E-Commerce Opportunities for a Commercial Vehicle Industry System Supplier

Bachelorarbeit

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1. Introduction

'When the wind of change blows, some build walls and others build windmills'.
- Chinese Proverb

There is no economic sector existing in the world, being characterized by such a durably high innovation and growth rate as the ICT-industry sector. This particularly counts for the sub-sector of Electronic Business and its subsumed part of Electronic Commerce. These business fields have realized tremendous rates in recent years until today and it seems that it stays this way. Especially in the Business-to-Business (B2B) area, the highest sales potential through E-Commerce transactions is forecasted. Nevertheless, there are still many companies in the industrial sector that evade these changes and remain in their old systems. Even if web based business processes are almost a world standard in medium to large enterprises, the step from basic E-Commerce to collaborative E-Commerce still seems to be difficult to many companies.[1] It can be assumed that this might be one reason for Forrester Research to expect the biggest growth opportunities in the motor vehicles and motor vehicle parts as one of four sectors until 2020 in its latest research.[2]

With respect to these facts, this work takes a close look at the E-Commerce opportunities for an industrial company, acting in a branch, where E-Commerce did not play a significant role up to now. Ironically, it is indirectly benefited by E-Commerce's global growth to a significant degree.

The works center of attention is the global operating company WABCO, a system supplier to the commercial vehicle industry. Until now, this branch was clearly not in the field of research's view on E-Commerce. Therefore, it offers the best possibilities to derive development potentials and procedures. The current research on E-Commerce is basically designed more conceptual and less empirically. In addition, it can be bisected in the rough. While the first group of researches is primarily concerned with the adoption of E-Commerce, group two, however rather deals with the performance assessment of E-Commerce systems. For this reason, there are already a number of studies that deal with the critical success factors of E-Commerce as well in a B2B context as in related E-Business fields. If there is empirical research, for the most part, the focus lies on very web-driven companies. In the meanwhile, more and more studies deal with the possibilities of data processing for using the data acquired by E-Commerce systems. This discussion, however, is more reflected from a hardware and software point of view and limited to the analysis of various data

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[1] Lee, Seung Chang; Pak, Bo Young; Lee, Ho Geun (2002), "Business value of B2B electronic commerce: the critical role of inter-firm collaboration", Electronic Commerce Research and Applications, Vol. 2, pp. 350-361
[2] Demery, Paul (2015), "B2B e-commerce sales will top $1.13 trillion by 2020", Internet retailer, 2nd April 2015, available at: https://www.internetretailer.com/2015/04/02/new-report-predicts-1-trillion-market-us-b2b-e-commerce (last check: 8th August 2015)

mining tools, database systems etc. A synthetic approach of Business Intelligence and E-Commerce can be identified hardly. This counts for the theory as for practice, too.

Overall, one question remains: How can E-Commerce secure long-term success? Giving an answer on this is the main purpose of this work. What opportunities arise from E-Commerce with view to strategic management and company's decision-making which go further than short term approaches like cost savings and additional sales channels? With a special regard to the knowledge and skill management, E-Commerce systems can give companies a competitive advantage through the allocation of (customer) information. To achieve that, an organizational strategy, leading from E-Commerce to E-Knowledge needs to be built.

This work wants to draw up long-term E-Commerce opportunities and set standards for an underdeveloped company within the E-Commerce business. For this, already existing studies are reviewed and a theory-praxis comparison is accomplished. The structure of the work is as follows:

In the first part, the theoretical foundations of E-Business and E-Commerce are laid and the observation object WABCO is presented. The second part is a literature review. In the last part the findings are discussed and put in relation to the observed enterprise environment in a case study. The work concludes with a summary and an outlook on prospective fields of research and limitations.

2. Foundations

The following definitions enable the reader to understand the terminology used in the following of this work. In addition, they provide background information on the work's research object. They are generally valid unless otherwise stated. This preliminary introduction allows a more structured reading.

