

Competitive Strategies Formation in High Technology Enterprise

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Abstract: The article describes competitive strategies formation in high technology enterprise, choosing the optimal structure of the manufacturer, effective management system for definite case situations as the formation of competitive strategies is one of the most important goals of modern Russian economy.

Key words: Competitiveness • Competitive strategies • High technology • Effective management
• Evaluating criteria • Resources

INTRODUCTION

One of the crucial concerns in the contemporary Russian economy is to build and implement the competitive strategy of production enterprises. It will enable the economy to change its basic macroeconomic indicators, as well as to surpass the raw materials orientated export and finally it will allow domestic manufacturers to regain its share in the market of high technology products [1, 5]. The condition and quality of competitive capacity are determined by various factors which are exposed to a regular change in unstable external environment. Consequently, this requires senior executives to take relevant management measures.

Effective management is considered to be the only one way to establish, deliver and sustain the necessary competitive capacity of high technology production enterprise. Managing the competitiveness of high technology production enterprise along with developing relevant competitive strategies should be seen as a consistent process of coordinated actions in relation to the managed objects to establish and maintain the essential competitiveness in the market. It is worth mentioning that in order to manage competitiveness effectively high technology production enterprise should not follow a single strategy. A dynamic and unstable external environment, which is specific to the high technology production enterprise, suggests applying multiple competitive strategies instead.

Defining the main competitive strategy in the development of high technology production enterprise is fundamental to form the system of management. Besides,

it is one of the key concerns of the contemporary innovation manufacture, which requires developing an algorithm when choosing the most sustainable competitive strategy. The stages of the algorithm are the following [3]:

- Defining key competences of high technology production enterprise on the basis of content analysis on its mission and vision. At this point the manufacturing company should reveal its capacity to produce something unique and define the potential segments within which it could gain leadership. It is worth mentioning that key competences of high technology company could be the limited number of the following, that includes the labour competence (outstanding employees, who can generate innovative technologies and/or apply the available ones with enhancing synergy), organizational competence (unique organizational system, which combines formal and informal and enables to generate innovative technologies and /or maintain synergy), information competence (data processing that enables to generate innovative technologies and/or maintain synergy) and operational competence (a unique chain of business processes which allows to generate innovative technologies and/or maintain synergy).
- External and internal environment analysis on the basis of five competitive forces. At this point it is crucial to broadly evaluate external environment in relation to five dimensions. First, to evaluate if new competitors may come to the innovation market of

manufacture (this is of particular interest for high technology production as new technologies could provide competitive advantage for a company, which used to be insignificant in the market earlier). This is considered to be the possibility of new technologies within high technology production. Further, supplier and customer power are to be analyzed to reveal to what extent they influence the development of high technology production enterprise. At the end of the analysis the threat of substitute products is to be discussed on the basis of the research of customer level of satisfaction with the high technology company products. The lower the level of satisfaction, the bigger the risk to lose competitiveness and the possibility that substitute products and technologies may appear. The analysis also includes the evaluation of current competitors and their strengths. Further, internal environment analysis needs to be carried out to reveal the possibility to minimize expenses of high technology production and to develop a complete high technology products line.

Cost saving and targeting a particular market segment may allow the company to gain a short term beneficial position in comparison with the competitors who have high expenses. However, as the company wins over those who did not manage to minimize expenses, it will have to penetrate the market further and compete with those whose expenses are even higher. Consequently, if a company aims to achieve a competitive advantage with the help of a product differential, it is expected to continuously enter new markets. Competitive advantages can be sustained so long as the company makes its way to more advanced market segments. Unfortunately, it is not always possible to evaluate the success of innovations; few segment leaders often did not appreciate enough the potential of new competitors. Nevertheless, a given cycle provides companies with enough stimuli to enter the advanced market sectors that is the only opportunity to gain profits [2, 6].

In order to determine the perspective strategy of the competing company and be ready to face the challenges from the outside, it is essential to have a comprehensive analysis on each of the competitors in a given market segment, applying the methods of resources, procedures and values [3].

