

# SUPPLIER DEVELOPMENT IN THE CZECH REPUBLIC

KRŠŇÁKOVÁ Lenka<sup>1</sup>, JANČÍK Jakub<sup>2</sup>

VSE - University of Economics, Prague, Czech Republic, EU

1lenka.krsnakova@vse.cz, 2jakub.jancik@vse.cz,

### **Abstract**

Since each company can be considered only as a segment of the supply chain, cooperation among all the segments is inevitable. Through cooperation, supply chains can gain competitive advantage and achieve better performance. Competition has shifted to the level of the supply chain. Nowadays, buyers engage in specific types of processes at their suppliers in order to strengthen their cooperation and to improve their performance. It is especially noticeable in automotive industry.

Extant literature on types of cooperation among companies within supply chain provides the foundation for the study. The data collection was conducted through questionnaire. Questionnaire was sent to manufacturing and business companies of all sizes (small, medium and large enterprises) with the representation in the Czech Republic within following sectors: automotive, food, clothing industry, electronics and pharmaceutical industry.

The results show how the companies develop their cooperation with suppliers and what is significant in different sectors. Majority of the companies prefer close cooperation with suppliers, some of them participate on streamlining of the supplier's processes and effective sharing of information via information technology systems.

Keywords: Cooperation, Czech Republic, supplier development

# 1. INTRODUCTION

In recent years, it is especially noticeable the short product life cycles, ever-increasing competition, individual customer requirements which change over the time and, last but not least, cost competitiveness. Today, companies must be able to mix this cocktail individually for each customer, otherwise they will quickly lose its competitiveness in the market.

For that reason, it is inevitable for the companies in the supply chain to cooperate closely otherwise the flows of products, information and payments would not be efficient [1], [2]. Through cooperation with suppliers, supply chains can gain competitive advantage and achieve better performance by gaining synergic effect. Therefore, supplier integration goes beyond the buying and selling activities and emphasize the importance to involve suppliers in different processes, for instance product development [3].

This paper outlines what types of cooperation and supplier development are important for the companies in the Czech Republic. Moreover, it focuses on companies that are directly involved in streamlining of supplier's processes and show what the motivation for such involvement is. Authors define two research questions.

RQ1: Do the companies participate in supplier development? If yes, how?

RQ2: Are the companies directly involved in streamlining of supplier's processes? If yes, how?

## 2. SUPPLIER DEVELOPMENT

### 2.1. Literature review

In sectors where manufacturing know-how is crucial for the final product such as automotive or electronics industry, companies are highly dependent on their own knowledge in order to produce innovative products.



Moreover they have to rely on know-how of their suppliers otherwise they would not be able to compete with other companies. [4], [5].

Since each company in the supply chain concentrates on the specific manufacturing process, companies can only produce innovative and competitive products using innovative parts from their suppliers. [6], [7] In order to be sure for the companies that they receive a competitive and innovative part for their final product, they tend to supervise the supplier's processes.

In today's global competitive environment, companies go further. They engage in supplier development as a reaction to competitive markets. Companies access to supplier development differently. It starts with an informal supplier evaluation and a request for improved performance. On the other hand companies invest in the training of the supplier's personnel and in the supplier's operations. [8], [9]

Carter emphasized that strong relationships built through collaboration may block competitors from accessing key sources of supply. It means that the buyer company can gain a technological exclusivity for a period of time until the supplier decides to cooperate with other companies. [10]

Supplier development is described as activities initiated by a buying company to strengthen the competitive capability of its suppliers. In practice, supplier development activities vary significantly, buying companies use different approaches to enhance their suppliers' performance and capabilities.

Li classified these endeavours into four categories. Asset specificity represents transaction-specific investments in the supplier by the buying company. Joint action represents in-depth cooperation between buyers and suppliers on certain activities that are important for improving the performance of both parties. Performance expectation represents buyers' expectation of suppliers' performance improvement. Trust too is an important factor. [11]

### 2.2. Data collection

The data collection period was established to five months during the second half of 2015. Questionnaire was sent to approx. 800 selected manufacturing or business companies belonging to all sizes (small, medium and large enterprises). Target group are companies with the representation in the Czech Republic within following sectors: automotive, food, clothing industry, electronics and pharmaceutical industry.

