

Conceptual Issues of Sustainable Innovative Development of the South Caucasus Economy Based on the Concept of Engineering Marketing-Management

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The historical period from the end of 2019 to the present for countries around the world can be characterized as a time of new unknown political and economic challenges and threats, the consequences of which are very difficult to predict. The designated processes and conditions, as well as the irreconcilable competition for ever new cheap raw materials, labor and sales markets between relatively economically developed countries of the world, the entire world community also presents new challenges and threats. These events and processes of the last two or three years, which have involved all countries, have shown the excessive vulnerability of the national economies of such relatively small countries of the South Caucasus as Azerbaijan, Armenia and Georgia. Other reasons for the challenges and threats that await the peoples of not only the South Caucasus, but the whole world can be attributed to the local problems of individual regions and countries.

The reasons for new challenges and threats are usually hidden in ambitions, as well as sometimes in incorrect political, economic and military-strategic decisions of inexperienced leaders of individual states who came to power in different years, including in the indicated countries of the South Caucasus. Indeed, there are a lot of problems associated with the all-round development of the countries of Azerbaijan, Armenia and Georgia. In the face of new challenges and threats, the countries of the South Caucasus can ensure sustainable innovative development of their national economies through the practical application of the conditions and principles of engineering marketing - management.

Key words: *marketing management, the countries of the South Caucasus, innovation, economic sustainability.*

Engineering marketing - management is a kind of new creative approach to solving social and economic problems of countries and their regions. The main tool of engineering marketing - management is engineering technology, supported by precisely verified and calculated engineering thoughts.

Presently, the world economy is showing tendencies that cannot be reasonably comprehended. Indeed, the laws and patterns of social and economic development of society are not observed by many state structures everywhere. Economically developed countries tried to remake the world in their own way, trampling the rights and freedoms of small countries which are on relatively low level of development. All these phenomena and processes, as well as the rapid spread of the COVID-19 coronavirus since the end of 2019, have put the entire world community in front of new challenges and threats. Many of the latter are associated with new processes in the modern world order. This includes an open violation of the rights and freedoms of small countries by large countries of the world, etc.

Other roots of the challenges and threats that await the peoples of not only the South Caucasus, but the whole world can be attributed to the local problems of individual regions and countries. The latter are usually associated with the lack of a sufficiently effective objective electoral system and public administration, particularly in countries formed about last thirty years in the former post-Soviet space. As follows from the above, all challenges and threats in each individual country

come from both external and internal national and other forces. The main reason hindering the economic development of the South Caucasus countries is the lack of experience in development under the conditions of the capitalist economic system.

It remains only to discard all the accumulated negatives in relations between these countries and think about the future of the peoples inhabiting the South Caucasus. It will be difficult to find common ground with internal opposition forces and external enemies. In short, the countries and peoples of the South Caucasus need to unite their efforts and act from a unified position in protecting the common sovereignty and territorial integrity of each country, open borders, integrate scientific, technical, production, economic, financial and other capabilities. We are also prompted to these and other constructive actions by the experience of Western European countries, USA, Japan, China, South Korea, etc. This experience is also associated with a relatively new and progressive concept of engineering marketing and management. The problems of the practical application of marketing and management in Russia are devoted in the works of Bagautdinova N.G., Zozuli D.M., Kovalev A.I., Kolesnikova M.A., Lyubanova T.P., Mamontov A.N. and other researchers (Lyubanova et al, 2011).

Results

The importance of engineering marketing management lies in the fact that it incorporates the main elements of the practical implementation of the concept of engineering marketing and engineering management in countries and free economic zones, regulated and managed on the basis of laws and orders of a market economy. The rational and effective links of engineering marketing - management are the principles of complexity, consistency, engineering and mathematical validity, economic and social efficiency and environmental balance. Engineering marketing management is designed to combine the basic conditions and principles of three scientific and practical areas: engineering knowledge, marketing and management. Such joint activity is a scientifically grounded and practically verified step of modern management and its functional part of marketing. The activities of these two interrelated sciences in this case are mobilized to improve the quality of management of research and development work to create goods and services in demand from the market, as well as the effective solution of logistics problems to bring them to specific buyers in accordance with the concluded contracts (Kotler, 2006). This means that engineering marketing management is a market-oriented system for managing the production and commercial activities of firms using engineering approaches and principles (Bagautdinova, 2004). It should be noted that engineering marketing - management is formed on the basis of engineering principles, experience and knowledge, as well as basic theoretical and practical components of two mutually complementary sciences - marketing and management (Birbraer & Altshuler, 2007). Nowadays, scientists of different profiles and directions, including economists, do not have common views and opinions regarding engineering management and marketing. Although some of them believe that engineering management is an academic subject that instills in future engineer's special knowledge in the field of modern management. Representatives of the following direction note: "Engineering management is a specialized form of management related to industrial engineering, which concerns the application of engineering principles to business practice" (Engineering management, 2011).

