

Marketing activities in mineral ore complex of Yugoslavia

Ratko Culibrk¹

Marketingové aktivity v rudnom komplexe Juhoslávie

Rýchly ekonomický rozvoj v súčasnej dekáde tohoto storočia sa odrazil taktiež v zmenách orientácie obchodovania moderného podniku. Prechod smeroval od produkčnej orientácie k trhovej, kde sa neskôr vyvinuli dôležité aktivity, bez ktorých by bol moderný management dokonca aj v rudnom komplexe nepredstaviteľný.

Účelom tohoto príspevku je poukázať na niektoré postupy a procesy ovládajúce marketingové aktivity v juhoslovanskom surovinovom priemysle.

Key words: mineral ores, marketing, marketing program, communication, environment and the system environment factors.

Introduction

Marketing determines the business activities and behavior of every enterprise and thus the mining firm too. This is natural when we know that the planned and business tasks and assignments could be realized only by the market and its mechanisms. Since the time when the demand was bigger than the supply and when the basic problems were shown through a request for an increase in the scope of production (to produce the largest quantity of goods with the lowest expenses) the market has been transformed into the *market of buyers* in which the essential problem is how to satisfy the buyers requirements concerning the goods (product) or service.

Only the best and the most capable ones will survive and remain on the market. They always offer faster, more and more qualitatively than their competitors. Buyers are satisfied with them because they meet buyers needs, requirements and expectations. Better are only those who can duly identify the market needs and requirements, providing the quality which ensure them a measurable competitive advantage on the market, long-standing success, and even the leading position.

The relationship to the market in the industry of minerals depends not only on the action of the market laws, but also on the influence of the country, producers and consumers themselves, that are to be identified and properly allocated by the enterprise management so as to achieve the maximal possible effect on the market of mineral ores.

Long ago, majority of successful mining enterprises, i.e. economic systems in the Yugoslavia industry of minerals have introduced and conceived their specific approach to the market, based on the application of the marketing i.e. the marketing strategy and conception as the framework of the contemporary management. It excludes improvisation and pushes a routine activity: favor possession of quality and an opportune information on the mineral resources, market, new technologies, actual scientific achievements, etc.

Marketing activity - specific feature and organization in the industry of minerals of Yugoslavia

Kotler (1972) defines marketing as "*peoples activity oriented to satisfying the needs and wishes through the process of exchange*". F. Gross emphasizes that "*marketing can be best defined as making the market, as the buyers production, as the unique programming of production of an enterprise from the consumers point of view (Kotler, 1972)*".

According to P. Kostic "*marketing is a system of organized and coordinated business activities through which the production systems are successfully controlled in order to optimally satisfy the needs and requirements of consumers for certain products or services*". M. Milisavljevic says that marketing is "*also a method of linking the enterprises with the milieu in which the process of exchange is carried on to satisfy the needs of an individual or an organization (Milisavljevic, 1992)*".

"What is common to all these assumptions is that the *marketing of an enterprise represents a complex system which unites all domains connected to the functions of an enterprise*."

The marketing conception in the industry of minerals in fact offers a new method and practice in defining and realizing the business policy of the enterprise. The business functions and the policy of the enterprise act on the basis of the marketing conception synchronously and integrated. Their only aim is the market i.e. its needs and the making of a competitive capability and advantage of the enterprise on the market. This affirms the

¹ Prof. dr Ratko Culibrk, Senior Scientific Associate, Faculty of Mining and Geology, Belgrade, Yugoslavia
(Received: December 10, 1998)

search for new designs and more efficient forms of management in which a certain specific features become apparent, reflecting directly or indirectly the marketing.

Specific features influencing marketing in the industry of minerals of Yugoslavia

A variety of mining production has offered to Yugoslavia valuable experiences in the researches and acquiring of resources of solid and liquid mineral ores.

Today, FR Yugoslavia with the population of about 11 million (approx. 0.26% of the world population) participates by 0.8% of the world production of coal, petroleum and gas 0.30%, in the production of copper ore 3.2%, in the production of lead ore 1.5%, in the production of zinc ore 3.8%, in the production of antimony 2.5%. In the production of magnesite 3.0%, cadmium 1.0%, magnesium 2.0%, bauxite 1.5%, feldspar 1%, ferronickel 1.0%, silver 0.9%, and gold 0.4% (Vujic, 1997).

On the territory of Yugoslavia are available and exploited four most important sources of primary energy: coal, outstanding hydropotentials, naphtha, and gas. Energy resources of Yugoslavia still mostly rely on coal reserves in our four biggest coal basins: Kolubara, Kostolac, Kosovo and Metohija and Pljevlja. The inland production of oil and gas in FR Yugoslavia (and with concessions in Angola) though not covering completely all the requirements is of great importance for the economic stability and the economic development of the country. Of certain importance, but comparatively much less than this one, are some of new and reopen energy sources such as the geothermal biomass energy, solar energy, wind energy, as well as the presently insufficiently explored and less industrially applied nuclear raw materials and oil-shales.

