MARKETING AND REMODELLING BUSINESSES IN DIGITAL ECONOMY

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Abstract:
In the current information society, the implementation of information technology and communication is an essential requirement, not only for increasing business competitiveness, but also for maintaining it on the market. Digital economy is based on electronic business support, and businesses are beginning to have an increasingly digital dimension.

At the level of the enterprise/organization, new technologies remodel not only the production/services system, but also decision-making mechanisms. Marketing is undergoing significant transformations in digital economy, which require a thorough re-conceptualization. New information technologies and their globalization enable a business remodeling, including in the field of marketing instruments.

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The admission of the possibility of knowledge beyond human cognition (1), of intelligent artifacts capable to produce knowledge brought about a paradigm shift which opens new horizons in understanding reality. At the same time, reality is becoming more loaded with an increasingly substantial virtual content, our environment becomes more intelligent, but, intelligence is more artificial.

In a knowledge-based economy, the relation between economic theory and reality becomes more and more complex, as the economic environment becomes more intelligent. It is now a
fact that human existence is living in a more intelligent environment, but the nature of this intelligence is, to a large extent, artificial.

The knowledge-based economy can be defined as the economy that has surpassed the threshold of development, beyond which knowledge is a fundamental resource.

Knowledge is a more and more important production factor, thereby diminishing the role of capital and of labour force, while productivity and innovation are now lucrative activities, both being applications of knowledge. Hence, knowledge management acquires a strategic relevance at the macroeconomic level, as well as at enterprise level.

Knowledge management achieves the synergy between the technological and human capacities, its aim being to stimulate innovation and the production of new knowledge. The concern regarding the evolution of human society demands the pursuit of a sustainable development as an essential characteristic of knowledge management.

The information revolution from the past decades has brought about severe changes in the economy:
- information and communication technology ensures the increase of labour productivity, which allows price reductions for some goods and, implicitly, it increases their availability;
- investments and information and communication technologies have registered a high yield, which has accelerated the rhythm of innovation;
- the increase of the share of intangible goods in relation to tangible goods, as the companies’ activity and people’s lives, in general, they are more regular internet users.
- the growth of the companies’ interest in investments in environmental protection, in discovering and promoting green resources on an industrial scale and for reducing the consumption of current resources;
- the emergence of new forms of communication, by means of new technologies.
- the acceleration of the process of globalization of information and communication technology, simultaneously with the globalization of environmental, economic and monetary issues;
- the increase of the number of border research field.
- learning is conveyed as a general and defining process for knowledge-based economy.

- the need to establish new methods and criteria for measurement of economic performance

The most important technological and social event (since its use requires the approval of individuals and organizations) of the 20th century was the launching of the internet. This technological vector of knowledge-based society changed the term of the globalization process. On top of this, we can say that the accidental invention of the internet changed the history of human civilization. However, data communication by internet raises issues of security as well as of morality. Because of the evermore important role of the internet in human communication, its vulnerabilities translate into the vulnerabilities of human society. The secrets of states, companies, organizations and individuals can be “broken”, exposed or compromised by hackers through viruses. International laws need to be enforced to protect the confidentiality and security of internet communication.

In a knowledge-based society, the weight of intangible assets increases with respect to physical assets, as well as the value of knowledge and information on the market. However, a question remains open concerning the role that inanimate intelligent agents will play on the labour market whose complexity will mount in the decades to come.

It is obvious those intangible goods will gradually become dominant in the new economy and that the labour market structure will be adjusted according to the types of products and services requested on the market. The decisive role of knowledge in the creation of intangible and tangible assets, the need to have the required qualification not only to create, but also to use the new technological infrastructure, induces severe mutations in the labour structure in the sense of increasing the weight of professions, as well as the number of those who use information for the most part. Michael Dertouzos noticed that “60% of the Gross Domestic Product of the US is allotted to the intense use of information. The situation is qualitatively similar to that of other industrialized countries of the world, the only distinction being that the percentage is close to 50% […].” If we take into consideration the entire US economy, we

1 M. Drăgănescu, De la societatea informațională la societatea cunoașterii, Editura Tehnică, București, 2003, p. 27.
2 M. Dertouzos, Ce va fi în Lumea Nouă a Informației, Editura Tehnică, București, 2000, p.178.
notice that 58% of the labour force (including the public workers) works in an office”.