Engineering marketing - management as a concept was originally formed in Japan, then developed in South Korea, and is currently being intensively enriched and applied in Western Europe, China and other countries of the world (Babkina, 2017). Currently, marketing and management with engineering stuffing, as scientific disciplines, is taught in a number of economic and technical universities in Russia and other countries of the world. However, it should be noted that engineering

marketing is management as a relatively new scientific discipline and an integrated complex that has incorporated the basic elements of the above disciplines. This discipline is still at the stage of formation and further approval (Lyubanova et al, 2011).

Comprehensive innovative and sustainable development of any country on the basis of engineering marketing - management, including the countries of the South Caucasus, opens up very broad prospects in solving strategic economic and other tasks that are beneficial to all nations inhabiting this region. For the successful decision of this question it is necessary in a trilateral order to remove problems, interfering with this noble process. Particularly, in all three states of the South Caucasus, the process of democratization among members of society should be continued, the threat of war and elements of corruption in government should be eliminated. Additionally, it is necessary to pursue a policy of tolerance in interethnic and interreligious relations, abandon territorial claims to each other and provide sustainable peace and economic stability in the region. In our opinion, in order to eliminate the above and other problems, it is necessary to study the experience of resolving such issues in politically stable and economically developed countries of the world through innovations offered by engineering marketing - management.

There are various productions, economic and financial opportunities in the South Caucasus countries aimed at creating, acquiring and introducing innovative production and organizational technologies in the sectors of the national economy. For example, the Republic of Azerbaijan has the ability to extract and sell hydrocarbon raw materials and economically occupies a relatively better position than Armenia and Georgia. Presently, 18 technoparks function in Azerbaijan, production and economic zones have been created in Nakhichevan and the Nefchalinsky region, about five logistics centers have been formed, and a free production and economic zone is starting to operate in Alat (The first technopark., 2016).

According to the data of the National Statistics Service of Georgia, the volume of foreign direct investment in the national economy of Georgia in 2020 amounted to only 0.6169 billion US dollars, which is 52.9% less than the adjusted data for 2019. (Statistics Service, 2021).

Notably, that in the ranking of countries by the level of foreign direct investment in 2018, Azerbaijan ranked 75th, Armenia - 129th, and Georgia - 84th (Humanitarian portal, 2021).

However, as in the former republics of the post-Soviet countries, and in the current countries of the South Caucasus, we notice elements of a cowboy and imitation economy (Cowboy economy, 2016). In the meaning of the cowboy economy, among other things, we lay the fact that in the countries of the South Caucasus, often a number of economic and other decisions are made on the initiative of some leaders without sufficient scientific and technical justification and calculation of environmental and other environmental consequences, as required by engineering marketing - management. The simulation economy has nothing to do with the simulation of economic processes. The simulation economy is not the same thing as the simulation of economic processes. We have resorted to the term imitation economy for the reason that, not only in the South Caucasus countries, but also in the world, we see how a number of leaders in the highest echelons of power in the media and statistics are trying to mislead the scientific world, exaggerating their successes and the state of the economy of their own state. The viciousness of the imitation economy depends of fact that by imitating the success of economic development from the outside. For example, if we take the official statistical indicators characterizing the state of the economy in Azerbaijan, Armenia and Georgia, they often change from year to year.

Additionally, we have the impression that the heads of most enterprises and organizations in the South Caucasus countries do not understand the meaning of the word "innovation". How else to understand the fact that in a number of industrial and commercial enterprises of these countries, innovation departments have been created, where they little know about engineering marketing - management and have never developed their own innovative products.