In the domain of valuable mineral ores, the group of non-metals is the youngest one and since recently started to enjoy its own sovereignty. Nowadays, Yugoslavia has an important and developed production of building and architectural stone, bricks and ceramic clay, quartz sand, marl for cement industry, barite, quartzite, etc.

From the standpoint of development of the mineral economy of the country, very important are discoveries of new deposits of mineral ores which have not been known here so far. Those are boric minerals, wollastonite, zeolite, tungsten, uranium phosphorous fluorite. More than 300 deposit occurrences of lead and zinc, about 250 quartzite occurrences and several tens of copper deposits have been registered.

In recent years high level, and in the exploitation of some mineral ores also the highest world level of the technique, technology, and organization of production have considerably contributed to time and capacity exploitation of equipment of the mining enterprises. However, the absence of possibilities for a more complex utilization of certain types and complex natural factors with emphasized geological, hydrogeological and ecological problems results frequently even in a lower grade of utilization of both the deposits and the equipment in comparison to similar conditions beyond the borders of this country.

The uneven territorial disposition of the mineral ore resources and their production, impossibility of the reproduction of already exhausted deposits through new explorations and mastering, the limitation of wealthy and large deposits of mineral ores as well as permanent drop in the quality of mineral ores, with a growing participation in explorations of "blind deposits and ore bodies" mostly represent additional restricting factors in the development of the mineral industrial complex of Yugoslavia.

It is understood that the scientific-technical progress neutralizes one part of the above negative tendencies and influences but a considerable part remains to be minimized or completely neutralized by better management inter alia.

Marketing activities and organization

Marketing in the business activity and the industry of minerals too is specific in many ways but also alike. The specific features can be observed from the standpoint of coverage, modality, involvement in certain marketing functions, etc. Similarities are in the direct connection with the relationship between the enterprise and its environment.

The marketing role in the mineral ore complex as well as in other production fields can be observed from several standpoints, viz.:

- ❑ *thematic,*
- ❑ *functional,*
- ❑ *territorial,*
- ❑ *system-related, and*
- ❑ *management.*

Thematic approach ensures the marketing control of certain products (services) and therefore a distinction must be drawn between the marketing as per individual concrete products, i.e. services.

Functional approach covers the activities related to the process of distribution of products (services) and there are different functions and the role of marketing, for example the market research from the standpoint of a possible marketing of products (inland and world).

Territorial approach secures marketing, commercial contacts between producers of mineral ores and consumers-users who are in a great number by rule and with different requirements and needs. From this point of view the market could be divided into *local, regional, domestic, world, etc.*

With the *systematic approach* it is possible to ensure the coordination of marketing and other business functions inside the enterprise while the *management approach* of marketing keeps the central role in the overall development and application of the management strategy.

Irrespective of the organizational model of enterprises in the industry of minerals (*professional, divisional, mixed*) mutual businesses are concentrated today on the level of enterprises from the research-developing, quality control, marketing, business information, finances, personnel, commercial and other general assignments aimed at a more complete utilization of so-called synergetic effects.

Within this scope there are several alternatives for a successful organization of the marketing function. But, how it will be organized depends on the nature of the enterprise itself, competition, market at which the enterprise realizes its business activities, as well as on the available staff which is scarce in this field.

Majority of authors agree nowadays with the assumption that irrespective of the organizational form of the marketing activity, it should be developed and realized on the level of the enterprise with the transfer of some operational activities to lower organizational forms.

The marketing service on the level of the enterprise ensures its integration with other activities of the enterprise. The advantages which are often accentuated in such a model of organization of the marketing activities are:

- ❑ *savings in assets,*
- ❑ *there is no duplication of work posts in the enterprise,*
- ❑ *the most creative staff gathered at one place,*
- ❑ *the best coordination and control of carrying on certain activities,*
- ❑ *the easiest reconciliation of targets, plans and budgets,*
- ❑ *the easiest creation of the image, style of the enterprise and the longest keeping thereof.*

From the standpoint of the environment of the marketing function in an enterprise, the functional and the territorial components have to be kept in mind.

Such a conceived marketing activity ensures assumptions for the efficient cooperation with other services of the enterprise. It is on an equal footing with other services and represented through its executive to the management of the enterprise.

Marketing strategy and managing the enterprise

The strategy of development of a mineral ore complex of every country must be oriented toward further mastering of mineral ore resources. This includes the need for a permanent recognition and search for an answer in the enterprise connected to changes in the milieu in which the enterprise is doing the business and beyond it, in the environment with which it communicates via its product, and this anyway makes a framework for the marketing strategy of the enterprise.

