MARKET STRATEGIES SUPPORTED BY INFORMATION TECHNOLOGY

Vlatko Jovanovski¹, Verica A. Jovanovska², Todor Cekerovski¹

¹UGD, FI (FCS), Kirste Misirkov bb, Stip, Macedonia, vlatko.jovanovski@ugd.edu.mk ²UCLO, EF (FE), Gorce Petrov bb, Prilep, Macedonia, verica24@yahoo.com.ph

Given the fact that after global economic crisis the enterprises still feels the consequences, best for them is to transforms organization structure in order to adapt to new conditions at domestic and the international market. Scientific paper gives special emphasis to the development of new market strategies supported by information technology infrastructure, highlighting the function of information technologies as a key driver of competitive strength of enterprises participating in international trade and its impact on organizational adaptation and the demands of international market.

Keywords

Information technology, strategic management, international market

1. Introduction

The companies operate in a competitive environment, the rule for many years in almost all facets of the exchange of products and services. Market products, services and labor are already tight for both companies and for individuals, whereas the process of globalization draws more market participants. Competition is intensifying, so from that aspect there is a need of analysis of the environment, managers can predict the future events, trends and changes like base for adjusting its operations. The purpose of implementation of the information technology (IT) is to prepare the company for the future. Therefore, the main task is to enable the organization and its people (from that organization) to think and act long term and prescient¹.

2. IT and marketing strategies

In order to achieve sustainable competitive advantage in the international market, companies apply one of the following marketing strategies with application of information technologies:

- Cost leadership & Differentiation;
- Focus (in terms of permanent leadership or differentiation);
- Links, information management, corporate management and leadership.

For choosing the strategy of operations undertaken the following steps:

- Analyze the environment (market trends, competition, strengths and weaknessesoforganization);
- Assess needs for future products & future needs of the market;
- Develop strategies for market performance that brings competitive advantage.

¹ Sirka V, Inventivni Menadzer, Croman I Mer Consult, 1995

2.1. Strategy cost of leadership

The key of this strategy is the development of very low fiscal structure that provides high return on assets and income, even when competition in the international market is strong. This strategy is supported by information technologies and in all processes that make the value chain and increase efficiency in the operation of the international market by accelerating the implementation of certain processes and eliminating or replacing the socalled routine operations. Reducing costs, however, be realized by reducing the price of products and services, while retaining the quality and profit international trade plan. We emphasize that this strategy contains a paradox, reducing prices and increasing the quality. So, free to say that success is determined by the Japanese (just-in-time) concept and good relationships of customers and suppliers maintained with IT and internet technologies. However, this strategy many companies combine it with other strategies or it's a segment of the selected strategy for achieving the objectives of the current international market. But the superior fiscal structure hides certain risks. It could be endangered by sudden disturbances, such as the emergence of new technologies that the company can quickly adapt or copy the superior cost structure by another company in the international market, thus jeopardizing the strategic or competitive advantage.

2.2. The strategy of differentiation

When the company aims to create a specific product or service on the international market that differs from competing products or services under any of the basic features (design, superb quality, performance, and additional IT services and esc.) States that it applies strategy of differentiation. So, differentiation does not necessarily relate specifically to the product which offers the international market. It may involve increased collaboration with customers, performing various services through IT sales (Caterpillar, a manufacturer of top construction machinery has recognized for achieving service defects within 24 hours, no matter which part of the world are located). Information technologies are suitable for adding additional products in the service or additional services in the product. However, this strategy is part of a series of international trade hiding dangers and risks. Higher cost due to the uniqueness, you can create a barrier for certain mass buyers who do not use or do not know to use information technologies. On the other hand, are always having superior products targetcounterfeiters that, with low cost of imitation products can attract buyers, which threaten the competitive advantage of companies who use the strategy of differentiation.

2.3. The strategy of focusing

If the company produces special products or products with low fiscal structure of the narrow international market segments, in this case they have implemented the strategy of focusing. Such a strategy usually applied companies are limited in terms of resources and therefore choose more specialized production and products which would mean a kind of elitism. This strategy comes to the fore the application of e-marketing using the database, where information technologies rely on the database for customers in a particular geographic region, in order to detect potential buyers or users of services. Because it hides in the high risks. In fact, companies that apply this strategy, the competitive onslaught, hard develop alternative routes.