Very few people go beyond the company resources. Analysts often look at the main company resources, its

technologies, cash reserves, product lines, executive CVs and suggest that the more resources a company has, the more likely it is to succeed.

Applying the current method allows to evaluate weaknesses and strengths of a competitor company. Thus, it is suggested that strengths of a company are comprised of resources, as well as of procedures and values. Accordingly, the projects which reveal inconsistencies in resources, procedures and values are expected to meet with losses. In the following table some criteria to evaluate competitors' activities are suggested:

In the final stage we can make a choice with prioritized strategy for high technology production enterprise is to be made, cell chart of which is suggested in Figure 1.

The strategy which is selected on the basis of the earlier suggested cell chart and matrix is considered to be the most suitable and appropriate to sustain competitive advantage of high technology production enterprise in the long run.

However, the analysis attempts to demonstrate that the above mentioned theory is highly concerned with internal resources of a company and the way they are used and managed, which basically refers to the internal institutional environment within company. At the same time, the development of a company's internal environment which functions within dynamic and unstable arena depends on internal institutions as well as on external ones. Consequently, building and developing external institutional environment and taking its advantages are considered to be one of the key concerns to increase the effectiveness of strategic management. It is of particular interest for Russian Federation as there is a high level of government involvement in economic activities. To meet the objective it is essential to establish contract relationships which might occur to high technology production enterprise when operating in domestic external environment.

The analysis of strategic positioning of high technology production enterprise in the market has demonstrated that long term competitiveness to large extent depends on the quality of the institutional environment, which structure is suggested in Figure 2.

In relation to the above figure, it could be suggested that to increase the effectiveness of high technology production enterprise activities on the basis of improving formal and informal contracts with main contract partners (government, specialized innovation institutions, suppliers and customers) consistent control and development of

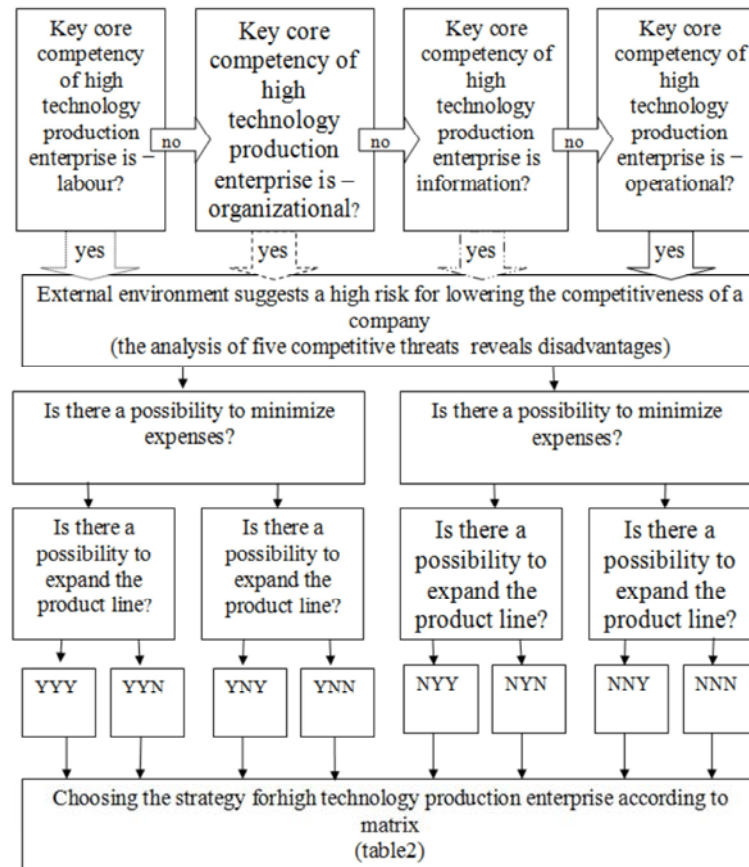


Fig. 1: Cell chart of choosing the strategy for high technology production enterprise