Under the conditions of market economy, scheduling of a business policy of the enterprise represents the basis generating all more important assignments for the management of the enterprise, starting from the market research, sale of the product, market communicating, design, distribution, price policy, training of personnel, organization of business operations, to the planning and investing. The role of marketing in the business policy of the enterprise starts with the defining the strategy and objectives of the enterprise and ends in making the planned and operational decisions and the implementation thereof, with the feedback information from the market. From the marketing or the marketing strategy, the enterprise is expected to contribute by the market research and by proposing the assortment of products for that market, to the choice of such a production which products are demanded and have real chances to be marketed (Culibrk, 1998).

No application of marketing is possible without the research and no success of the enterprise without marketing. Marketing enables timely perceiving and recognizing all changes occurring in the environment and being the threat and chances for the enterprise so that it could adequately react to them. Marketing identifies influences of the external and internal factors which substantially condition the efficiency and effectiveness of the enterprise strategy.

Therefore, the purpose of marketing within the scope of business policy which the enterprises should govern in order to ensure their goals and interests on the market is shown through the necessity:

- ❑ *that the enterprise get acquainted as good as possible with the requirements for its products (services),*
- ❑ *according to the information from the market to determine its assignment and pursue its development and present policy accordingly,*
- ❑ *to provide the undisturbed conditions for carrying on the reproduction, and*

- ❑ *to create such organizational conditions which will contribute to the better utilization of resources, without losses, with the realization of the planned scope of production and the appropriate productivity of work, etc.*

The key principles on which the marketing approach is conceived and which remains irrespective of the circumstances in the environment are especially:

- ❑ consumers demands,
- ❑ achieving a competitive advantage,
- ❑ directing and focusing the targets, resources and efforts of the enterprise.

The strategic option in developing and application of the marketing principles means only upgrading of the concept or its adaptation to concrete conditions ruling on the market. Therefore, at any moment the marketing system of control must precisely determine:

- ❑ where is the enterprise (state and position on the market),
- ❑ where it wants to go (objective, business policy, etc.), and
- ❑ with which means and models it can realize the target.

Marketing must envisage an adequate control and appraisal of the results of marketing activities whereby permanent observation of the system behavior is ensured and the possibility of influencing certain flows and functions determined. This in fact represents a dynamic and interconnected action of ascertaining the condition and relations, setting the goals and business policy.

Since the basic meaning of the marketing concept lies on the orientation of the enterprise toward consumers-buyers, the management must endeavor through its determination for the marketing concept to adapt the enterprise structure to the market requirements which is defined by rules as marketing program of the enterprise.

Marketing program of the enterprise

To remain on the market the enterprise must be well acquainted with its demands, taste and needs. This also includes, in addition to knowing the factors and phenomena influencing the market trends, having a knowledge of the competition, relevant normative regulations, government policy as well as general economic, social and political circumstances influencing the market conditions (Culibrk, 1998).

Therefore, it means that in the development of the marketing activity on the market it is not sufficient to be only marketing oriented toward the key resource - consumer but the attention should be also directed to the creating new values of the product, better and more complete than that offered by the competition. The marketing is therefore expected to contribute, through the market research and the proposal of product assortment for that market, to the choice of such a production which products have the appropriate demand and real chances for marketing.

Starting from these principles, the marketing concept has evolved from its traditional paradigm conceived on creating a “better” product and orientation to “personality” of the consumer toward a more expressive affirmation of the significance of the strategic management approach in developing the marketing activities through the marketing program.

Marketing mix makes the basis of the marketing strategy from which the overall marketing orientation of the enterprise originates. Realization of the marketing program usually runs through the following stages:

- ❑ defining individual elements of marketing program,
- ❑ defining the role of every individual element in the marketing program,
- ❑ interlinking the functions of the marketing program elements,
- ❑ finding and optimal combination of the program elements,
- ❑ realization of the marketing program on the market,
- ❑ action control of the marketing program.

Marketing program represents the scope, structure and the method of utilization of the marketing resource defined beforehand for the purpose of accomplishing the objectives set. Marketing program encompasses four basic fields (subsystems):

- ❑ *production,*
- ❑ *price related,*
- ❑ *distribution, and*
- ❑ *communication.*

Each element of the marketing program covers a great number of activities through which the appropriate functions to be precisely defined are realized in order to be more efficiently combined for a more successful activity of the whole marketing program.

Defining of the optimal combination inside the mix of each element, as well as the whole program is implemented for a more efficient realization of the basic targets both of the program itself and the overall

business system. It should have in view here that the *product, prices, sales channels* are only the instrument of the marketing mix and variables with which the enterprise try to satisfy the buyers and to accomplish the goals of its management of affairs.

