne konkurentsnosti u „novoj ekonomiji”.

Ključne reči: ekonomija znanja, intelektualni kapital, konkurentsnost.