Questionnaire was sent to the companies from described sectors, from different regions in Czech Republic electronically. Since the questionnaire encompasses the wide range of questions concerning the strategic decisions of the company, authors selected carefully the key informants. Thus, the recipient of the email is logistic or supply chain manager (if this role is not held within the company, it is sent directly to the CEO). Questionnaire response rate is around 5 %. Every company is contacted by email that includes cover letter, instruction sheet and the questionnaire. To increase the response rate as well as to send the questionnaire to the right person, pre-notification calls were made. Managers were invited to participate and authors offered them a copy of the questionnaire's results.

However the response rate is low, we received enough questionnaires in order to make a conclusion, moreover some companies are willing to continue with the research and cooperate on semi-structured interviews. Although most companies understood well the questions, there were some discrepancies in a few questionnaires. Moreover some companies were not able to finish the questionnaire due to different reasons. Some of the questionnaires had to be discarded.

### 2.3. Results

Recipients were asked about the cooperation with suppliers. From 40 companies, only 7 companies stated that they do not participate on supplier development. The majority of them (4 out of 7) belong to the food industry. One of the companies belongs to the automotive industry.



Table 1 Participation on supplier development

Yes	33
No	7

If the company confirmed the participation on supplier development, we asked about how they develop the cooperation with suppliers. Each company could mark more than one possibility. **Table 2** shows the results. Regular meetings with suppliers, personal or online meeting are the most frequent across all studied industries. Employee training and effective sharing of information is other preferred way to cooperate. Less presented types of cooperation as efforts to involve suppliers on savings and vendor-managed inventory were confirmed across industries as well.

Table 2 How the companies develop relationship with suppliers

Involvement in R&D	6
Regular online meetings	18
Regular visits at supplier	23
Employee training	12
Efforts to involve suppliers on savings	7
Capital investments	2
Effective sharing of information	10
Vendor-managed inventory	7
Other techniques	6

Some companies not only cooperate with suppliers but they are directly involved in streamlining of supplier's processes. This trend is especially noticeable in automotive industry (3 out of 7 companies confirmed direct involvement) and pharmaceutical industry (2 out of 4 companies).

**Table 3** Direct involvement in streamlining of supplier's processes

Yes	7
No	33

The companies that confirmed the involvement were asked how they are involved. Each company could mark more than one possibility. Most of them apply lean management principles, know-how sharing. Involvement of own employees or involvement of external consulting companies are frequently marked as well. All companies confirmed financial investment in their suppliers.

**Table 4** How are the companies involved?

Know-how sharing	4
Training and development of employees	1
Involvement of own employees	4
Involvement of external consulting companies	4
Financial investment	7
Lean management principles	
Total quality management	3
Just in time	1
Kaizen	3
Radical change and redesign of processes	1



The motivation for involvement in streamlining of supplier processes is the long-term cooperation with the supplier or strategic partnership. The results of the motivation for cooperation shows **Table 5**. Each company could mark more than one possibility. There was not found any specific motivation that would be typical for concrete industry.

**Table 5** What is the motivation for this involvement?

Development of supplier with long-term cooperation	6
Strategic partnership	5
Insufficient financial capital of partner	0
Motivation of financial savings	4
Motivation of increased quality of supplied parts	4
Motivation for partner's development and stabilization	4

The companies stated the benefits that bring such involvement. All of them confirmed increased on-time deliveries, majority of them claimed increased quality of deliveries and faster delivery cycle time. Another benefit of such involvement is supplier stabilization. The results are shown in **Table 6**.

Table 6 What are the benefits of such involvement?

