Doctoral dissertation titled:

Determinants of building partnerships with MRO suppliers for manufacturing companies in Poland

Summary

The appropriate use of market opportunities and a company's internal capital, as well as the development of a strategy and the construction of its own unique supplier relationship management model, influence the added value of the company. This dissertation considers the relationship between the supplier and the buyer and examines the determinants of this collaboration. The partnership relationship is interpreted as a specific intangible resource encompassing behaviour, culture and interaction.

The variety of relationships taking place between manufacturing companies and suppliers of equipment and spare parts, shows that they are indispensable in the production system, requiring the development of appropriate policies and the collection of necessary information. In practice, it is accepted that staff and procurement practices must have the relevant information and data on their main suppliers of critical components, sub-assemblies and parts.

The issue of determinants of building partnership relations with MRO (*Maintenance*, *Repair and Operating Supply*) suppliers is the subject of this dissertation. The research analysed issues related to barriers and factors supporting partnership cooperation in the supply chain. The identification of factors of key importance for MRO suppliers, allowed for the proposal of a catalogue of best practices aimed at the development of partner relations for manufacturing enterprises in Poland. The main objective of the dissertation was to identify those areas of supplier relationship management that require improvement or the introduction of specific behaviours. This is because it was found that there was a lack of empirical research

that focused on identifying barriers and stimulators for building partner relations with suppliers of this type of goods.

Due to the convention of an implementation doctorate, the rationale for the research topic was the need to propose directions for change aimed at bridging existing barriers and strengthening the activators of the development of LOTOS Group S.A.'s partnership relations with MRO suppliers.

Given the significant role of MRO as a key element in ensuring process continuity and safety in manufacturing companies, a practical catalogue of actions has been identified to mitigate barriers to the development of partnerships between MRO suppliers and manufacturing companies in Poland.

The implementation nature of the dissertation meant that an attempt was made to solve a research problem located in the company where the author of the dissertation is employed. Exploring the topic of partner relations occurring in the supply chain of materials, equipment or key machinery required the establishment of research assumptions for the purposes of this dissertation. Therefore, those areas in the company Grupa LOTOS S.A. (currently part of Orlen Capital Group) in which corrective and remedial actions are necessary were defined. The types of the company's relations with suppliers of spare parts and auxiliary materials and the level of the company's partnership with individual supplier segments were also identified. The in-depth analysis required the author of the study to identify leading concepts, practices, as well as technical solutions oriented towards increasing the degree of integration with suppliers in the company market. In the final phase of the analysis, directions for change were proposed to reduce existing barriers and strengthen the activators of partnership development in the studied supply chain, and a map of the supplier support process was presented both graphically and descriptively as an implementation aid.

The thesis of the dissertation addressed the research objectives listed below:

In manufacturing companies in Poland, there are specific barriers to building partnerships with suppliers of spare parts and auxiliary materials, which can be eliminated by developing a consistent methodology of cooperation on a win-win basis.

The main objective of the dissertation was to identify areas of supplier relationship management in need of improvement and to propose a methodology for implementing best practices aimed at mitigating barriers to the development of partnerships between MRO suppliers and manufacturing companies in Poland.

The main objective was developed through specific objectives that focused on:

C1	Defining the types of relations of production enterprises with suppliers of spare
	parts and auxiliary materials of the LOTOS Group S.A.;

- C2 Identify leading concepts, practices, as well as technical solutions oriented towards increasing the degree of integration with LOTOS Group S.A.'s suppliers;
- C3 Indicating barriers and enablers to building partnerships that are of key importance to MRO suppliers of LOTOS Group S.A.;
- Proposing directions for changes aimed at eliminating existing barriers and strengthening activators for the development of partnership relations with MRO suppliers of LOTOS Group S.A..

In order to achieve the specific objectives of the study thus defined, the following research questions were formulated:

- Q1 What types of relationships prevail between MRO suppliers and manufacturing companies in Poland?
- Q2 What barriers limit the development of partnerships with MRO suppliers for manufacturing companies in Poland?
- Q3 What factors support the development of partnerships with MRO suppliers for manufacturing companies in Poland?
- Q4 What external and internal factors influence MRO supplier relationship management for manufacturing companies in Poland?

The research used quantitative methods, including a survey, statistical methods. The study allowed for the development of a methodology for introducing changes in the management of relations with suppliers by the companies of the LOTOS Group S.A. Group, oriented towards the development of partnerships.

The paper consists of five thematic chapters, the first two of which are theoretical and provide an introduction to the issue of supplier relationship management. The next two chapters are analytical and exploratory in nature. The final chapter, on the other hand, is of a projective nature.

Chapter one, which is divided into three thematic sections, describes the concept of supplier relationship management.

The next chapter characterises the determinants of relationships with suppliers. The results of building relationships with suppliers are presented, a breakdown of these relationships, which constitute the intangible resource of the company, is presented and models of cooperation with suppliers are described.

The third chapter contains a characterisation of the specifics of manufacturing enterprises' relations with MRO suppliers in Poland. This part of the dissertation presents what the reality is in the area of MRO purchasing and supply in manufacturing enterprises in Poland, for which maintenance is a significant area of activity. Subsequent parts of this chapter are devoted to MRO supplier relations and define risks closely related to production.

The fourth chapter includes a description of the research methodology and analyses the results of the of the empirical study. Conclusions defined on the basis of the research carried out are presented in the last subsection of the thesis.

Chapter five presents recommendations for manufacturing companies in terms of forming relationships with MRO suppliers. The premises conditioning the building of relations by LOTOS Group S.A. with MRO suppliers are also defined. Based on the survey, the determinants conditioning the building of relationships with suppliers of spare parts and consumables in production enterprises were defined. The results of the survey made it possible to formulate a catalogue of good practices for building relations with MRO suppliers for the segment of production enterprises.

It concludes with findings and conclusions related to the proposed practices and indicates the possibilities of their application in building and maintaining partnerships in manufacturing enterprises in Poland. The dissertation has a great potential for further development of the topic in the MRO supply stream, as a special and much under-exposed area of enterprise activity in the literature.