Interfunctional Coordination at Hi-Tech Firms

Lucie Kanovska[1], Eva Tomaskova[2]

[1]*Brno University of Technology*
Kolejni 2906/4, 612 00 Brno, Czech Republic
e-mail: kanovska@fbm.vutbr.cz

[2]*Masaryk University*
Veveri 70, 611 80 Brno, Czech Republic
e-mail: eva.tomaskova@law.muni.cz

The paper is focused on the determination of new knowledge about interfunctional coordination.
Interfunctional coordination was defined at the beginning of 90s. It is the coordination of all company activities leading to the increase of business performance. Interfunctional coordination is connected with market orientation. It is one of necessary principle of market orientation. It is not possible to use market orientation without interfunctional coordination. Market orientation is based on marketing conception. The first detailed studies were offered by Kohli and Jaworski (1990) and Narver and Slater (1990). Market orientation is described as a method helping to contribute better managing of a company by many researchers. A lot of papers on this topic were publicized during the last two decades. The earliest papers involved the first definitions of market orientation; offered methods for its measuring; and investigated the impact of market orientation on business performance. The last attitudes towards market orientation agree that market orientation enables managers to focus on external and internal elements and activities, which influence the activity of a company leading to its performance increase (Tomaskova, 2009). At present, we have a lot of methods used for the measuring of market orientation. Using a proper method depends on the branch or economic system. The perception of the implementation of market orientation is changing during the period, as well. However, the main principle is still the same – market orientation has a positive impact on business performance. Nowadays, a lot of authors deal with the implementation of market orientation. Because of this reason, we have prepared research "Research on implementation on market orientation in Hi-Tech Firms" (GA 402/07/1493). The goal of the research was to detect barriers of the implementation of market orientation. We divided the barriers of the implementation into three parts according to managers' influence in an internal, branch and external environment. State, economy and technologies are named as the main elements of external environment. The main barriers connected with the elements of branch environment are quality and quantity of branch stakeholders. Barriers of internal environment involve the barriers connected with the top management and its personality, skills, knowledge and experiences, all employees of a company and interfunctional coordination. The paper deals with the interfunctional coordination at hi-tech firms. The objective of the paper is to define barriers connected with interfunctional coordination and to detect the perception and importance of interfunctional coordination at hi-tech firms. The theoretical knowledge is noticed in some research studies. The data was acquired by means of a questionnaire. New Method measured market orientation in a company. The questionnaire New Method with 7-point Likert scale constituted by Tomaskova (2005) was used for the research. The complete database was analysed by using standard statistical methods (correlation analysis, Spearman correlation coefficient, chi-square) as well as other sophisticated techniques (Cronbach alpha). The main results of the research show that the level of market orientation at the hi-tech firms in the Czech Republic is high and confirm how important is gaining information and using this information inside the company for market orientation. The main results of the research confirm that interfunctional coordination is the base of market orientation. Hi-tech firms in the Czech Republic perceive interfunctional coordination as very necessary presumption for their future development and prosperity. The highest rate for this part received the following statements confirming positive company attitude for innovation, preference for teamwork and mutual cooperation in firms and also effort to be flexible. On the other hand, the lowest average rate had the statement describing relations between superiors and subordinates and their strictness and formalness.

Keywords: *market orientation, interfunctional coordination, barriers of market orientation, research, Hi-Tech firms, the Czech Republic.*

Introduction

A lot of scientific papers try to find new ways how to gain and maintain competitive advantage. Competitive advantage according to Zostautiene and Daraskeviciute (2009), is the factors through which companies provide better capacities to obtain production resources, increase sales markets and establish their position in the market. It is important to have never-ending effort to be always in front of competitors. Not only prices and technical criteria play a key role in a decision-making process during the purchasing of a new product. The more positive points

have customers about potential products, the more probable should be their effort to buy them. (Kanovska, 2010) A lot of ways and recommendations are offered directly to firms. The first part of the suggestions offers new attitude, promotion or customer services to customers. The second one shows some possible new opportunities on the market, which can be used by a company. The third group tries to demonstrate a new style of company management. The fourth one comes with a new type of financing, insurance etc. However, it is difficult to offer some general recommendations for all types of today´s firms. Each company has its own specific product and also some specific conditions of business and particular relationships with their stakeholders. The connections of various stakeholders with a company are not the same. Their abilities of influence and importance for the company's decisions are not identical as well. (Juscius & Snieska, 2008) However, interfunctional coordination is one of the common recommendations. The main principle of interfunctional coordination can be applied for all firms doing business.

