MODERN CONCEPTIONS REGARDING THE CREATION OF SMALL AND MEDIUM BUSINESS IN UNCONVENTIONAL TECHNOLOGIES FIELD

Radu Dumitru MARINESCU¹, Niculae Ion MARINESCU², Claudiu Adrian PURDESCU², Dan DUMITRIU⁴

Abstract
Integration requests in The European Union, impose a great development also in Romania of the small and medium business orientated to knowledge, field in which also are integrated the unconventional technologies. This thing impose an approach at a superior level in management, relieving especially on the entrepreneurial and intrapreneurial relations, having personalized managerial thoughts for the affirmation of these business in front of the competition and for the creation of a strong brand image.

KEYWORDS: Management, competition, client, entrepreneurial, intrapreneurial.

1. GENERALITIES
In managerial practice, the realization of the leading process in any activity field, means the fulfillment of some specific activities, grouped in some defining management functions which act unconditional in interaction with industrial organization functions (fig. 1)

The main characteristics of these functions are:

- must be exerted in all industrial organization
- have different content and acting forms in rapport with the organization activity field
- have different content and acting forms in rapport with the hierarchical level at which they are exerted.

Taking into account the presented managerial aspects, can be affirmed that these managerial functions can be fully plagued also in the leading of the big, medium and small industrial organizations with preoccupations in unconventional technologies field, giving an integration expression to the management as science, art, spirit state (fig. 2)

Fig. 1 Interconnection MANAGERIAL FUNCTIONS – INDUSTRIAL ORGANIZATION FUNCTIONS

Fig. 2 The management complexity in unconventional technologies field
2. INDUSTRIAL ORGANIZATION WITH PREOCCUPATIONS IN THE UNCONVENTIONAL TECHNOLOGIES FIELD BORDERED TO THE COMPETITIONAL ENVIRONMENT

In the modern managerial conception, the organization with preoccupations in the unconventional technologies field must be treated as an open system of cybernetical nature (fig. 3) having some specific characteristics:

- is a complex system because groups human, material, financial resources and information;
- is a system in which act the social – economic unity, because groups, coordinate and train the available human resource to the achievement of some economical objectives;
- is a open system acting through the input flux - human, material, financial resources, information and through the output flux, materialized especially by products, services, information;
- is a integrated system man – machine – environment; etc

Fig. 3 The organization with preoccupations in the unconventional technologies field as system of cybernetical nature bordered to the competitional environment

In the market economy, the competition has the role to increase the value of the products delivered to the market that the effective or potential clients pay for. This "value" can be obtained by practicing lower prices than the competitors (for equivalent advantages), or by delivering exclusive advantages (technical impossibility of realization), that can fully compensate from the point of view of the client, a high price, case that can be resolve also through unconventional technologies procedures. Must be mentioned that, in the market economy, albeit the competitional importance of a new technology has at the base his scientifical deserve, in the moment of the impact with the market is not took into account and neither the realized product and counts the strong effect that the new technology produce it through the competitional advantage achieved. From this point of view, can be said that, the technological progress in the unconventional technologies allows an organization to gain a long lasting competitional advantage, if are fulfilled the next conditions:

- the decreasing of the costs and the increasing of the products differentiation;
- to improve the occupied market segment structure and to allow the possibility of penetration of the potential market;
- the stabilization or modification in the firm interest of the five "forces" of the market.

In this way, the technological progress can modify the rapport of forces between the firms in competition from a market segment and their clients through the influence of the costs, prices, and the diversification, determining the ascendent in negotiations from the firm. Are also modified the negotiations rapport between the firms that have technical progress and their delivers (especially in using new types of materials), reducing the dependence from a single deliverer. Also, the technological progress in the unconventional technologies field can influence the market segment structure by
launching some substitution products adaptable to the stock market variations. The market success of this kind of enterprise with preoccupations in unconventional technologies field is synthetically presented in fig. 4.

Fig. 4 Relation competition – clients – enterprise in the market recognition in unconventional technologies field

3. THE MODERN CONCEPTION REGARDING THE CREATION OF THE MANUFACTURING ENTERPRISES IN INTRAPRENEURIAL APPROACH, APPLICABLE IN UNCONVENTIONAL TECHNOLOGIES FIELD

The reality of the integration in the European Union impose as an important task to resolve, the development of the small and medium business and less the big ones, especially because the small → medium entrepreneur has the strongest evolution in the European Union. The modern vision in the creation of the manufacturing enterprises in the unconventional technologies field (fig. 5) has two directions of acting:

- entrepreneurial approach: the creation of some manufacturing enterprises independent in particular propriety developed on the individual thinking of an entrepreneur or totally detached from other big industrial organization;
- intrapreneurial approach: the creation of some SATELLITE enterprises, attached to a mother enterprise, with penetrating actions on the market in research, production, marketing and services fields.
Taking into account the reality of integration in the European economy, it's impose the apparition from occidental models of some small and medium business SATELLITE, attached initially to a big enterprise MOTHER also in the unconventional technologies field. The entrepreneurial conception of the creation of this kind of firms SATELLITE in unconventional technologies field is presented in fig. 6.
Analyzing this satellite enterprises creation conception, can be presented the next aspects of managerial thinking:

a. the MOTHER enterprise has a base activities domain – BAD – for example: the research, the designation and the manufacturing of some products, equipments, installations in classical technologies field (CT) and in unconventional technologies field (UT);

b. for becoming strong on the market, the MOTHER firm develops strategically activity domains – SAD – derivated from base activity domain – BAD such as:
   - SAD1– products obtained through or for mechanical processing (PM)
   - SAD2– products obtained through or for metallic constructions (CM)
   - SAD3– products obtained through unconventional technologies (UT)

c. if the MOTHER gets the market especially in SAD1 and SAD2, will look for to harmonize his own strategically managerial vision based on stability and financial response with future managerial thinking, creating on base SAD3 the SATELLITE firms 1,2,3,….. Strategically managerial thinking aspect appear when on base of the same SAD3, the MOTHER firm creates in different geographical zones similar SATELLITE enterprises 1′ and 1″, imposing the competition between them, in own benefit;

d. the SATELLITE firms 1′ and 1″ will create business strategically units BSU, asked by the MOTHER firm, but also independent from this – BSU 1,2,3 ….. such as : BSU1 – specifically installations to the unconventional technologies ; BSU2 – electrode instruments ; BSU3 – specific operations, etc.

4. CONCLUSIONS

In the present, in the market economy evolution especially in the industrial strong developed countries, can be detected the need of development in different fields of small and medium business especially in the unconventional technology field, micro and nanotechnologies. This because in the presented domains, this kind of enterprises present a strong action to innovation, team spirit and mobility according to the market needs, acting alone or as SATELLITE of a MOTHER organization characterized by stability, the acceptance of risk actions and financial potential. The probably evolution of small and medium business in the European Union and on global plan, recommended by the European Employers – UNICE – and for Romania is presented in fig. 5.

REFERENCES


AUTHORS

1. Professor Ph. D. Eng. Radu Dumitru MARINESCU¹, “Politehnica” University of Bucharest, Phone +40722479844
2. Professor Ph. D. Eng. Niculae Ion MARINESCU², “Politehnica” University of Bucharest
3. Assist. Eng. Claudiu PURDESCU³, “Politehnica” University of Bucharest, Email: claudiuap@yahoo.com, Phone +4072663755
4. Assist. Ph. D. Candidate, Eng. Dan DUMITRIU⁴, “Politehnica” University of Bucharest, Email: dumitriud@gmail.com, Phone +40723867258