From the point of view of economy, the transition to information society has led to the replacement of the theory of labour-based value with the theory of knowledge-based value. In the paper *Powershift. Power in movement*, Alvin Toffler1 argues for the transition from the material capital, including machines and materials, specific to industrial society, to a new form of capital represented by knowledge. In Toffler’s opinion, knowledge is inexhaustible, can be applied by different users and can generate, at its own turn, new knowledge.

In the economy of information society, information assumes the role that material assets played in industrial society, and technological progresses are based on permanent knowledge and innovation. In the new economy, information becomes the most important economic resource, the company is based on the consumption of information and the information infrastructure extends to a global level.

At a macroeconomic level, industrial technologies are replaced with information and communication technologies (ICT), the weight of tangible (physical) assets decreases in relation to intangible assets, and the production of tangible goods implies more knowledge and information. One of the differences between tangible and intangible goods is that a physical asset is transferred entirely, while the information sold or assigned is not disposed for good. This difference is not so marked when we talk about information assets protected by intellectual property laws.

Information and communication technology (ICT) is an infrastructure created on the basis of scientific knowledge, which disseminates this knowledge globally. Hence, knowledge becomes a fundamental resource, a means of production and a product in the new economy. At international level, the emergence of new branches, the establishment of new technologies and resources and the change of labour leads to the restructuring of the economy. For the first time in history, the question of anticipating the directions of development of the economy is required by defining strategies and introducing new interdisciplinary coordinates, the sustainable economic development that ensures the preservation of environmental conditions and resources for future generations.

If at the macroeconomic level, knowledge management is materialized in national or transnational development strategies, at the level of the enterprise, the implementation of ICT specific to information society begets a new type of organizational management, as well as the change of traditional work relations.

The main scope of knowledge management at the level of the organization is to control and use the intellectual capital available at the level of that organization. What is characteristic of the information and knowledge-based society is that information and knowledge are the most valuable assets of the organization.

The knowledge revolution also entails a revolution of the labour force. It is important to mention that this restructuring is not determined strictly by technology, but also by the cognitive science applied to new technologies. The place of the trader and the artisan is taken by the technologist or the engineer, actually by the professional specialized in the continuous assimilation and dissemination of knowledge.

The implementation of new IT technologies also leads to the increase of demand for highly qualified workers, with multiple training, capable of continuous learning. Moreover, work relations are also subject to severe changes: indefinite employment contracts are being replaced with short-term contracts or project-based contracts, the weight of flexible work schedules, of working at home or remote work increases (due to the existence of the Internet and specialized software applications). The tendency of outsourcing various activities becomes increasingly pervasive, to such an extent that many companies combine a fixed employment structure with a flexible one. Around a “hard core” containing a small number of employees, other employees are recruited only for specific operations or services for definite periods of time.

Therefore, there are three essential abilities required for employment:

− Computer literacy, at least at a basic level;
− The knowledge of an internationally spoken language, a requisite for using the computer and various programmes and browsing the internet;
− The capacity to communicate not only with the team, but also with possible intelligent systems and entities of the future.

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In the context of globalization of digital economy, companies using information and communication technology risk being thrown out of the market. Intercompany and intra-company communication, as well as between companies and providers, customers and service providers is achieved by means of more and more digital systems. New technologies modify the decision-making mechanisms by replacing the pyramid hierarchy with a horizontal one or with other types of decision mechanisms.