The objective of this paper is to summarize and analyze interfunctional coordination. Therefore the main research problem is focused on interfunctional coordination and market orientation at Hi-tech firms, as well. Interfunctional coordination is one of necessary factors of market orientation. The novelty of the paper is in a measurement of interfunctional coordination by Hi-tech firms. Hi-tech firms surveyed in our questionnaire provide their services in the Czech Republic. Hi-tech firms were chosen for their important role in the economy. Hi-tech firms produce research and development of new technologies in every industry, increase industry efficiency and competitiveness in the domestic and foreign markets. It affects structural changes in industry (Saboniene, 2010).

The data are noticed in some research studies and are based on the results of "Research on implementation on market orientation in Hi-Tech Firms" (GACR 402/07/1493). Description, analysis, comparison and synthesis are the methods used to prepare this paper. In the research part of the mentioned GACR project we used a questionnaire constituted by Tomaskova (2005) with 7 point Likert scale for a measurement of market orientation. The questionnaire was used at Hi-tech firms in the Czech Republic. The main findings by High-tech firms show that firms in the Czech Republic perceive interfunctional coordination as a very necessary presumption for their future development and prosperity. The highest rate for this part received the following statements confirming positive company attitude towards innovation, preference of teamwork and mutual cooperation in firms and also effort to be flexible.

Market orientation

Market orientation is based on marketing conception. Market orientation introduced a different point of view on marketing and management at the beginning of 20s. Market orientation shows the results of management attitude especially towards customers and competitors. Moreover, it is focused on management Event decision into a company on business performance. Kohli & Jaworski (1990) and Narver & Slater (1990) presented the definitions

of market orientation, described factors, which have positive and negative influence on market orientation, showed the methods how to measure market orientation and its impact on business performance. The above-mentioned authors published the results in the Journal of Marketing and they created a new trend for hundreds of researchers, which examined market orientation in detail. Many studies dealing with the market orientation have appeared until the present, changing the view on the definition of market orientation. The first definitions of market orientation were similar to customer orientation (e.g. Desphande et al., 1993). Other definitions referred to a method how to get necessary information (e.g. Deng & Dart, 1994). Development of definition was turbulent during the first 10 years. One of the last attitude (Tomaskova, 2005; Simberova, 2008) towards market orientation agrees that market orientation enables managers to focus on external and internal elements and activities. Thus, it influences processes in an organization leading to its performance increase. The sense of the mentioned attitude is very similar to the attitude of Kurtinaitiene & Gaizutis (2008). They noticed that market orientation is an organization -wide process of customer and competitor intelligence generation, dissemination and coordinated response actions of all organizational units towards obtained information.

The methods used for the measurement of market orientation changed as well as the attitude towards the definition. The first methods included only question for one or several factors. During the last twenty years, more than 34 methods were published.

The model of New Method was constructed according to the analysis of 25 methods in 2005 by Tomaskova. We obtained methods for measuring market orientation according to the following scholars: Kohli & Jaworski (1990); Narver & Slater (1990); Hooley et at. (2003), Liu (1995); Deshpande & Webster (1993); Gima (1995); Fritz (1996); Lado, Mayderu-Olivares & Rivera (1998); Gray et al. (1998); Cadogan et al. (1999); Dawes (1999); Harrison-Walker (2001); Farrell (2002); Haijat (2002); Helfert et al. (2002); Vazquez et al. (2002); Farrelly & Quester (2003); Varela & Río (2003); Bigne et al. (2004). Some of these methods are similar to other methods, e. g. methods constructed by Vazquez et al. (2002) and Farrelly & Quester (2003). Other methods are oriented only on one element of market orientation, e.g. the method from Haijat (2002) was oriented only on customers. Some of the mentioned methods were limited for their construction methodology, e. g. MARKOR by Kohli & Jaworski and MKTOR by Narver & Slater absent the Churchill methodology.

We have prepared the New Method for measuring market orientation by the analysis of the currently used instruments with regard to the fact of some shortcomings. Creating the method we have considered the aspects which are determined in the executed analysis of all before mentioned problematic areas of market orientation. Moreover, we have tried to eliminate shortcomings, which were criticized in other methods. We have prepared the New Method according to Churchill methodology. The New Method involves all factors of market orientation, not only customer orientation or interfunctional coordination.

For creating the items of measuring we used the following methods: method by Hooley et al. (1990), FMCG'S Market Orientation by Gima (1995), MOS by Lado, Olivares and Rivera (1998), New Measuring of Market Orientation Method by Farrell (2002), Measures by Helfert et al. (2002) and Market orientation, dependence and satisfaction by Bigne et al. (2004). The method involves a part of the statement related to external environment, final customer's orientation, distributors' orientation, competitors' orientation, suppliers' orientation, reflecting the knowledge on the decision-making process and interfunctional coordination. The method of the market orientation measuring contains some statements to which respondents expressed their standpoint by means of Likert seven-degree scale. The questionnaire contains the measurement of market orientation and is meant for top managers. The New method was verified with Cronbach alpha coefficient in 2005. (Tomaskova, 2005)

The last dilemma is a model of market orientation. Scientists try to find all factors, which have a positive or negative influence on market orientation. Moreover, these factors can be marked as potential barriers of the implementation of market orientation. The model of market orientation is completed with the results of its relationship with business performance. The most important barriers of market orientation come from the internal environment. The corporate culture is one of typical barriers of market orientation (Simberova, Tomaskova, Kanovska, 2010). The corporate culture is a part of interfunctional coordination.