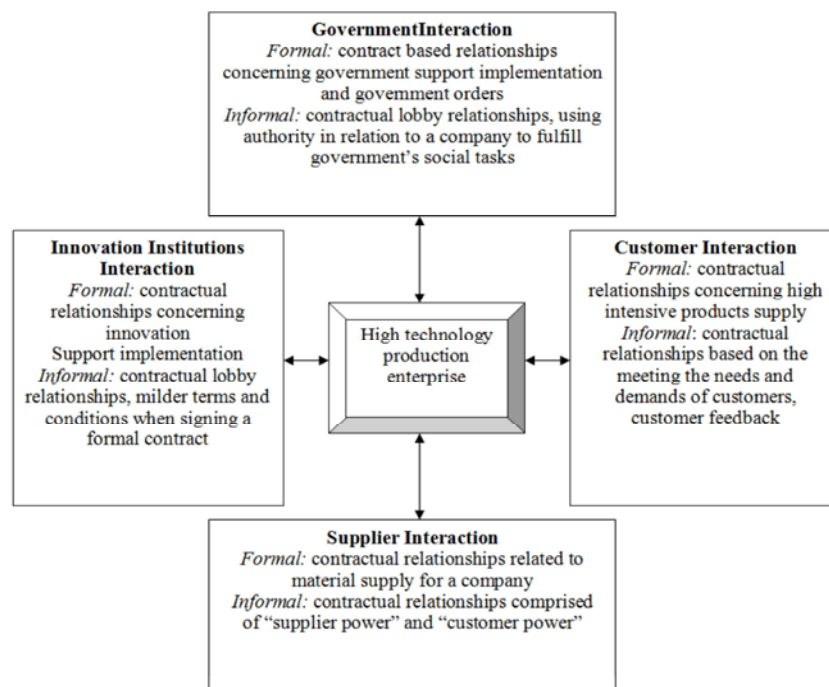


Fig. 2: Institutional environment of high technology production enterprise

Table 1: Competitors' activities evaluating criteria

Term	Definition	What should be considered
Resources	Tangible objects available for a company	<ul style="list-style-type: none"> •Tangible assets: technologies, products, accounting reports, equipment, distribution network. •Intangible assets: staff (employees with some level of education and set of skills), brands, experience.
Procedures	Methods and skills to manage a business	<ul style="list-style-type: none"> •Challenges that a company faces on a regular basis. •Regular procedures: recruitment and training, product development, production process, budget planning, market research, resource allocation.
Values	Setting the priorities (motivation)	<ul style="list-style-type: none"> •Business-model: <ul style="list-style-type: none"> - earning money; - the proportion between sales revenue and intermediate maintenance revenue; - cost structure and tax declaration; - the size of a company and the potential for growth. •Investment decisions record - the earlier priorities of a company.

Table 2: Choosing the strategy for high technology production enterprise according to matrix

		External and internal environment type of a company on the basis of five competitive forces evaluation							
No	Key competency type	YYY	YYN	YNY	YNN	NYY	NYN	NNY	NNN
1	Labour	Focus on expenses	Focus on expenses	Differentiation	Focus on expenses	Differentiation	Focus on expenses	Focus on differentiation	Focus on differentiation
2	Organizational	Focus on differentiation	Expenses leadership	Differentiation	Focus on expenses	Expenses leadership	Expenses leadership	Differentiation	Focus on differentiation
3	Information	Focus on expenses	Focus on expenses	Focus on differentiation	Focus on differentiation	Differentiation	Focus on expenses	Focus on differentiation	Focus on differentiation
4	Operational	Focus on differentiation	Expenses leadership	Focus on differentiation	Focus on expenses	Expenses leadership	Expenses leadership	Differentiation	Focus on expenses

the above contractual relationships need to be considered. Should production enterprise dedicate insufficient attention to institutional environment development, it will not be able to reach strategic competitiveness in the market.

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