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## Cooperation management on construction business market in the Slovak republic – an Insight from a Company

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### Abstract

Continuous research in the area of cooperation, its theory and practice, gradually moves us closer towards the applicability of cooperation management in specific environments. In the Slovak Republic one such environment is the construction business market, which is characterized by various cooperation networks. Statistics of the construction business indicate slow economic growth, which is in fact lower compared to the time period before 2007. The main challenge is to stay competitive in the environment where supply of construction services is considerably higher than the demand for such services. Companies that are competitive and have a strong cooperation basis are characterized by frequent activity, long-term interactions, high performance, and adherence to the supply & construction terms. In the discussion part of this article we focus in detail on a model of cooperation management for this specific environment. The main part of the model is a managing unit, which coordinates cooperation activities of the collaborating and competitive companies. Successful cooperation is one of the elementary activities of cooperation management suitable for strategic management of a group of companies. Competitive environment at this construction market can be generalized and the results of this study can be used for applying cooperation management in other industries and collaborative settings.

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**Keywords:** cooperation management; Slovak Republic construction business market; company case study; synergy; cooperation networks

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## 1. Introduction

In this article we focus on a concrete manifestation of cooperation management in a specific environment – construction business market in the Slovak Republic, and in a concrete company active at this market. We concluded that the construction business market in the Slovak Republic is characterized by established cooperation networks, e.g. various strategic alliances and sub-contractor networks. Through secondary sources and the method of content analysis we identified main characteristics of the construction business market in Slovakia. As a next step we analyzed in detail the environment and collaborative relationships of a concrete company active at this market (SIPE, Ltd.). The company selection was based on the willingness of the company to share information with us. We analyzed collaborative relationships of this company, their purpose, main effects and the way they are managed. We studied these aspects directly in the company through the methods of observation, interview and document content analysis. We study the topic of cooperation management relatively for a long time. Our research can be broadly categorized into three areas: 1) theoretical basis of cooperation management, 2) study of concrete cases of cooperation management and subsequent creation of case studies (clusters, strategic alliances etc.), 3) quantitative analysis of the state of cooperation management in Slovak enterprises (questionnaires, interviews etc.). This article is part of the second category. The results of our research are typically published, as an example we include below two texts where we focus on the results from the third and the first category. The evaluation system proposal of the businesses preparedness for cooperative management implementation” [16]; “Proposal of model for effective management of cooperation activities in Slovak companies” [17]. Theoretical basis of cooperation management is extensive. A major part is represented by the work of M. Porter. Considering inter-firm cooperation and economic clusters efficiency, Michael Porter claims that these processes, when managed effectively, have significant impact on overall competitiveness and innovation potential of cooperating entities. Furthermore, Porter underlines the potential of these processes as positive externalities for wider environment [10]. Key characteristics of cooperation management were summarized by Veerakumaran [15] in his work: Cooperation management is a complex decision making process and the decisions are made on all managerial levels; Primary goal of cooperation management is to satisfy the needs of the members of cooperation; All activities need to occur according to the agreed principles of management and cooperation; Suitable balance needs to be established between the efforts for commercial success and maintaining goals of the cooperating parties; Management focused on reaching a goal via effective use of resources. We add here further characteristics: Mutual trust between the cooperating parties [3,19,20]. Common goals that are attractive and significant for the cooperating parties – in certain cases the common goals may actually change the competitive nature of the relationship between the parties (e.g. clusters, strategic alliances) [1,6,10]. Serious attitude towards the cooperation relationship, reciprocity in redistribution of the benefits arising from the cooperation [4,6]. Efficient cooperation between organizations can represent a major factor in the process of establishing a competitive advantage, e.g. enabling access to goods and services that would be difficult to obtain by a single company [10,16,17], efficient supplier-customer relationships in development, supply and implementation of a project management system to a company [14], or in sport [18]. Based on the results of our research as well as the study of theoretical background we created a definition of cooperation management. This definition characterizes our research and what we primarily focus on. “*Cooperation management is effective and efficient management of relationships in a cooperation between separate and relatively independent organizations or individuals, with the goal of improving their competitiveness.*” [12]. Main goals of this article are: to establish a high level definition of the construction business market in the Slovak Republic in light of the effects of cooperation management; to present the main findings and conclusions of the construction company case study, which may be considered to be representative of the usual cooperation relationships in the construction business; based on the results to offer a brief discussion where we highlight the main conclusions and their significance.