Interfunctional coordination

Interfunctional coordination is one of necessary principles of market orientation. Interfunctional coordination can be seen as the harmonization of all internal functions and processes in a company. It consists of two parts, namely corporate culture and information coordination. Interfunctional coordination refers to the degree of co-operation between the different functions/departments within the organization (Tay & Tay, 2007). Many authors, e.g. Slater & Narver (1995), Harris (1996), Lafferty & Hult (2001), identified interfunctional coordination as a barrier of the implementation of market orientation. This barrier could be divided into several groups (Figure 1).
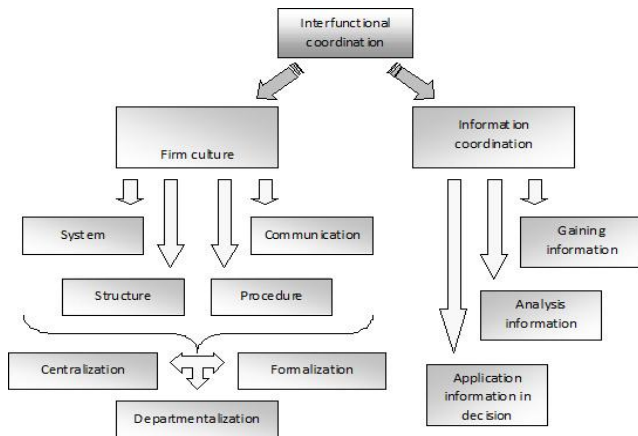

Figure 1. Interfunctional coordination connected barriers (Tomaskova, 2009)

The barriers connected with corporate culture are systematic, structural, procedural and communication ones. It is important not to have any weaknesses in a system, a structure, a procedure or a communication in a company. Thus other barriers as too high centralization, formalization or departmentalization can also appear. The second barrier of interfunctional coordination is connected with information coordination. It is important to gain information, analyze it and then use the results in the decision process in a company (Tomaskova, 2009).

Three ways to achieve effective interfunctional coordination, described by Tay & Tay (2007), were named by the authors:

● Almost each company targets its activities on its customers. Customer orientation is one of the most important orientations of a company. Each company (department) tries to offer its customer a superior customer value. Interfunctional cooperation means motivation of all departments and all systems to create this superior value.

● The formation of interfunctional dependency helps to each area to find advantages for closer cooperation with others. It increases the degree of coordination, too.

● Interfunctional cooperation is a spirit of a company. It involves the right responsiveness to the perceptions, wishes and needs of every department of a company.

Interfunctional coordination is aimed at internal environment, however, the effects of interfunctional coordination are connected with internal, external and branch environment as well. According to Tomaskova & Kopfova (2011) management has high impact on interfunctional coordination and employees. Improving of management style leads to improving interfunctional coordination. Improvements in internal processes are visible during a short period. Employees can perceive changes very soon. Improvements in branch and external environment need more time.

Research design and methodology

The research project was titled as "Research on implementation on market orientation in Hi-Tech Firms". We used a questionnaire, with 7 point Likert scale, for a measurement of market orientation. The New Method includes external environment elements, branch environment elements and internal environment elements of a company. The whole questionnaire was measured for internal consistency with Cronbach alpha and was used for measuring market orientation at power industry in the Czech Republic in 2005 (Tomaskova, 2005).

The questionnaire was used for measuring market orientation at Hi-tech firms in the Czech Republic in 2009 again. Data collecting was realized in the first half of 2009. The sample consisted of firms classified as Hi-Tech firms according to the CZ NACE codes utilized by, e.g. the Czech Ministry of Industry and Trade. Only manufacturing firms operating mainly in mechanical and electric engineering sectors (NACE codes 3x xxx) were selected for the research project. Using the database of the Kompass Czech Republic Company made the selection.

A total of 450 firms were included into the main research. The firms were contacted over the phone and

asked to fill in a web-based questionnaire. The complete database was analysed by using standard statistical methods as well as other sophisticated techniques. Incomplete questionnaires were discarded. The data from 88 firms were used for further processing.

Results

Table 1 reports means and standard deviations for elements of measurement of market orientation.