The capacity to innovate, the high level of intellectual training and creativity will be the main values of the employed staff, and the concentration of the power of decision at the level of an employee or a restricted group will be replaced with the delegation of responsibilities. The relationship of subordination will, probably, be replaced with that of cooperation, which presupposes a high level of confidence between the organization and its employees. At the same time, the organization will have advanced technological means at its disposal to supervise its employees (cameras and microphones inside the organization, recording telephone calls with customers, restricting the access to various communication lines, first of all, to the internet, installing GPS systems for the company’s means of transport etc.), which poses problems centered on the protection of human freedoms, as well as regarding the change of the applicable law.

It is possible that new directions of digital communication will be defined in the near future, all the more so as information and communication technology is more and more financially and economically accessible from the point of view of their dimensions and weight (the office computer is gradually replaced by the laptop, mobile phones become smaller and take over computer applications etc).

In the last decade, several types of electronic business instruments and solutions were established¹:

- Online catalogues - the digital presentation of products and services offered by a company allows the instantaneous transmission of this catalogue to potential customers, as well as the permanent update thereof, all for a price which is lower than the price of a print.
- Vertical networks - which digitally scan as much information as possible from an industry and can create the required data bases for the preliminary stages of pre-production as well as for production and post-production.
- E-buy - is needed in all stages of internet purchases (documentation, negotiation, contracting, bidding).
- Online professional education and training (e-training and e-coaching) - ensures the fundamental support of innovation, knowledge, creativity and communication.
- Internal portals - all employees are simultaneously informed and their solidarity and responsibility is built by means of online management projects.
- E-tailing - which allows the permanent increase of the number of clients, as well as the creation of a customer database, which is practically impossible in traditional trade.

Here we can add the company’s webpage which defines the coordinates of its identity in the virtual space, the opening of pages on various social networks, and its registration on business websites.

A company’s presence in cyberspace radically changes the competitive climate as well as the marketing instruments and strategies. Cyberspace is a new territory which can balance out companies, irrespective of their size, the companies with a more flexible behaviour, often times, small and medium enterprises, are favoured. In addition, we are witnessing a marketing revolution, insomuch as the globalization of internet access allows the gradual substitution of traditional and expensive marketing solutions (door-to-door sale, advertising on consecrated and outdoor media) by digital accessing potential consumers and publicity in the virtual space. The strong development of e-commerce is a direct consequence of people’s movement in virtual reality. In the technological context of information society, the definition that Philip Kotler gives to marketing, namely "a human activity directed at satisfying needs and wants through exchange process"⁴, can also be read against a background of new meanings. Consumers’ needs and the characteristics of exchanges are subject to an intense process of transformation. We need more and more intangible assets which belong to a virtual reality, and commercial exchange takes place more and more on channels that incorporate digital technology.

In the same context, we can talk about a reinterpretation of these four factors (product, price, distribution, promotion), according to which, according to E.J. McCarthy, the marketing objectives of the organization can be classified using marketing instruments which make up the marketing mix. Products incorporate more and more digital technology and can be non-material assets in themselves, distribution channels experience an intensive restructuring determined by digital technology and, in certain cases; they can be fully incorporated in this, while instruments of promotion have an accelerated dynamics of transformation in the directions brought about by the use of new technologies.

There are also vulnerabilities associated with electronic business which need to be identified and foreseen. As money moves in the virtual space, new forms of crime emerge. Cybercrime is a term designated in specialized literature which designates a wide range of crimes carried out in cyberspace. Theft and bugging all types of documents circulating in electronic form threaten the operation and security of companies and organizations. New forms of economic espionage emerge and new types of anti-competition practices. This requires the establishment of a new profession at the level of the company, that of communication security specialist (large companies have full-size departments handling this problem).

Consequently, in a knowledge-based economy, as the economic environment becomes more and more intelligent, we are witnessing a remodeling of business and, implicitly, of marketing instruments and strategies. It is imperative to foresee these changes, in order to give the theory of one-step-ahead reality a chance.

**BIBLIOGRAPHY**


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