2.4. Strategy of information guidance

When the product or service attributable to information or knowledge means that companies apply the strategy of information leadership. By adding information on products or services or the monitoring of the information (Meta tag-s) using information technologies, thus creating

knowledge. Thus increasing the value of the product and these companies (is hybrid using the traditional modes of trade in combination with information technologies) become competitive in the market². The following table presents the support of various international trade strategies with information technology³:

Table 1: Impact of information technology on strategies

Strategy for competitive advantage in commerce through the IT	-impact of Information technology
Cost leadership	- reducing costs of operation
	- better quality goods and services
	& just in time output
Differentiation	- quality differentiation
	- better level of service to customers
Focus	- focusing on the present and e-market
	- creating new products and services
Relationship	- the influence of competition
	- interorganizational cooperation
	- adding value based on partnership
Information economics	- products and services to add information (metatags)
& technology	and are transmitted and monitored by applying IT.

2.5. Strategy of linkage

This strategy comes to the fore in the new global operating environment and is therefore referred to as a new strategy for companies to achieve competitive advantage in the international market. The association acts as the co-operation with customers, suppliers, partners even the competitors, and internal cooperation, primarily through the influence of some of these strategies. Namely, today, companies in order to open to the environment and to respect their environment factors to this partial IT strategy, which means that its own forces can respond to new market challenges. Today is no longer a problem to produce and most complex product, but the problem is how and to whom he sold. The companies have one common goal: to learn the needs of customers. Therefore, they collaborate with other participants of e-markets. In other words, competitive forces can be considered as an opportunity for cooperation. The implementation of this strategy, information systems play a key role, and information technology becomes standard in the operation of companies.

3. The role of IT to competitive forces in the development of international market

Specific actions to be undertaken in order to successful implementation of strategies depends on both activity and the dynamics of international market place, in which rule following five forces of competition with the implementation of information technologies:

- 1. Competitive forces of suppliers;
- 2. Competitive forces customers;
- 3. Threatened by the emergence of new competitors (strength of potential competitors);
- 4. Emergence of new threats such products or services (strength of potential products or services that can replace existing);
- 5. Forces of existing competitors.

²Bresnahan J, Speed – CIO Magasin, Nov. 15, 1997 – www.cio.com/achieve/anterprise

³Srika V. Spremnik M. Inf. tehnologiom do poslovnog uspeha, Sinergija 2000

Presented competitive forces are equally important in different industries. The activities in which the five listed forces have an impact (production of juices and beverages, computer industry, pharmaceutical industry, automobile industry, etc...) Likely to provide a larger number of competitors, while in some basic industries (the oil, steel, aluminium) only some of the five forces influence, so it said that in that area has very few competitors and therefore require greater use of information technologies.

3.1. Competitive strength of suppliers

This competitive strength is manifested when the existing supplier enters the market for its customers by using information technologies. So I says to buyers that a threat. In this case you need to develop alternative ways to retain existing customers and acquiring new ones with the use of information technology (regarding quality, price, distribution, date of delivery). From that point the need arises, and the necessity for iinformation technology cooperation between the customer (the company that manufactures finished products) and suppliers. Thus they become strategic partners to achieve synergy of their goals on the international market.

3.2. The competitive strength of customers

This force is identical to the previous. Companies may buy from other companies, after entering in their market. The most common ways is when companies purchases goods from others, using information technologies after that they are competitors.