Electronic Business and Electronic Commerce

Electronic Business as well as Electronic Commerce is often used randomly within scientific research. By comparing different journals it is conspicuous that the terminology is used compatible. This is caused by the blurred differentiation of the both affected areas. It is not the aim of this work to have a discussion on definitions. That is why a universal definition, represented by Wirtz is conducted. Thereby Electronic Business refers to '*the initiation as well as respectively full support, management and maintenance of exchange processes by using electronic networks*'.[3]

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[3] Wirtz, Bernd W. (2001), "Electronic Business", Gabler Lehrbuch, 2. Auflage, p. 35

5. Conclusion and outlook

The research on E-Commerce is at an advanced stage. However, it is more limited to the systems than on the integration within a company's processes. It was clearly found that E-Commerce is making a value contribution to the company. The value impact depends on its implementation degree. This value proposition is based on the interaction of IT and E-Commerce. It also refers to the company's reputation. If the information obtained from E-Commerce is used properly, it refers to marketing, too. Overall, E-Commerce is a process relief for everyone involved. It has been proven that E-Commerce is an interdisciplinary field which requires competences from several areas. To establish a contemporary E-Commerce, it requires expertise from the newer disciplines, such as Business Intelligence and Data Science. By including these disciplines, the integration and synchronization of E-Commerce and Knowledge Management succeeds. This is the next step from basic to collaborative E-Commerce, where E-Commerce is transformed to E-Knowledge.

Companies need information for their own knowledge and skills management. They need them to best satisfy the customer demands and settle in the market, too. It was found that research on the synchronization of E-Commerce and Knowledge Management represents a gap, yet. This will be a focus in the future. Even to push companies on this step.

Overall, it was found that E-Commerce is an integral part of a company's strategy. The digitization spares no branch. Companies that do not recognize this will have to live with losses against their competitors in the future.

A case study was conducted to make a theory and practice comparison. WABCO was used as an examination object.

It has been shown that the identified weaknesses from research were present in this company. Here, E-Commerce has been seen as a self-standing system which plays no significant role within the company's strategy. A process orientation could not be identified. Generally, digitalization has not been conducted seriously. Knowledge Management was not lived. Added to this was a completely outdated webshop presentation.

Ways were shown how a new integrated E-Commerce system might look like. Based on the case study, it was shown that even in a not web-based company, considerable opportunities in E-Commerce exist. These go beyond the additional sales of products. For the future, it will be necessary to push a common understanding of E-Commerce. In addition, an understanding of the need for digitalization of processes must be obtained.

Finally, it can be referred to the introductory Chinese proverb. Company's acting in branches for which E-Commerce so far was not an issue, should not concentrate on

building walls. They should see the incoming information from E-Commerce as a breath of fresh air and, more importantly, as a lift towards long-term success.

6. Limitations

As part of this work several fields were identified where research deficiency prevails or which could not be processed due to the scope of this work. Given the identified customer focus, an in depth research on social sciences and behavioral science is of increased interest. This might draw conclusions about the customers purchase behavior and attitude within E-Commerce systems. Further, there is lack in empirical evidence on companies using E-Commerce. But more important, there is lack on empirical evidence on companies acting in a not web-driven environment, so especially companies from the industrial sector. In the long-term, insights regarding opportunities and challenges of E-Commerce are necessary to ensure emphasis in branches, where E-Commerce has been considered very critical, yet.

Another identified gap is the missing of best practices on implementing a successful E-Commerce system with view to an integration of a Knowledge Management system. Generally, it is necessary to promote an integrated and deepened research approach on E-Commerce and Knowledge Management. This could lead to discussions about generally accepted roadmaps as they already exist in the computer science field for implementing software systems. A basis might be the 'B2B eCommerce Playbook for 2015' published by Forrester Research.[101]

There are limitations with regards to WABCO as the research object, too. A market research on the customer's acceptance on E-Commerce systems within the branch might be of interest. Generally, it can be assumed that this can be classified as very high. Furthermore, research on the development of new distribution channels is interesting. In particular, platforms that could already enjoy a high degree of acceptance in the B2C area, like Ebay or Amazon, could be useful research objects. It must be assumed that especially Amazon is an attractive alternative due to their own warehousing and distribution system which suits better to WABCO's corporate structures. In the course of this examination, clarity on accepted payment methods is needed prior to such an expansion, which is another field of research. Last but not least, the company should expand its expertise in the field of digitalization. Therefore, research on opportunities on Big Data Management is of interest.

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[101] Hoar, Andy; Johnson, Carrie; Milender, Jacob (2015), "Build A World-Class B2B eCommerce Business", Forrester Research, 25th June 2015, available at: https://www.forrester.com/Build+A+WorldClass+B2B+eCommerce+Business/fulltext/-/E-RES89642 (last check: 07th August 2015)