What will be the structure of certain elements in the marketing mix depends first of all on the conditions in which the system functions, and on the frequency of changes occurring in the environment as well as on the method of market communication.

At this, the management of the enterprise should strive for such combinations of elements that best correspond to both the business system and the instantanenuous demands of the market .

Market communication system

The enterprise as a system sustains and receives the influences of its environment. The relationship of the influences between the elements (*subsystem*) inside the system and the system in the wider surroundings is realized through an exchange of material, energy and information. It is an universal characteristics valid in general for all open systems and relationships between the subsystem and the system. In order to pertain to a wider entity, they must have its basic properties because otherwise they lose the connection with it and in most cases are condemned to destruction. Therefore, only open systems can survive with permanent interaction with the environment.

If the enterprise is acquainted with changes at every moment, it is possible to optimally govern the flows of production and their expenses. The enterprise establishes the contact with the environment through the marketing system of communication, because it is also the part thereof. The characteristics of the environment are carried over to it, so we can find similar valuable characteristics in it (Kostic, 1978).

The enterprise environment determining its behavior includes:

- ❑ *socio-economic system,*
- ❑ *demographic system,*
- ❑ *technical-technological system,*
- ❑ *legal system, and*
- ❑ *the system of social values.*

The role and the importance of communication in marketing reflects first of all the requirement for the objective and thorough information of buyers and consumers about the products and services aimed at making the choice more clear and the decision-making for the purchase easier.

The instrument which regulates the elements behavior inside the system and the system in the environment on the basis of which its further behavior is planned is the feedback connection which eliminates entropy and chaos, and establishes an order and balance in the system.

Fig. 1 shows a schematic presentation of the enterprise-market communication.



Fig.1. Enterprise-market communication system.

The above system of communication of the enterprise offers the following advantages:

- ❑ *better resistance to entropy forces,*
- ❑ *greater availability to changes and threats of the environment,*
- ❑ *greater flexibility and openness for introduction of innovations,*
- ❑ *more successful monitoring of competition activities,*
- ❑ *easier implementation and more adequate utilization of the technological achievement.*

The communication system is developed and changed parallely with the development and changes of the market i.e. the environment in which it functions. For that reason and in order to gain a competitive advantage of an enterprise, it is also necessary to adapt the organizational structure and the management strategy of the enterprise to the market changes.

Conclusion

Modern market of mineral ores is so complex that a successful management of affairs of the enterprise cannot be provided without the integral approach to marketing activities. In the formation of its business policy the enterprise uses various instruments which enable, in combination with other measures, the varying business objectives.

Coordination of the business policy with the state and changes on the market or with the consumers requirements is realized by the choice and development of the appropriate marketing concept of the enterprise which establishes all business activities in a well organized processes of planning and communicating, the system of information and the utilization of the relevant resources. According to its own role in the economy and the society, the marketing concept is directed to the making a special product and services used to satisfy certain needs, as the initial and final points in the activity of every enterprise.

For that purpose, the enterprise must study consumers requirements and try to satisfy them because this considerably affect the results of its management of affairs. Marketing must duly estimate possibilities and chances related to the probability of realization, i.e. success, parallelly with a real assessment of possibilities and capabilities of the enterprise to meet, respecting the economic trends, the requirements of the buyer or the market. This is in fact the marketing mix of the enterprise which is based on a permanent communication with the market and through a combination of different elements ensures the most favorable business results.

With the introduction of the marketing system of management in the enterprises of mineral industry qualitatively new cooperation relations are formed between the individual subsystems in the realization of the set goals of the enterprise. This requires a study, analysis, and an appraisal of all relevant factors, particularly those related to the possibilities, market and the competition. Here, not only the information available at that moment will be satisfactory, but a collection of information will be requested about previous and expected trends which serve to define a long—term strategy and planned activities of the enterprise.

Literature

- Culibrk, R.: Marketing activities in building material industry. *Zbornik radova I nau-no -strucne konferencije Komseko, Kanjiza, 1998.*
- Kostic, P.: Marketing – upravljanje proizvodnim sistemima. *Institut za sisteme planiranja i upravljanja, Institut za ekonomsku ekspertizu, Belgrade, 1978.*
- Kotler, P.: A general concept of marketing. *Journal of Marketing, Vol. 36, No 2, 1972, New York.*
- Milisavljevic, M.: Marketing. *Savremena administracija, Belgrade, 1992.*
- Vujic, et al. S.: Informacioni sistemi za podrsku u industriji minerala Jugoslavije. *Savetovanje, Informatika, ekologija i menadzment u povrnskoj eksploataciji lezista mineralnih sirovina Savez inzenjera i tehnicara Jugoslavije, Arandjelovac, 1997.*