## 2. Situation on the Slovak market

Globalization of the 90s has supported the phenomenon of establishing connections between companies in order to reach certain goals, such as increased productivity, improved manufacturing efficiency, reduced costs, and strengthened competitive position. [12] Construction business is an important part of the Slovak economy as it enables construction necessary for various sectors such as business, trade, public sector, logistics, manufacturing and others. It is evident that the construction business creates and supports tangible environment needed to cater to the various

needs of the society. The Slovak Republic is a relatively small market where “everybody knows everybody”. The business situation overall is rather challenging, not only due to ever more global character of the economy but also due to the actual business environment created by individual market players (companies, organizations, institutions). The business environment of the Slovak construction sector is shaped by customers, competition and legislation, as well as by the character and a degree of advancement of the individual companies. Market players influence one another by their competitive struggle for customers and quality suppliers (with sufficient capacity and acceptable prices), by their corporate social responsibility, and by their pricing strategy for products and services. Construction business in Slovakia is currently in a moderate stagnation. The following text represents a synthesis of statistical data about the Slovak construction business: a) Sales in the sector are declining and so are the profits; b) Attributes of the construction business like production, productivity and investments are declining; c) Occurrence of negative signals in the industry, e.g. shadow economy and informal agreements; d) Unemployment rate oscillates around 14 %; e) Inflation rate culminates at 0 %; f) Slow increase in the number of economically active population, on average 0,34 % per year.

Productivity of the Slovak construction business compared to the overall productivity is at the level of 8 %. Major share of the productivity is attributable to new construction, reconstructions and modernization, followed by repairs and maintenance. However, repairs and maintenance grow hand in hand with the new construction. There is an increase in the share of non-residential buildings, and a decrease in the share of residential buildings and engineering structures. The highest share of construction was done by the self-employed 36,7 %, followed by small enterprises 26,2 %, mid-size enterprises 17,2 % and large enterprises 19,9 %. When we combine the self-employed with small enterprises, and the mid-size enterprises with large enterprises, the ratio is 62,9 % vs 37,1 %. Construction business in the Slovak Republic can be further characterized using the following statistics (Sources: Ministry of Transport, Construction and Regional Development; Ministry of Finance; National Bank of Slovakia; Statistical Office of The Slovak Republic)

Unemployment rate is currently at the level of 14 % and since year 2008 it has been growing. 8,6% of those unemployed in 2012 were working in construction. Unemployment in the construction sector declined by 4,5 % (7,7 thousand people). The number of economically active people in the country is rising modestly, on average by 0,34 % per year, representing on average 8 955 people. Sales in the construction sector are declining, between 2008 and 2013 they declined by 35,25 %. Labor costs were rising until 2008, then were declining until 2011, and then were rising again until 2013, reaching the same level as in 2008. Overall profit of the construction business in 2013 reached 480,5 m EUR, representing a decline compared to year 2012 by 13,73 %, and compared to year 2011 a decline of 38,27 %. Inflation declined from 3,9 % in 2011 to 1,4 % in 2013. Growth of GDP has declined over the past years. In 2013 GDP increased only by 0,9 % compared to 2012. Contribution of the construction business to the national GDP was at the level of 8,5 %. Previously it increased until 2008 by rates between 12 and 20 %, and after 2008 it declined and increased by rates between -7,9 % and + 6,4 %. GDP contribution of the construction business decreased in 2013 by 3,6 % compared to 2012, hence in 2013 the overall contribution of the construction business to the national GDP was 8,03 %. Production of the construction business at the domestic market was decreasing since 2008 by 7 % annually. Since 2011 total export of products and services surpasses total import into the country. Statistic indicators show that 2008 represents a climax of the construction business, as all metrics were rising at that time, such as production, productivity and investments. Between 2008 and 2013 these metrics were generally declining. The biggest share on the production between 2005 and 2013 had new construction, reconstruction and modernization, and repairs and maintenance. In 2013, construction investment was split as follows: 67,91 % new construction, reconstruction and modernization; 25,72 % repairs and maintenance; 1,15 % other construction works; and 5,21 % foreign work. In 2012 was the share of subjects engaged in construction production as follows: self-employed 36,7 %; small enterprises (0–49 employees) 26,2 %; mid-size enterprises (50–249 employees) 17,2 %; large enterprises (over 250 employees) 19,9 %. At present there is a growth in the share of self-employed and small enterprises compared to larger enterprises. The level of construction production is declining since 2008, on average by 6,5 % per year. In the studied years there was an increase in the share of non-residential buildings (in 2012 47,0 %); decrease in the share of residential buildings (in 2012 22,2 %) and engineering structures (in 2012 24,5 %). Private sector realizes 99,8 % of production in the Slovak construction business. [2,7,11,21]