Faster delivery cycle time	5
Increased quality of deliveries	6
Increased on-time deliveries	7
Decreased buying price	3
Decreased expenses on salaries at supplier	0
Supplier stabilization	5

## 3. CONCLUSION

This paper confirmed the importance of the cooperation in the supply chain. Supplier development is one of the ways how companies can strengthen their position on the market and bring innovative products. As a result of closer relationship with the suppliers, companies can improve their performance. Cooperation with suppliers allows them to provide their customers with shorter time of delivery since the supply chain becomes more flexible.

The results of the questionnaire sent to the companies from different sectors in the Czech Republic show that Czech companies constantly work on the relationship with their suppliers, more frequently they regularly visit their suppliers or meet them online, train supplier's employees or share the information with them. The benefits of such cooperation are better quality of deliveries, lower costs of deliveries or more flexible supply chain.

Some of the Czech companies participate on streamlining of supplier's processes with different methods and motivation. Most of them apply lean management principles, know-how sharing, involvement of own employees or involvement of external consulting companies. All companies confirmed financial investment in their suppliers. The benefits of such involvement are increased on-time deliveries, increased quality of deliveries, faster delivery cycle time or supplier stabilization.

Since the study confirmed the necessity of future research on cooperation with suppliers, the authors have already started in-depth interviews with participating companies from automotive industry to reveal how the involvement in streamlining of supplier's processes influence the company's performance.



## **ACKNOWLEDGMENT**

This paper and associated research was carried out as a part of the project financed by Internal Grant Agency of University of Economics, Prague, IG305025.

### **REFERENCES**

- [1] FLYNN, B. B, HUO, B., ZHAO, X. The impact of supply chain integration on performance: A contingency and configuration approach. Journal of Operations Management, Vol. 28, No. 2, 2010, pp. 58-71.
- [2] THUN, J. Angles of integration: An empirical analysis of the alignment of internet-based information technology and global supply chain integration. Journal of Supply Chain Management, Vol. 46, No. 2, 2010, pp 30-44.
- [3] CROXTON, K.L., GARCÍA-DASTUGUE, S.J., LAMBERT, D.M., ROGERS, D.S. The supply chain management processes. The International Journal of Logistics Management, Vol. 12, No. 2, 2001, pp 13-36.
- [4] MACHER, J.T., MOWERY, D.C. Vertical specialization and industry structure in high technology industries. In J.A.C. BAUM & A.M. McGAHAN (Eds.), Business strategy over the industry life cycle (Advances in strategic management, pp. 317-355. Elsevier: Amsterdam, 2004.
- [5] MACHER, J.T., MOWERY, D.C., MININ, A.D. The "Non-Globalization" of innovation in the semiconductor industry. California Management Review, Vol. 50, No. 1, 2007, pp 217-242.
- [6] LAGLOIS, R.N., ROBERTSON, P.L. Networks and innovation in a modular system: Lessons from the microcomputer and stereo component industries. Research Policy, Vol. 21, No. 4, 1992, pp 297-313.
- [7] ROBERTSON, P.L., LAGLOIS, R.N. Innovation, networks, and vertical integration. Research Policy, Vol. 24, No. 4, 1995, pp 543-562.
- [8] KRAUSE, D.R. and ELLRAM, L.M. Success Factors in Supplier Development. International Journal of Physical Distribution & Logistics Management, Vol. 27, No. 1, 1997, pp. 39-52.
- [9] SÁNCHEZ-RODRÍGUEZ, C., HEMSWORTH, D. and MARTÍNEZ-LORENTE, Á.,R. The Effect of Supplier Development Initiatives on Purchasing Performance: A Structural Model. Supply Chain Management, Vol. 10, No. 3, 2005, pp. 289-301.
- [10] CARTER, J.R., SLAIGHT, T.H. and BLASCOVICH, J.D. The Future of Supply Management Part 2: Technology, Collaboration, Supply Chain Design. Supply Chain Management Review, Vol. 11, No. 7, 2007, pp. 44.
- [11] LI, W., HUMPHREYS, P.K., YEUNG, A.C.L. and CHENG, T.C.E. The Impact of Specific Supplier Development Efforts on Buyer Competitive Advantage: An Empirical Model. International Journal of Production Economics, 03, Vol. 106, No. 1, 2007, pp. 230-247.