Table 1

Means and standard deviations of market orientation degree by individual elements of measurement
(0 – low value, 7 – high value)

Elements of measurement market orientation	Mean	SD
I. External environment	4.76	1.6
II. A Final customers	5.42	1.28
II. B Competitors	4.82	1.46
II. C Distributors	5.06	2.12
II. D Suppliers	4.74	1.51
III. A Reflecting the knowledge on the decision-making process	5.26	1.25
III. B Interfunctional coordination	5.62	1.19

The item interfunctional coordination (5.62) reached the highest value in our research. The above-mentioned results confirm that interfunctional coordination is very important for high-tech companies. In the second position final customers were placed. The key factor of success in today's dynamic and fast changing environment, which ensures companies to survive on saturated markets, is the focus on long-lasting mutual relationships with stakeholder, mainly with customers. (Simberova, 2008)

Table 2 deeply analyzed interfunctional coordination. Item 7 of the interfunctional coordination has been taken from the method created by Hooley et al. (1990), items 8, 10, 11 from the method created by Helfert et al. (2002). The rest of items are newly created. The first five items relate to management and the relation of the top management to employees. Items from 6 to 9 examine the relation to the strategy of the organization. Other two items relate to the structure and the last three to the culture of the organization. All items placed at this part of measuring follow from the items influencing market orientation in the proposed model of market orientation.

The results gathered from the questionnaires in the part of interfunctional coordination (Table 2) showed the following values:

The lowest average rate had the statement describing relations between superiors and subordinates and their strictness and formalness (5.29; statement 12). Negative influence on flexibility and the promptness of response can have overdone strictness and formalness. It can be also one of the reasons for the lower values of statements connected with flexibility and promptness. Not only Hi-Tech firms should try to decrease formalness between superiors and inferiors. It can also help to avoid an increasing flexibility and the reaction time.

The second lowest average rate had the statement "We prefer achieving long-term company targets in comparison to short-term ones and also achieving definite market share in comparison to financial target." (5.34; statement 9). If company is interested in surviving on market as long as possible and increasing its market share, then it prefers long-term targets. On the contrary, a company, which focuses only on profit maximization, is usually not too much interested in long-term targets. Businessmen have to decide which visions and company targets they want to fulfil. If Hi-Tech firms want to make business for a longer time, then it is essential for them to get over the loss of the budget from time to time. Well-invested money can be profitable for a company in the future.

Table 2

Average values of statements related to interfunctional coordination (0 – highly disagree, 7 – highly agree)

Interfunctional Coordination Statement in questionnaire	Mean	SD
1. Every worker knows his competences and responsibilities.	5.83	1.26
2. Every worker knows the main company targets and know how to contribute to them.	5.68	1.17
3. We regularly analyse the comments from our employees.	5.40	1.22
4. We pay attention to further employee trainings.	5.74	1.26
5. We prefer teamwork and mutual cooperation.	5.97	0,97
6. We pay attention to the exchange of information among individual departments of the organization.	5.58	1.26
7. We regularly hold meetings, where we discuss about our successes, inform on new opportunities and threats, set new tasks and discuss with all lower-level managers.	5.51	1.51
8. We try to be flexible.	5.97	0.91
9. We prefer achieving long-term company targets in comparison to short-term ones and also achieving definite market share in comparison to financial target.	5.34	1.30
10. All partial targets come out, develop and support the main company target.	5.57	0.99
11. Managers of all departments comment the company plan.	5.60	1.29
12. Relationships between superiors and subordinates cannot be defined as very strict and formal.	5.29	1.59
13. We have positive attitude to innovations.	6.05	0.96
14. We try to make a business with respect to ethics and make ethical decisions.	5.91	1.03

The highest average rate (Table 2) showed the statement confirming a positive attitude to innovations in firms (6.05; statement 13). The result was quite expectable. Hi-Tech firms can be described as a company with high-quality innovations.

Furthermore, firms also prefer teamwork and mutual cooperation (5.58; statement 6) and try to be flexible (5.97; statement 8). The findings show that the more employees are flexible and easy to cooperate, the more they are able to work on product innovations easily.

Generally, all statements in hi-tech firms mentioned above obtained high average rate. Interfunctional coordination measured in our sample of hi-tech firms is very good. Moreover, the statements with the highest average rate correspond to the attributes of hi-tech firms. The results presented above can be also influenced by the sample of firms participating in our survey. The firms were mainly small and medium sized. The small and medium firms are usually characterized as subjects with higher rate of interfunctional coordination and flexibility.

Conclusions

The paper is focused on short overview of interfunctional coordination. Interfunctional coordination simply shows a level of relations in a company and in its departments. It is a very important part of market orientation. Without interfunctional coordination there is no market orientation. We have named a lot of barriers, which can decrease the level of interfunctional coordination. Corporate culture, gaps in communication, high value of formalization and centralization, weaknesses in system, structure, and procedures can be mentioned. All of these barriers have negative influence on decision process.

