

## The relation between personal property and IT and competitiveness in economy

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**Abstract:** In the current study, the economical analyses of the relation between IT, personal property and competitive policies are presented. This analysis deals with the issue how IT affected economical activities and the competitiveness between economical enterprises. It emphasizes on this issue that competition should be in the framework of intellectual property rules. By intellectual property rules, the progress in IT can cause variety in competitive strategies. Intellectual property rights have deep influence on competitive strategies in IT. Today, some companies to achieve the commercial advantages considered intellectual property rights. Thus, the intellectual property system performance should be as it can be effective in motivating the long-term competition innovations and it is developed as it avoids deprivation of innovations or damaging the customers.

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### 1. Introduction

The ability of human being in intelligence, creativity and collaboration caused the frequency in creating new information, innovations in various fields. Thus, these abilities and mental results require legal protection and this issue is the basis of intellectual property. Like other properties, intellectual property is commercially used. Historically, the infrastructure of the development of intellectual property rights is established by economical institutions in the middle age. Today, the first source of intellectual property rights is state law. The major part of state rules is dedicated to intellectual property rights including patent, copy right, trade mark and service (Roderick Darling, 1997).

One of the challenging issues in IT is intellectual property. Denis Thompson the chief of IT board of Harvard University believed that intellectual property issue of the ministries is considered for the universities, the scientists vs. humanitarians and scientific values vs. financial benefits. He believed that the changes of intellectual property should be considered more than IT products. The intellectual property rights have deep influence on competitive strategies in IT section. According to Professor Varian, IT economy deals with the analysis of various competitive strategies being applied by advanced companies. Such strategies such as personal pricing, Lock-in and the selection of fully-integrated standards based on intellectual property namely copy right or patent.

Copy right increases the motivations of the companies and improves its software. Patent has an important role in competitive strategies in semi-

conductive industries, hardware, computer and software (Farrel and Shapiro, 2004).

Today, the companies to achieve commercial benefits consider intellectual property rights. The performance of intellectual property system should be in a way that can be effective in motivating the long-term innovations and progress and it is developed as it avoids the deprivation of the innovations or damaging the customers.

In supporting competitive markets, the intellectual property rules should be revised based on economical principles.

### The influence of IT on economical activities

Today, the data is turned into an unavoidable part of human life. Although, information had considerable effect on human being and human being required it for decision makings, the important issue today is the new conditions of life and increase of information share. The advent of computer provided the rapid processing and storing a great volume of data and made the next progresses possible regarding the relation between the computers and data exchange between them, the data exchange at wide range. These events are done with other progresses regarding electronic and communication including microelectronic, semi-conductors, satellite and robotic resulted into a revolution regarding the collection, processing, storing, recall and presenting the data and formation of IT was the result of this event (Mortazavi, 2004).

IT is defined as a branch of information about the distribution of storing process of data. IT is defined as organizing, storing, sending and organized use of information. Briefly, IT refers to the production, processing and distribution of data in great institutions (Wikipedia).

## History

Since 1970, in the west and namely in some of the advanced countries, great changes were done regarding the information and informing.

In 1980s, the computer came into the homes and offices and economical establishments had information section and global and international business was done rapidly via communicative networks and was an important factor in people life.

In 1990s, people with less working hour presented more output and the works were done without exchanging papers (Forster, 1992).

In the late 1990 some signs of new dimensions in economy were created. IT and communication as a new technology entered the market in 1990s and was developed rapidly. This technology due to its vertical orientation is different from other technologies as it is not effective only in its activity region, it is effective in all economical and non-economical activities in facilitating the affairs and increasing the efficiency. Digital economy components including hardware, software, network, information and human being as producers of data and customer and service givers and services and digital systems.

According to the statistics, IT was effective in five cases of the organizations.

- 1- Improving productivity (less time and better quality)
- 2- Reducing costs. This reduction is due to various reasons including easy advertisement
- 3- Improving decision making
- 4- Enhancing customer relationships (it was impossible in some cases)
- 5- Developing new strategic applications- developing new technologies

## The role of IT on competition

The current century is the one in which considerable scientific and technological changes with global phenomenon caused that the countries and economical enterprises compete with each other to stay in global markets. Today, IT has important role in globalization and taking competitive strategies at global level.