### 3. SIPE, Ltd. case study: main results and discussion

The company in our case study, SIPE, Ltd., [5,8,9,13] is a typical representative of the category of small enterprises (10-49 employees) in the Slovak construction business. It has been active in the business for 19 years since 1997 in the area of manufacturing and supply of indoor and outdoor flooring (e.g. concrete floor, epoxy floor, stone floor, parking). The company had between 2009 and 2014 documented cooperation relationships with 258 business parties. The challenge for the company was the competitive market situation caused by the market supply being higher than market demand for this type of products. A study in the area of cooperation was expected to bring knowledge applicable to the situation of the company in dealing with this market challenge – recommendations for the management of business interactions and use of cooperation management. In the construction business environment in Slovakia where SIPE is active, there are 6 basic interactions: customers, competitors, suppliers, partners, outsourcing, regulatory. For these interactions (relationships) we can list the following characteristics: experience, reputation, loyalty, attractiveness, displays of power. Using the method of personal interview, observation and document analysis, it was necessary to deduce for the previously mentioned characteristics the following criteria of strongly cooperating and competitive subjects: a) Frequent activity on the market (availability of the suppliers, demand of customers, offer of competition); b) Duration of the interaction with the company (2 years and more); c) Ability to ensure high production performance (resources with large capacity); d) Adherence to the supply – construction terms (price, quality, time, flexibility).

These criteria represent basic requirements necessary for healthy competitive cooperation relationships in the environment of the company SIPE. Strategic management of these relationships within a group of companies results in synergy, with results such as cost advantages, new investments, repeated business activities and others. Dynamics of the environment where SIPE is active depends on the reactions and activities of individual participants in that particular sector. Development of these relationships is supported by: a) Degree and intensity of the business relationship; b) Extent of the involved resources; c) Satisfaction of a concrete need; d) Size of the market and sector, market possibilities; e) Adherence to the industry terms (reliability, flexibility, price, quality); f) Regulation of the market and sector. For relationships in every cooperation group (in a certain industry structure) it may be beneficial to consider using their strategic management. This may help to manage the dynamics of this environment in order to produce synergistic effects as well as to manage changes, issues and regulations. There are multiple factors that influence management of relationships in the environment where SIPE is active. The first factor is the market itself, as a place where supply and demand meet, it represents a natural place for a more concrete management. The second factor is the regulation and legislation, which typically influences activities like public tenders, taxation, and other various regulatory payments and responsibilities to the legislator in that particular location. The third factor is the current need, according to which are managed the relationships between the parties. The current need can be caused by the demand of customers, legislative benefits, and favorable offer from a supplier, or by a marketing communication of the competition. Next, it is necessary to draw the attention to particular controlled activities aimed to satisfy the current needs using elements of the environment. Formulating recommendations for strategic management of a group of companies can contribute to strengthening of the just created synergy effects of cooperation relationships.

Appearance of the cooperation environment in the construction business was related to certain criteria, in relation to which were formed cooperation relationships, thus creating the cooperation environment. These criteria can be applied more broadly beyond the construction business also to other industries. In case that these criteria are present in an environment among the businesses, there is a chance for successful cooperation and its effects may be stronger than in case of a purely competitive environment. Theory and practice lists several forms of cooperation, e.g. clusters, networks, spin-offs, joint ventures, alliances, mergers and acquisitions, etc. However, even these forms of cooperation require for their functioning certain cooperation structure – a system where the cooperation would take place – cooperation management. Mapping the structure of the construction business involved identification of individual parts and relationships in the environment, the concrete cases in the cooperation environment of the company. Companies aim to achieve their goals by the arrangement of the elements, relationships and functioning of the structure (management) of the industry where they are active. In the current competitive business environment, cooperation with other parts of the environment – cooperation management – represents one of the strategic tools how to maintain company's market position, customer base, and competitiveness. Cooperation system that involves specific elements and relationships is shown in the following diagram. It represents generally applicable structure of a system useful for