We focused on High-Tech firms and their perception of the interfunctional coordination importance. The main result of the research confirms that interfunctional coordination is the base of market orientation. The High-Tech firms show high average rate of interest in innovation and effort to work in cooperation and teams. According to

Sedziuviene & Vveinhardt (2010), innovation and innovativeness as ability and continuous readiness to re-organize and to initiate changes, create value-added of an organization in markets. Performance of an organization depends on the input into innovations, technologies and ideas that provide advantages against competitors, financial and managerial investments into knowledge processes as well as knowledge employees. That is the great advantage of hi-tech firms.

On the other hand, they gained the lowest average rate in the statement asking about achieving long-term company targets in comparison to short-term ones and also achieving definite market share in comparison to financial targets. The firms should aim to eliminate barriers connected with these areas. However, all average rate gained in interfunctional coordination are high in our research.

It is possible to focus on the problems of interfunctional coordination in both SME and large Hi-Tech firms in our future research. In general, SME are known for their higher rate of interfunctional coordination and flexibility. Micro companies and small companies, probably because of their size and sources, evaluate the research and development (R&D) as weak and insufficient. On the contrary, medium and large companies evaluate R&D as developed and very developed. (Kita, 2009)

Other interesting points can be found in a detailed analysis of developed barriers and in weaknesses at hi-tech firms.

References

Bigne, J. E., Blesa, A., Kuster, I., & Andreu, L. (2004). Market Orientation: an Antecedent to the Industrial Manufacturer's Power. *European Journal of Marketing*, 38(1/2), 175-193.

Cadogan, John. W., Diamantopoulos, A., & Mortanges, de P. Ch. (1999). Export Market-oriented Behaviour, its Antecedents, Performance Consequences and Moderating Factors: Evidence form the U.S. and The U. K. RP9916.

Dawes, J. (1999). The Relationship Between Subjective and Objective Company Performance Measures in Market Orientation (Research: Further Empirical Evidence). *Marketing Boulletin*, 10, 65-75.

Deng, S., & Dart, J. (1999). The Market Orientation of Chinese Enterprises During a Time of Transation. *European Journal of Marketing*, 33(5/6), 631-654. http://dx.doi.org/10.1108/03090569910262279

Desphande, R., Farley, J. U., & Webster, F. E. J. (1993). Corporate Culture, Customer Orientation, and Innovativeness in Japanese Firms: A Quadrad Analysis. *Journal of Marketing*, 57(1), 23-27. http://dx.doi.org/10.2307/1252055

Farrell, M. A. (2002). Critique of the Development of Alternative Measures of Market Orientation. *Marketing Bulletin*, 31-13.

Farrelly, F., & Quester, P. (2003). The Effects of MO on Trust and Commitment: The Case of the Sponsorship Business–to-Business Relationship. *European Journal of Marketing*, 37(3/4), 530-553. http://dx.doi.org/10.1108/03090560310459078

Fritz, W. (1996). Market Orientation and Corporate Success: Findings from Germany. *European Journal of Marketing,* 30(8), 59-74. http://dx.doi.org/10.1108/03090569610130106

Gima, K. A. (1995). An Exploratory Analysis of the Impact of Market Orientation on New Product Performance. *Journal of Product Innovation Management*, 12, 275-293. http://dx.doi.org/10.1016/0737-6782(95)00027-Q

Gray, B., Matear S., Bashoff, C., & Matheson. P. (1998). Developing a Better Measure of Market Orientation, *European Journal of Marketing*, 32(9/10), 884-903. http://dx.doi.org/10.1108/03090569810232327

Haijat, M. (2002). Customer Orientation: Construction and Validation of the CUSTOR Scale. *Marketing Intelligence and Planning*, 20(7), 428-441. http://dx.doi.org/10.1108/02634500210450864

Harris, L. C. (1996). Benchmarking Against the Theory of Market Orientation. *Management Decision*, 34(2), 7. http://dx.doi.org/10.1108/00251749610110292

Harrison-Walker, J. L. (2001). The Measurement of a Market Orientation and its Impact on Business Performance. *Journal of Quality Management*, 6, 137-172. http://dx.doi.org/10.1016/S1084-8568(01)00035-9

Helfert, G., Ritter, T., & Walter, A. (2002). Redefining Market Orientation from a Relationship Perspective. *European Journal of Marketing,* 36(9/10), 1119-1139. http://dx.doi.org/10.1108/03090560210437361

Hooley, G. J., Lynch, J. E., & Shepherd, J. (1990). The Marketing Concept: Putting Theory into Practice. *European Journal of Marketing*, 24(9), 7-23. http://dx.doi.org/10.1108/03090569010001637

Hooley, G., Fahy, J., Greenley, G., Beracs, J., Fonfara, K., & Snoj, B. (2003). Market Orientation in the Service Sector of the Transition Economies of Central Europe. *European Journal of Marketing,* 37(1/2), 86-106. http://dx.doi.org/10.1108/03090560310453975

Juscius, V., & Snieska, V. (2008). Influence of Corporate Social Responsibility on Competitive Abilities of Corporations. *Inzinerine Ekonomika-Engineering Economics*(3), 34-44.