3.3. Threat of developing new competitors

This competitive force actually contains the aforementioned competitive forces, and refers to the emergence of new manufacturers of this type and the existing Internet (IT) markets. Those companies wishing to penetrate a foreign market, though faced with a series of obstacles (hazards), have the option of a double action:

- For them it is a chance to succeed.
- For companies already in that market, they are a threat because they seek to take awaypart of the market where the main role is the application of information technologies. It is therefore necessary to raise barriers to their entry into the market (and as obstacles arise, especially investments in IT sector or use its services), in which join and governments, that policy⁴. Threat of developing alternative products are often advertised and offered online via the Internet. As a consequence of this competitive force in the existing company risk arises from the feedback of investment, lowering the prices of its products and services at all, jeopardizing the position of e-marketers. In order to defend against this force, companies need to take some of the following activities:
- Improving relationships with customers;
- Differentiation of production;
- Increased quality and so on;
- The application of information technologies and use the global Internet network.

3.4. Strength of existing competitors

For each international market among companies of the same business there is competition, in terms of price, products, services and distribution. In this case, in order to defend against

⁴Kralev T, Osnovi na menadzment, Centar za internacional. menadzment, Skopje 1996

the competitive force, it is necessary to change the basis for the struggle of that market, or to change the attitude towards:

- Reducing costs & Market access;
- Differentiation, either in terms of product;
- Service or company itself & Restructuring the company's in hybrid model;
- Implementation of information technologies in everyday work and communication with suppliers/customers.

For defence against these competitive forces companies into its operations in the international market often apply information systems, Internet and information technologies. They have an impact, mainly in the:

- Reducing costs & Product differentiation;
- Checking customers & Selection of suppliers;
- Improving relations with strategic partners or in a word, to raise obstacles in terms of the five competitive forces and strategic performance advantage over competitors.

In order to realize chosen strategy, the company used one of the following tactics:

- Own innovations mainly in the sphere of information technologies
- Association and joining of traditional and IT market;
- Own growth and strategic IT connectivity.

The above connections with customers, suppliers, consultants or rival companies may be stronger or weaker, ranging from agreements about marketing, production or distribution until the acquisitions. In any case where time and money are critical such associations in the international market and have an advantage over potential innovation in their company.

4. Impact of IT on the international market

International markets are an important component of the environment that affects the structure and behaviour of all forms of trafficking. Interaction of the company and the market stems from the nature of the exchange of identities when it comes to constantly confront the many buyers and suppliers. Interdependence and the impact they made on the enterprise market can best be seen through the differentiation of functions, as a result of changed business orientation and the changes that occur in organizational structure and implementation of information technologies in these two basic factors.

4.1. Differentiation of functions in the implementation of IT

Orientation of production companies have found adequate differentiation in which the production function, with its accompanying activities and services, had a decisive role in increasing the efficiency of labour and market expansion of companies primarily in the conquest of foreign markets. In addition, enterprises have had precisely defined functions and appropriate lines of authority and function integration was awarded the highest organizational level and leadership that certainly puts a major emphasis on the application of information technologies both in production and in distribution of goods and services abroad⁵. The business orientation of the company to sales by means of IT brings new elements of organizational differentiation of functions, which takes place towards the constitution of complex commercial segment (which is of electronic nature), which is able to perform complex tasks of sales that is of hybrid character. Practically, the sales-oriented enterprises, especially when market conditions are unstable, it comes to new ways of organizing the functions and new ways of coordinating and directing them where certainly play a role imminent implementation of IT. Namely, this phase comes to the creation of organizational goals whose only task is to focus on certain problems of the electronic marketplace and

⁵Bainbridge I. D, Information Technology Law, Pearson Education, England 2005

internet environment. It is such a differentiation of organizational features in coming to the redistribution of work and creation functions with specific tasks. The so-called e-marketing phase is coming to completion and further organizational strengthening of certain secondary functions of the executive IT function, related to research and development, analysis, monitoring and studying the information environment itself is unknown and international borders. Firms in relatively stable conditions used with the mechanisms of coordination are provided through the hierarchical system of management. However, in the so-called unstable conditions the role of coordinator and integrator has been entrusted to a separate organizational unit that is IT department, which is forced to omit instruments aimed at traditional ways of management and coordination.