managing cooperation environment. The strongest relationships with the most impact are placed inside of the system. These represent cooperation relationships built on the criteria of cooperating companies listed in the SIPE case study. The goal is to build a competitive system of multiple companies, while reducing or completely removing negative impact on costs, quality, or the environment for doing business. An important strategic step is the decision to cooperate and to modify company's existing relationships to fit this goal. Every company that participates in the system needs to align itself with system's functions and management. Internal efficiency of individual relationships in the system represents an important shift in the perception of current competition on the market. Competitive struggle is natural between the rivals who aim to achieve certain advantages (bigger market share, higher profits, more customers etc.). Current market represents a stage when the sheer number of competitors has reached a level when they inflict damage on each other – they damage the value that they offer to the customer (quality, functionality, price). For this reason, it is desirable to establish a system that would prevent the decline in the value provided to the customer, and would also influence functioning of the competitors. In this proposed environment every element (company) would be managed by itself, however, for the purpose of a successful cooperation and control it is necessary to establish a “managing unit”. This unit would be a strategic tool for realizing multiple tactics such as: definition of the cooperating elements, assignment of rights and responsibilities, re-distribution of market demands, securing of communication and control.

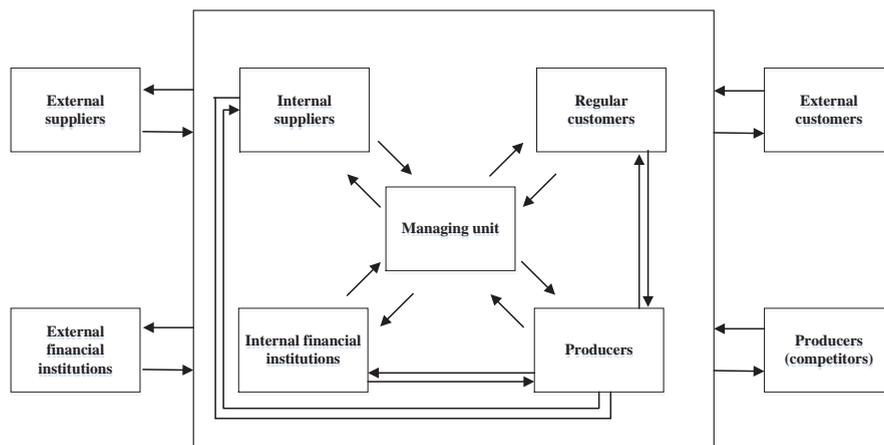


Fig. 1. Generalized cooperation environment of SIPE (construction business in Slovakia)

Cooperation represents a new evolutionary direction. Its interactions are supported by mutual relationships between the participating companies, as well as their links to the environment. For this reason, it is necessary to coordinate and manage these interactions using a suitable structure (system) that would help to create a suitable environment among the cooperating parties. According to the introduced case study but also in general, there is an increasing degree of dependency of companies which impacts the whole business ecosystem. Various forms of collaborations, competition, creation of rules, overcoming of changes, all these further increase the dependency and thus they contribute to creating cooperation and cooperating environment. One of the main reasons for focusing on a certain area is to stimulate cooperation management as a tool for creating value for the participating companies. If multiple companies in a certain area focus on a common goal, it is suitable to use cooperation and strategic management as means to achieve the goal more efficiently and to create synergies.

#### 4. Conclusion

Application of theoretical knowledge in practice for modeling a system of cooperation environment for successful cooperation represents a basic exercise of cooperation management useful for strategic management of a group of collaborating and competitive companies. Situation in the construction business in the Slovak Republic is characterized by a high number of competitors that strive to unhealthily overcome competition over the customer.

Statistics of the Slovak construction business show a moderate stagnation of the environment, what influences the relationship between suppliers and customers. On the other hand, the number of smaller companies and the self-employed is increasing, what also creates certain blocks as well as opportunities in the manufacturing aspect. The initial impulse for cooperation as such should be the purpose of cooperation, trust in the result of the cooperation and in the individual participants. This leads to an agreement and the need for interactions in the concrete area or on a project. In an environment where these interactions arise and meet it is necessary to bring a comprehensive perspective for managing such collaboration – strategic cooperation management of a group of subjects. We can generalize the competitive struggle on the Slovak construction market into a cooperation environment that is characterized by a high intensity of interactions, long term relationships, capacity that is changing to match the demand, and high competitiveness in the parameters of price, quality, time and flexibility. From this we can conclude that a single company is unable to compete in such an environment with complex groups of companies that are connected and dependent on each other.

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