Kanovska, L. (2010). Customer Services – a Part of Market Orientation. *Economic and Management*, 15, 562-565.

Kita, J. (2009). Vybrane aspekty riadenia ponuky v slovenskych priemyselnych podnikov. *Trendy ekonomiky a managementu*. 3(4), 28-37.

Kohli, A. K., & Jaworski, B. J. (1990). Market Orientation: the Construct, Research Propositions, and Managerial Implications. *Journal of Marketing*, 54, 1-18. http://dx.doi.org/10.2307/1251866

Kurtinaitiene, J., & Gaizutis, A. (2008). Market Orientation and Development of Innovative Solutions in the Mobile Telecommunications Third Generation Networks. *Inzinerine Ekonomika-Engineering Economics*(1), 84-90.

Lado, N., Maydeu-Olivares, A., & Rivera, J. (1998). Measuring Market Orientation in Several Populations: a Structural Equations Model. *European Journal of Marketing*, 32(1/2), 23 -39. http://dx.doi.org/10.1108/03090569810197408

Lafferty, B. A., & Hult, G. T. M. (2001). A Synthesis of Contemporary Market Orientation Perspectives. *European Journal of Marketing*, 35(1/2), 92- 109. http://dx.doi.org/10.1108/03090560110363364

Liu, H. (1995). Market Orientation and Firm Size: an Empirical Examination in UK Firms. *European Journal of Marketing*, 29(1), 57-71. http://dx.doi.org/10.1108/03090569510075343

Narver, J. C., & Slater, S. F. (1990). The Effect of a Market Orientation on Business Profitability. *Journal of Marketing,* 54(5), 20-35. http://dx.doi.org/10.2307/1251757

Saboniene, A. (2010). The Evaluation of the Potential of Lithuanian Manufacturing Industry Structure on the basis CI Index. *Inzinerine Ekonomika-Engineering Economics*, 21(4), 399-407.

Sedziuviene, N., & Vveinhardt, J. (2010). Competitiveness and Innovations: Role of Knowledge Management at a Knowledge Organization. *Inzinerine Ekonomika-Engineering Economics*, 21(5), 525-536.

Slater, S. F., & Narver, J. C. (1995). Market Orientation and Learning Organization. *Journal of Marketing*, 59, 63-74. http://dx.doi.org/10.2307/1252120

Simberova, I. (2008). Marketing Culture-Base for Market Orientation Implementation. *Using Events and Festivals to Develop Tourism*, Spain, 5, 1-15.

Simberova, I. (2008). Vztahy se stakeholdry v soudobych marketingovych koncepcich. *Trendy Ekonomiky a Managementu*, 2(2), 71-80.

Simberova, I., Tomaskova, E., & Kanovska, L. (2010). High Technology Sector in the Czech Republic: Market Orientation and Corporate Culture. *Business and Management,* 1, 488-493.

Tay, J. Y. W., & Tay, L. (2007). Market Orientation and the Property Development Business in Singapore. *International Journal of Strategic Property Management*, 11(1), 1-16.

Tomaskova, E. (2005). Mereni trzni orientace a jeji vliv na podnikovy vykon. *Vutium*, Brno, 29.

Tomaskova, E. (2009). Internal Barriers of Market Orientation Application. *Economic and Management*, 14, 1-6.

Tomaskova, E. & Kopfova, A. (2011) Management Style at Market Orientation. *Economic and Management*, 16, 981-986.

Vazquez, R., Alvarez, L. I., & Santos, M. L. (2002). Market Orientation and Social Services in Private Non-profit Organisations. *European Journal of Marketing*, 36(9/10), 1022-1046. http://dx.doi.org/10.1108/03090560210437316

Varela, J. A. & Rio, M. (2003). Market Orientation Behavior: an Empirical Investigation Using MARKOR. *Marketing intelligence & Planning*, 21(1), 6-15. http://dx.doi.org/10.1108/02634500310458108

Zostautiene, D., & Daraskeviciute, B. (2009). Peculiarities of Competitive Advantage Development of Panevezys City Companies through the Elements of Marketing Culture. *Inzinerine Ekonomika-Engineering Economics*(5), 102-112.