4.2. Organizational adaptation to the demands of inter. market

Changes that occur in the organizational structure of enterprises are the result of adjustments to the demands of international market or use of information technology in improving competitiveness and marketing of products. These are changes that occur as a result of the expansion of the company in the manufacture of a product and implementation of information technologies in the marketing of goods and services abroad. Namely, the increasing volume of production of the same product is possible in two ways: with intensification and better use of existing production factors and capacities to a certain level, is to a specified limit and introducing new production factors and resources that are of information nature. Both ways, however, require adjustment of the organization of production, supply and use of machinery and equipment by fully computerized operations. The other way, however, requires significant changes in the organization of enterprises, primarily changes in technical and technological procedures (IT-automatic computerized output), then changes in the organization of the preparation, planning (using Unified Modeling Language - UML) and the launch of the documentation (introduce Document Management System - DMS), changes in system maintenance, transport (Forwarding sector coordination, cooperation and logistics IT), and finally changes in sales (presentation of purely electronic and hybrid markets). Another change in organizational structure international trade as a result of expansion of the broader enterprise market areas, to other locations (including the internet). In this case it is a further differentiation of existing IT structure, but a process of multiplication (proliferation) of dislocated areas and places that are most easily contacted and is using information technologies and their implementation in international trade. A third change, particularly evident in recent years is the introduction of horizontal or lateral IT diversification that is driven by the need to analyze the placement of a particular product in the international market using IT. This is done with mathematical statistical methods for advanced linear not linear modelling of data from foreign trade, whose extensive calculations and tests would not be practically feasible if applied information technology. Then, the need to eliminate certain seasonal fluctuations and supply to accommodate the needs and demands of customers⁶. It is characteristic that in terms of horizontal diversification form new commercial structures with IT systems that differ from existing ones, because they have completely different tasks that do not contribute to better perform the tasks of marketing and supply of goods and services in international market. Simply, here it comes to introducing new information technologies, although belonging to the same activity, do not affect the realization of the internationally selling old program. This path of diversification are illustrates the example when the trade in cars are refers to trade of electrical devices. Also, significant changes occur in international trade and ensuring the lateral or side with the diversification that we have introduced new products that do not belong to the core business of commercial enterprise and it is the fourth change. The company with the introduction of products that do not belong to the core business strives to

⁶ Matsushita M, Schoenbaum T, The WTO, Oxford University, England 2006

achieve adequate expansion of the various (traditional and electronic) markets with different products. And here, as well as horizontal diversification, it comes to international trade logistics in IT that do not come to strong economic ties. Rather, structures are constructed of loose relationships. The end should say that the manner and volume changes in international trade must be on the possibilities for synergistic effects. But to achieve this need, of diversification of the trade program, to perform integration or connectivity. Here it is worth the general rule: an increase in uncertainty environment, to increase and reinforce the application of appropriate diversification and integration with IT. Practice has shown that all effective organizations in an insecure environment conditions are differentiated and highly integrated IT structure.

5. Conclusions

Market products, services and labour are already tight for both companies and for individuals, whereas the process of globalization draws more "players" in the game. Competition is intensifying, so from that aspect there is a need of analysis of the environment, managers can predict the future events, trends and changes like base for adjusting its operations. International markets are an important component of the environment that affects the structure and behaviour of all organizational forms. Interaction of the company and the market stems from the nature of the exchange of identities when it comes to constantly confront the many buyers and suppliers using information technologies. Changes that occur in the organizational structure of enterprises are the result of adjustments to the demands of international market or use of information technology in improving competitiveness. These are changes that occur as a result of the expansion of the company in the manufacture of a product and implementation of information technologies in the production and marketing of goods and services abroad.

References

- 1. Sirka V, Inventivni Menadzer, Croman I Mer Consult, 1995.
- 2. Bresnahan J, Speed CIO Magasin, Nov. 15, 1997 www.cio.com/achieve/anterprise
- 3. Srika V. Spremnik M, Inf. tehnologiom do poslovnog uspeha, Sinergija 2000,
- 4. Kralev T, Osnovi na menadzment, Centar za intern. menadzment, Skopje 1996,
- 5. Bainbridge I. D, Information Technology Law, Pearson Education, England 2005,
- 6. Matsushita M, Schoenbaum T, The WTO, Oxford University, England 2006.