

# **Analysis of Online E-Procurement Negotiation of a Car Manufacturer**

## **Masterarbeit**

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# 1. Introduction

## 1.1 Relevance and Motivation of the Discourse

In the last decades a substantial change took place within the automotive industry. Due to the emergence of global networks and the continuous increase of competition and cost pressure, the businesses were required to meet new challenges. These changes of the competitive situation had also a significant impact on the tasks of the procurement departments. Beyond the operative daily business activities, these new requirements could not completely be overcome with traditional methods and instruments. An integrated process management to meet these new requirements was needed by the buying agents to be able to eliminate non-value added activities and create therefore a process-related increase of productivity.<sup>1</sup> In this context, Electronic Procurement provides a continuous redesign through process supporting systems with the aim to decrease the administrative operations of buying agents.<sup>2</sup> New opportunities and substantial savings can be achieved through an aware use of these information and communication technologies by the procurement departments.

The Volkswagen Group collaborates with its suppliers intensively via Internet since the year 1999 and established therefore the central procurement market "VWGroupSupply.com". In this way, the entire demand of all group brands can be inquired via this electronic marketplace to the suppliers. Thus, the internet-enabled procurement is an efficient way to reduce existing inefficiencies and lack of transparency within the traditional supply markets. The possibilities in the ordering process as well as during the negotiation phase do offer the businesses the chance to react more flexible and faster to market circumstances and helps them to strengthen their position in the global competition. In particular, the use of online auctions as an alternative to

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<sup>1</sup> c.f. (Hofmann & Städter, 2007, pp. 323-324)

<sup>2</sup> c.f. (Nenninger & Lawrenz, 2002, p. 2)

traditional negotiations takes a distinctive importance within electronic procurement activities. A main advantage of this type of electronic negotiation is the possibility to negotiate with multiple suppliers simultaneously in real-time.<sup>3</sup> In addition to this, the advantage of high transparency and the fast execution of the negotiation phase during the procurement process are further assumed as a considerable outcome. The transparency should lead the participating suppliers to lower their prices, which would result in lower direct procurement costs for the purchasing business. Thereby, the fast execution of the negotiation phase enables both negotiating parties to save time and as a result to decrease their process costs.<sup>4</sup>

This master thesis will analyze the issue of “online negotiations” within the General Purchasing Department of the Volkswagen AG.

## **1.2 Structural Approach**

This master thesis is based on five succeeding chapters to examine the above mentioned issue of online negotiations within the Volkswagen AG. For this purpose, the terminological and theoretical foundations of Electronic Procurement and Online Auctions will be illustrated in chapter 2. In chapter 3, success factors as well as benefits and risks of Electronic Reverse Auctions will be elaborated by conducting a comprehensive literature review. Chapter 4 includes a general overview of the Volkswagen Group as well as the organization and structure of the Purchasing Department. Furthermore, the importance and implementation of the Online Negotiation Process within the VW General Purchasing Department will be illustrated in detail. In chapter 5, potentials for improvement will be uncovered and recommendations for the future use of this online negotiating tool will be given. In Chapter 6, the results of this discourse are reflected and summarized in brief.

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<sup>3</sup> c.f. (Hofmann & Städter, 2007, pp. 332-333)

<sup>4</sup> c.f. (Kaufmann & Germer, 2004, p. 194)

factors: full specifiability, market characteristics, switching costs and further factors to be considered. The second page includes the evaluation of seven important issues from a scale of 1 to 5. The buyer has to decide on its own which factors are important for the success of the online negotiation for the specific situation. Furthermore, the buyer can generate an individual total score for each of its purchasing processes. The buyer should always take notes within the field "Buyer Comments" to be able to explain why the purchasing situation was not suitable for the use of an online negotiation process.<sup>163</sup>

## **6. Conclusion and Outlook**

The substantial change of the automotive industry, especially the competitive situation within the supply market had a significant impact on the tasks of the procurement departments. With The development of information and communication technologies, E-Procurement solutions provided a continuous redesign of processes to meet the new requirements. Buyers were enabled to reduce administrative tasks and concentrate themselves on more valuable strategic tasks. Hereby, the online negotiation tool was developed to further decrease administrative and process costs as well as to increase substantial savings in purchasing activities.<sup>164</sup> This is the main reason why the Volkswagen Group decided to implement online negotiations beside of the applications capacity management, online catalogues and supplier databank as an important part of its group-owned e-sourcing platform. The aim of this thesis was to analyze the online negotiation process at the VW Group and to develop recommendations to use this negotiating tool in the most optimal way.

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<sup>163</sup> Please note that the criteria catalogue can be found in the Appendix of this Master Thesis.

<sup>164</sup> c.f. (Hofmann & Städter, 2007, pp. 323-324)

The buyers at VW possess the autonomy of decision to use this tool for their purchasing activities or not. The analysis of the status quo within the General Purchasing Department of the VW AG gives an insight into the utilization rate and further conversations with buyers showed that the usage of the online negotiation tool has a significant potential for growth. Before recommendations for action could be given, an intensive literature research about benefits and risks, important success factors and various design parameters of electronic reverse auctions had to be conducted. The comparison of the design elements found in literature was compared with the tactical and strategic measures of the online negotiation tool at VW. The result was that the online negotiation tool provides a professional ground for the buyers to conduct online negotiations. Therefore, recommendations are elaborated in regard to increase the acceptance of the buyers. An essential aspect of the recommendations is to eliminate the resistance towards this tool. Intensive education and technical training are important to increase the awareness of the buyers. The second recommendation is to use a criteria catalogue highlighting the success factors for the execution of online negotiations. The criteria catalogue should be used by the buyers to find out the suitability of the item or service to be purchased.

The online negotiation process, if it is used correctly, will strengthen its place within the procurement management in the future. The further technical development of this negotiation tool will disencumber the buyers more and more from their administrative tasks. It would not be surprising if especially non-critical items, which are characterized through a high specificity and standardization, will be put for auction automatically through more intelligent and developed systems when a demand is required without the buyer as "intermediary".