Using IT, computer and internet in all the productions and developing economical sections and knowledge as the most important production factor beside the capital, labor force, land and unity organization have the main position. Indeed, by IT revolution, formation of information community and future network and rapid development of superior technology, namely in knowledge communication field as the most important capital is replaced by physical and financial shadows in global unification (Zack, 1999). Competition makes the economy

efficient and the higher the competitive indices of an economy, the more capable and progressed the economy. International Institute For Management Development book in 2010 published ranking of the countries in the world based on competitiveness and Iran didn't have any position among 58 countries with the highest competitiveness degree. Now, competitiveness is an important issue in all over the world and it is used as a tool to achieve good economical growth and sustainable development. In a global economy, the competitiveness pre-requirement means achieving good position in international market. In the era of increasing globalization, competitiveness was an important issue among policy makers of various levels (country, industry and company) in various sections in the world (Shurchuluv, 2002).

One of the characteristics of the successful companies is having competitiveness power. This power is aroused of having new views about it. Environment background and time had considerable changes in competitiveness indices. It should be considered that only conceptual frameworks of competitiveness can be used for ever to be flexible for consistency of management processes and environmental changes (Ambashta and Momaya, 2002).

## Strategic Thinking

Today, the organizations deal with dynamic and unsafe environments. The success of the organizations depends upon the knowledge of strategy. The organizations should understand the changes in competitive environment and follow the opportunities activity to use the strategic abilities and make progress in all business fields and have a true understanding of current strategies and successes. Indeed, the organizations should respond the opportunities and barriers rapidly.

Managing directors are responsible for various activities including planning and organizing of the duties of sub-set, their motivation and controlling the events and the results evaluation. The managers decision making affects the strategic change.

The organization as a competitor is affected by the decision makings, competitive strategies and others innovation. These dependencies are vital and as the result of strategic decision makings should be evaluated by other companies or other organizations and their reaction. For long-term success, the organizations should compete effectively with their competitors in a dynamic environment. To do this, they should follow good methods to create and add value for their customers (Populova, 2006).

### Competitive Environment

The necessity of the attitude of the managers to the effect of organization of the environment is important as environmental forces can affect the organization management and its profit. The companies and enterprises should evaluate their environment in attracting the opportunities and creating competitive advantage and maximum concentration of the resources. The strategic thinking requires the knowledge of various strategic goals and the ability to identify different environments. The ability of organization detection in terms of various characteristics and framing them for organization consistency with the environment is necessary to achieve strategic goals. The prediction of a new dynamic environment is completely difficult. The real managers develop their environmental and strategic knowledge by their experience and attitude. This ability requires information of important social, political, legal, and economical and technology conditions.

For each organization, special environmental effects create powerful forces affecting mostly the decision makings. In some of the manufacturing and service businesses, the most powerful forces are the customers and in some others is competition. According to Ansoff, the environmental change depends upon six factors:

The change of market environment, change speed, competition severity, the innovation in good selection of the customers, the pressure from the most influential groups and government. He proposed that the most chaos the environment, the more pressure on the company in terms of competitive strategies and entrepreneurship. Otherwise, it changes its direction. The competitive environment is affected by the structure and profitability of the market, competition severity; distinguish degree, market growth, products life or services, the numerous new products, the considerable capital and economy.

### Strategic Approach

Strategy is not a planning, it is thinking and doing. The strategy is not a technique it is business management method based on strategic understanding and attitude. Strategic management is dedicated to understanding, selection and execution of strategy followed by the organization.

The managers should be informed of the management and behavioral management processes being occurred in the organizations.

The strategic management is a continual flow of the competitive best guarantee between the organization and varied environment. The strategic management is a trend determining the organization mission and it is looking for an environment to

establish the opportunities and such an evaluation for the weaknesses and strengths of the organization combine to determine the position in which the organization has competitive advantage.

The total aspect of environment follow up is considered as a pre-requirement to organize the effective strategies and is considered an important step in strategies relation. The organizations should understand the complexity and the changing environment. The organization should have successful management of the changes (technology, processes and structures to keep good consistency with this environment).

Thus, the strategic management in small organization is as follow:

- 1- Clarified knowledge to environmental forces and their change method
- 2- Increase of potential risks and opportunities
- 3- Decision making about good products and services for totally personal markets
- 4- The effective management of the resources for development and producing the market products, achieving good quality with good price at appropriate time

The strategic success requires clarified understanding of the market requirements and the customer satisfaction is the most effective factor than rivals.

### Competitive Advantage

The competitive advantage is achieved when the real value is given to the customers. If this value is added, there will be a successful business.

The important elements in added-value are including:

- 1- The close relation with the customer
- 2- The commitment to the quality
- 3- Full services
- 4- Rapid reaction against the opportunities and risks of competition

The small organizations which understand customers can cause competitive advantage and benefit of high prices and the trust of the customers.