We know from experience that innovations are created at the junction of two or more sciences by intellectuals who have gone through the corresponding schools. It is difficult to find such schools in the countries of the South Caucasus. In these countries there are no consistent researchers of the composition and structure of personnel requirements for individual sectors of the national economy, ministries and departments. It is also worth noting the issue of personnel training in universities of these countries and how well graduates of educational institutions meet the requirements of employers. Using the achievements of engineering marketing - management opens up very great prospects for the countries of the South Caucasus in front of the closest relatively large neighboring states, like Iran, Russia and Turkey, in terms of increasing the competitiveness and ensuring the sustainability of the national economies of all these countries.

Conclusions and recommendations

We believe that the countries of the South Caucasus, which about thirty years ago embarked on a course towards building a system of market relations within their borders, have a sufficiently solid basis for transferring the economies of their states to the path of innovative development. This base consists of the following:

1. Presence of kind intentions of top management and majority of population in translation of all regional economy of South Caucasus on the innovative way of development.
2. Available common resource potential, including the underground and above-ground resources of the South Caucasus countries, advantageous geographic location, developed infrastructure, relatively favorable natural and climatic conditions, etc.
3. Relatively skilled and plentiful workforce.
4. Availability of research potential of scientists from universities and academic institutions, the possibility of reorganizing and mobilizing their efforts to create and implement innovative projects based on the conditions and principles of engineering marketing, etc.

There are problems that hinder the practical application of the capabilities of engineering marketing - management in transferring the economies of the South Caucasus countries to the path of innovative development. It is worth to better study these problems, namely the political situation and the financial and economic condition of one's own country, geopolitical issues and problems of interstate relations, trends in the development of science, technology, mechanisms for solving certain internal and external problems, and much more. In Azerbaijan, Armenia and Georgia it is necessary to form the economic and political system on similarity of Israel, South Africa and Turkey, so that these countries always remain secular, independent and free, oriented to market mechanisms in the state management of social and economic processes.

In any case, the main directions of overcoming the problems facing the industrial application of engineering marketing - management in the South Caucasus countries include:

1. Relatively better study of science and practice of anti-crisis management of economies in countries with relatively stable financial and economic systems, with the condition of practical application of the knowledge and experience gained in their countries.
2. Carrying out qualitative changes in the systems of professional training of managers and marketers, engineering and technical workers, as well as workers for the social sphere, industrial and economic activity.
3. Development and implementation of special programs for training developers of innovative technologies to create technical and technological innovations.
4. Conducting special trainings with the participation of representatives of free economic zones, as well as workers of technoparks, aimed at educating and training their own creators of innovative technologies.

5. Improving the system of training in educational institutions of the region in response to the hostile attitude of a number of economically developed countries of the world to the development of education, science and technology in less developed countries of the world, including the countries of the South Caucasus.
6. Adoption of comprehensive measures for the qualitative selection and placement of managerial and other personnel in all state structures of the mentioned countries.
7. Raising the level of development of an integrated production, social and market infrastructure between the countries of the region.
8. Formation and improvement of the legal framework for integration relations between the countries of the Caucasus region.

Presently, business representatives and former corrupt officials, being in the power structures of the South Caucasus countries for some reason are not interested in applying the achievements of engineering marketing - management in their own countries. The reasons for such passivity of potential investors are mainly:

1. Relatively unstable political, economic and military-strategic situation in the countries of the South Caucasus. Particularly, the permanent change of government in Armenia and Georgia, the possibility of a repeated invasion of the Russian armed forces in Georgia and the resumption of hostilities by Armenia against Azerbaijan with the support of Russia, France and a number of other states, etc.
2. Lack of confidence in the countries of the Caucasus in the economic efficiency of investment projects and a sufficient legal framework to guarantee the protection of investments and the rights of investors.
3. Limited economic space for business development and purchasing power of the population in the countries of the South Caucasus. Limited opportunities for firms to enter foreign markets with their goods and services.
4. Insufficient development of production, social and market infrastructure in the countries of the Caucasus region, especially in Armenia and Georgia.

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