Lucie Kanovska, Eva Tomaškova

Tarpfunkcinis koordinavimas aukštų technologijų firmose

Santrauka

Straipsnyje pagrindinis dėmesys skirtas naujam požiūriui apie tarpfunkcinį koordinavimą pateikti. Tarpfunkcinis koordinavimas buvo apibrėžtas 1990 m. Jis susijęs su visų kompanijos veiklos rūšių derinimu, kuris padeda plėsti ir aktyvinti verslą. Tarpfunkcinis koordinavimas glaudžiai susijęs su rinkos kryptimis. Tai pagrindinis rinkos krypčių principas, be kurio rinkos veikla išvis neįmanoma.

Rinkos kryptis remiasi rinkodaros koncepcija. Pirmieji tyrimai susiję su Kohli ir Jaworski (1990) bei Narver ir Slater (1990) darbais. Rinkos orientavimas yra metodas, kuris taikomas valdant kompaniją. Per pastaruosius du dešimtmečius buvo išspausdinta daug straipsnių šia tematika. Pirmuosiuose straipsniuose buvo pateikti rinkos orientavimo apibrėžimai, pasiūlyti rinkos vertinimo metodai, ištirta rinkos orientavimo įtaka verslui. Šiuose tyrimuose pateikta, kad rinkos orientavimas įgalina vadybininkus sutelkti dėmesį į išorinius ir vidinius rinkos veiklos elementus, kurie veikia kompanijos darbo efektyvumą (Tomaskova, 2009). Šiuo metu yra daug metodų, kuriais nustatomos rinkos kryptys. Tinkamo metodo pasirinkimas priklauso nuo ekonomikos sistemos arba jos šakos. Naujojo metodo modelis buvo sukurtas pagal 2005 m. atliktą 25 metodų analizę. Daugelis mokslininkų dirbo kuriant rinkos krypčių įvertinimo metodus: Kohli ir Jaworski (1990), Narver ir Slater (1990), Hooley ir kt. (2003), Liu (1995), Deshpande ir Webster (1993), Gima (1995); Fritz (1996), Lado, Mayderu-Olivares ir Rivera (1998), Gray ir kt. (1998), Cadogan ir kt. (1999), Dawes (1999), Harrison-Walker (2001), Farrell (2002), Haijat (2002), Helfert ir kt. (2002), Vazquez ir kt. (2002), Farrelly ir Quester (2003), Varela ir Rio (2003), Bigne ir kt. (2004). Kai kurie metodai yra panašūs į kitus metodus, pvz., į metodus, kuriuos pateikia Vazques ir bendraautoriai (2002) bei Farrelly ir Quester (2003). Kiti metodai yra skirti tik vienam rinkos orientavimo elementui, pvz., Haijat (2002) metodas buvo skirtas vartotojams. Kai kurie iš paminėtų metodų buvo riboti savo metodologijos. Autorių parengtas naujasis metodas turi tikslą nustatyti rinkos kryptingumą analizuojant šiuo metu naudojamas priemones, atsižvelgiant į trūkumus. Kuriant šį metodą, autoriai atsižvelgė į tuos aspektus, kurie buvo svarbūs ankstesniuose tyrimuose. Be to, autoriai pašalino tuos trūkumus, kurie buvo kritikuojami ankstesniame straipsnyje. Naujasis metodas buvo sukurtas pagal Churchillio metodologiją. Šį metodą sudaro ne tik vartotojų orientavimas arba tarpfunkcinis koordinavimas, tačiau ir visos rinkos orientavimo veiksniai. Naujasis metodas buvo patikrintas pagal Cronbacho alfa koeficientą. Buvo taikyti ir kiti metodai. Šį metodą sudaro ir tam tikra dalis teiginių, susijusių su išorine aplinka, vartotojų distributoriais, konkurentais, tiekėjų orientavimu, kuris atspindi žinias apie sprendimų priėmimą ir tarpfunkcinį koordinavimą. Rinkos orientavimo matavimas apima teiginius, kurie atitinka Likerto septynių laipsnių skalę. Anketoje yra rinkos orientavimo, matavimai skirti aukštesnio lygio vadovams (Tomaškova, 2005). Naujasis metodas buvo taikytas nustatant 2005 m. rinkos kryptingumą energetikos firmose Čekijos Respublikoje. Reikia pažymėti, kad rinkos orientavimo suvokimo taikymas kinta. Tačiau pagrindinis principas išlieka tas pats, t. y. rinkos orientavimas turi teigiamą poveikį verslo procesui.

Dabartiniu metu daugelis autorių sprendžia rinkos orientavimo įdiegimo problemas. Autoriai parengė tyrimą apie rinkos orientavimą aukštųjų technologijų firmose. Anketiniai duomenys susiję su paslaugų sfera Čekijos Respublikoje. Ši sritis buvo pasirinkta dėl to, kad svarbi ekonomikoje. Tyrimo tikslas – nustatyti rinkos orientavimo įgyvendinimo trukdžius. Duomenys buvo gauti pirmoje 2009 m. pusėje. Buvo pasirinkti mechanikos ir elektros inžinerijos sektoriai. Dalyvavo 450 firmų. Su firmomis buvo susisiekta telefonais. Jų buvo prašoma užpildyti kompiuterinį anketos variantą. Gauti duomenys buvo apdorojami taikant įprastinius statistinius metodus ir kitas sudėtingas priemones. Ne visai užpildytos anketos buvo atmestos. 88 firmų duomenys buvo panaudoti tolesniam tyrimui.