The operation with high capacity reduces the costs. While effective use of all the resources is of great importance. Guaranteeing the maximization of potential value of the outputs with providing the customers' needs is vital. An organization achieves competitive advantage when it considers the customers goals as its goals and the customers can feel achieving the real value against money.

### The planning for competitive advantage

If the organization achieves an advantage, the business will continue and if this advantage is considerable, the organization is prospered. According to the theory of porter, the companies for competitive advantage can selected three total strategies with distinguish strategy, costs reduction strategy- gap strategy being used by the employers. The company using distinguish strategy creates competitive advantage by producing the goods and services with the lowest costs and if the employer continue to its capability to keep the costs low compared to others, the organization is progressed. The distinguish and leader strategies of the costs based on creating competitive advantage in all parts of the market, porter emphasizes on gap strategy between the market. The rivals using this kind of strategy are experts. They create a restricted market as local and national. The attributed strategies create special skills being in accordance with a special market. The good employers are informed that establishing and keeping competitive advantage is a big challenge without considering the fact that competitive advantage is lost easily.

### Competitive Specialization

The competitive specialization causes high productivity. By three methods were can use competitive specialization:

1- It is improved as the customers can understand it easily and are agreed with high value to pay more costs. The specialization regarding the product quality with increasing production quality or improving the production quality is improved. Thus, increasing the real level of quality and reduction of the price of the product is achieved.

2- This type of specialization can be prevalent as all the requirements of the customers are met. The most common method is done by geography range.

Finally, this type of specialization is extended as it remains by developing technology and the taste change of the customers. Improving the specialization should be based on strong data of customers' observation. By the increase of specialization life, some of this specialization is dedicated to the specific products or personal markets with low life (Papulova, 2006).

### The Definition of Competitive Strategy

Today, the increasing growth of international companies and their close competition for more shares of the market can create a hard environment for the managers. In such an environment that a false decision of the managers of the companies lead into the permanent failure, having competitive strategies is unavoidable. The

competitive strategies show the orientation of the performance of the managers for the failure of the powerful rivals in international markets (the 2nd international conference of management, 2007).

In the hierarchy of the strategies, the business strategies are in the upper and lower levels. The total strategy of the company is in upper level and duty strategies are in the lower level. Thus, the business strategies are among these two levels. According to the above item, Doyl (1998) distinguished between two words and it is said that the strategy at company level determines the general direction and movement of the company while business strategies emphasize on how to achieve competitive advantage (Waltins et al., 2003). Other researchers considered business strategies equal to competition strategies.

Al-Mursi (1986) proposed that competitive strategy is a business strategy determining the main forces affecting competitive situation.

Aker (2001) referred that business strategies that are called competition strategies can be defined by six aspects and the dimensions include:

- 1- The markets and products in which a business competes
- 2- Investment level
- 3- Duty field strategies being necessary for completion in the market
- 4- The strategic assets and skills being important for strategy and achieving competitive advantage.
- 5- Attributing the resources to commercial units
- 6- The development of increasing effects between businesses (Aker, 2001)

Velin Vehanger (2004) presented the competitive aspects of business strategies in their definition as: business strategies that are called competition strategies concentrate on improving the competitive situation of the products and services of the company inside the industry or a part of the market in which the company is active (Car engineering journal and branching industries, 2008).

### Competitive Strategies and IT (integrated technology and services model in company performance)

IT has important role in enterprise achieving the share goals and is considered as an important management issue and according to the researches it is the source of strategy management literature and refers to the necessity of market force and considering the enterprises as a set of strategy activities with the aim of consistency with industrial environment following attractive conditions in market supply. The dominant model is the

competitive strategy framework of Porter. According to Porter and Miller (1985), IT is a tool by which the enterprises and by the aid of changing competitive forces resulting into industrial profit achieve competitive advantage. IT via reduction of the costs or increasing the difference helps the change in competitive forces.

In the second view, the economical enterprises are considered as a set of resources, assets, processes and knowledge that are valuable. The commercial institutions are the only resources determining the strategy nature (Spanos, Lioukas, 2001). In this concept, IT capabilities, IT infrastructures, IT human resources and real estate assets of IT are strategy advantages (Paradoj, 2000). In traditional economy, the necessity of market force by industrial structure is considered as the main reason of strategy and institution performance and emphasizes on the importance of special capabilities of the enterprises (Handerson Metishel, 1997).

The success of an institution depends upon its ability in creating distinguished capabilities (Metis, 1997). According to Porter, the resources were not valuable and their value depends upon the consistency with industrial structure and supporting special strategy.

#### **Market-Oriented View**

The competitive strategy framework of Porter (1991, 1980) showed 5 industrial forces: The severity of industrial competition, threatening new competitors, and the threat of replacing and exchange power of the sellers of these forces showed the potential profit of an industry or a part of it. It means that an institution should find such forces to find the situation in the industry to defend against them (defensive effect) or affect them or achieve the benefits (aggressive effect) (Matis, 1997). According to porter, achieving a relatively attractive situation is as the result of one of two main types of competitive advantages. Lower costs than the competitors or being different and presenting an extra price on separation. In this view, only extra profiting logically aroused from giving higher price than the competitors or having low costs.

Ayus and Lonmont (1984) emphasized on applying IT to improve the relations between the institutions and customers. They recommended about using long cycle of customers resources as a tool to determine the application of an institution of IT to make themselves different from other competitors and changing into a manufacturer with low cost or determining the market gap, by completing the severity of competitive forces framework with the concept of value chain being presented by Porter in 1985. Porter and Miller showed that how IT can

change by changing the structure of the industry and creating the competitive advantage by achieving new methods in preceding their competitors and even creating some opportunities for create new jobs.

Commercial change, IT and competitive strategies

Creating competitive advantages by new methods and applying IT to improve the relations between institutions and customers caused commercial change.

Commercial change is a wide concept including the set of competitive strategies the organizations can develop the commercial performance. These strategies include re-engineering of education commercial trend, organization development, quality management and using IT.

The era of considerable changes by globalization of the markets, the permanent presence of IT, elimination of hierarchy structures and forming the networks and formation of new organization are defined. The growth in this regard causes new era economy of the information as the main source of the wealth of knowledge and communication than natural resources and physical work.

According to Canoy (1999), the second half of 20th century is about technology revolution, the challenge of 21th century as the jobs move from an internal environment to a global environment is with internal time era. The dissolution of the companies as the result of the lack of competitive consistency and the inconsistency with the changes and the important issue understands practical conditions for total achievement of total objectives of the organization at specific time during the company interaction. Commercial change is a term being used for a long time by strategy authors. Its 2-D concept is consisting of a considerable change in organization logic as the result of a considerable change in the behaviors. The change doesn't mean the reduction of the costs, increasing profit or re-engineering, it is creating and innovating the strategies process and management. It should be under the order of new thinking as the concept of opportunity. On the other hand, the change should affect total organization. The top managers should change total world view of the organization, the attitude of opportunities of the company. Only new and public understanding of the opportunities cause the creation of new methods for competition and the change should be with complete beliefs and values. These beliefs have considerable effect on the performance of the managers. The change requires the creation of a new set of the skills among the companies. The new markets and jobs and new strategies for continuing the competitive advantages required the change of the set of the skills in all the levels.

The change should be combined with new management processes. The evaluation of the performance, rewards, jobs management, production operation and development should be changed.

The silver bullet theory emphasized on objective process (re-engineering process, e-commerce) or competitive strategies to change performance and behaviors of an organization.

The organizations attempt to be consistent with the endless movement of the changes of the companies besides necessary technologies. Generally, most of the attempts are concentrated on short-term requirements and necessary needs. It means that there are many choices for major development in fundamental performance and some opportunities to use people talent. Indeed, management literature is full of silver bullets with changing the business. These bullets include IT, re-engineering of trading process, quality management, new strategies to strategy and human resources activities. Most of this literature is concentrated considerably by referring to the integration of required competitive strategies to change. Indeed, what is occurred in these changes is a series of separated measurements with different priorities depending upon managers' personality. Almost, the change successful processes follow an integrated strategy focused on developing the special organization capabilities in a suitable period with the support of strategy owners as the change in process and IT. A comprehensive plan and successful important factors in the change of the companies deal with the description of the type of work of people for a long time to develop a comprehensive strategy to the companies change with integration. This strategy is different from other strategies in this regard and determines the key aspects of commercial change, culture, skills, team work, attitude, continual development, re-engineering of the process and organization education (trading change, etc).

#### Conclusion

Arrangements For Commercial Exploitation of Intellectual Property rights should be carefully analysed to make sure that they are not contrary to industry rules. From Priority point, it is clear that changes in intellectual property policy should accept principles that go beyond information technology. Full compatibility between organizational and IT Structure will be an increased ability to better meet the needs of the organization. successful implementation of future IT projects and the ability for IT to become a strategic partner in the future of the organization.

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