Įdiegimo trukdžiai buvo susiskirstyti į tris dalis pagal vadybininkų daromą įtaką vidinei, šakos ir išorinei aplinkai. Valstybės ekonomika ir technologijos įvardijamos kaip pagrindiniai išorinės aplinkos elementai. Pagrindiniai trukdžiai, susiję su šakos aplinkos elementais, yra šakos akcininkų kokybė ir kiekybė. Vidinės aplinkos trukdžiai siejami su vadovais ir jų asmenybėmis, gebėjimais, žiniomis ir patirtimi, su visais kompanijos darbuotojais ir tarpfunkciniu koordinavimu.

Straipsnyje nagrinėjama tarpfunkcinės koordinacijos situacija aukštų technologijų srityje. Straipsnio tikslas – pateikti sunkumus, susijusius su šia problema, atskleisti tarpfunkcinės koordinacijos svarbą aukštų technologijų firmų veikloje. Problemos naujumas – tarpfunkcinio koordinavimo matavimai.

Tarpfunkcinis koordinavimas yra vienas iš svarbiausių rinkos orientavimo procesų. Tarpfunkcinis derinimas – palaikoma visų vidinių funkcijų ir procesų kompanijoje darna. Svarbiausi teoriniai teiginiai susiję su nustatymu tų trukdymų, kurie susiję su tarpfunkciniu koordinavimu. Jie yra siejami su korporacijos kultūra ir informacijos derinimu. Tarpfunkcinis koordinavimas susijęs su bendravimo lygiu tarp įvairių veiklos sričių ir skyrių pačioje organizacijoje (Tay ir Tay, 2007). Daugelis autorių (Slater ir Narver (1995), Harris (1996), Lafferty ir Hult (2001)) nurodė, kad tarpfunkcinis koordinavimas yra rinkos orientavimo priemonių įdiegimo stabdys. Šios priežastys yra skirstomos į kelias grupes. Trukdžiai, susiję su kompanijos kultūra, yra sisteminiai, procedūriniai ir bendravimo. Svarbu, kad nebūtų silpnų vietų sistemoje, struktūroje, procedūrose arba komunikacijų srityje. Bendravimui ir koordinavimui trukdo per didelė centralizacija, per dideli formalumai, apsiribojimas derinimu tik atskiruose skyriuose. Labai svarbus trūkumas yra informacijos koordinavimas. Svarbu tinkamai priimti informaciją, ją analizuoti ir gautus rezultatus panaudoti sprendimų procesuose (Tomaškova, 2009). Tarpfunkcinis koordinavimas yra nukreiptas į vidinę aplinką, tačiau jos poveikis yra susijęs su vidine, išorine ir šakos aplinka. Vidinių procesų pagerėjimas – pastebimas labai greitai. Darbuotojai tuoj pat pajunta pasikeitimus. Daugiau laiko reikia šakos ir išoriniams aplinkos pokyčiams. Pagrindiniai tyrimo rezultatai rodo, kad rinkos orientavimo lygis Čekijos aukštųjų technologijų firmose yra aukštas ir pabrėžia informacijos gavimo ir panaudojimo svarbą rinkos orientavimo srityje. Pagrindiniai tyrimo rezultatai rodo, kad tarpfunkcinis koordinavimas yra rinkos pagrindas. Straipsnyje pabrėžiama veiksmų ir procesų derinimo svarba aukštųjų technologijų kompanijų plėtojimuisi ir klestėjimui. Su šiais procesais glaudžiai susijęs kompanijos požiūris į naujovių įdiegimą, grupinio darbo efektyvumą, abipusį bendravimą, santykių lankstumą. Tyrimas parodė, kad kuo darbuotojai yra lankstesni bendradarbiaujant, tuo jie lengviau įgyvendina naujoves. Kita vertus, žemiausiai buvo įvertintas teiginys apie santykius tarp valdžios ir eilinių darbuotojų. Gana vangiai buvo vertinami ilgalaikiai ir trumpalaikiai firmų įsipareigojimai. Bendras tarpfunkcinis koordinavimas ir jo įvertinimas aukštų technologijų firmose yra gana geras. Tyrime daugiausia dalyvavo mažos ir vidutinės firmos. Aišku, kad mažoms ir vidutinėms firmoms yra būdingas aukštesnis tarpfunkcinio koordinavimo lygis ir lankstumas.

The article has been reviewed.