Linking the customer purchase process to website development and e-commerce performance
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5 Discussion and Implications

5.1 Summary of the findings and theoretical implications

The main goal of this thesis is to provide insights into how online customers’ needs structured in the customer purchase process affect website development and e-commerce performance. This thesis aims to contribute to professional practitioners’ understanding and to the academic literature. In the introduction to this thesis (Chapter 1), we have identified the main research objectives addressed in the separate chapters (three studies). In this section, the main findings of the thesis are summarized. Also, the theoretical and managerial implications to the field of electronic commerce are discussed.

Study 1: Stages of website advancement: Assessment based on goals to support the customer purchase process.

In Chapter 2 (study 1), our focus was on understanding the stages of website development. We contribute to existing literature by formulating website goals based on the customer purchase process. In this way our findings can assist in developing customer-oriented e-commerce strategies. Next, we adopt an innovative modeling approach, namely a latent class extension of the generalized partial credit model (Muraki, 1992; Vermunt, 2001) that combines latent class analysis and item response theory. This methodology permits testing equally well when a single hierarchy can be found or when the data is better described by distinguishing multiple hierarchies. The results suggest two separate dimensions of website development, one for transactional and another for relational website functions, in contrast to some other studies (e.g. Wu and Lee, 2005) which discuss the Internet only as a communication channel. The website goal hierarchy for the transactional dimension is as follows: product
selection, ordering, delivery, after-sales, order progress and payment. The relational dimension is: image building, strengthening relationships, after-sales service and order progress. These hierarchies assume that websites that have realized simpler goals may or may not pursue more advanced goals, but all websites at the advanced level also pursue the more basic goals. A model for website advancement has not been empirically tested before. In addition, only one-dimensional advancement stages have been discussed to date. We also investigated which firm characteristics influence the level of website advancement, including the presence of a separate marketing department and the industry type.

The two hierarchies we derive based on website goals are in line with previous research using different approaches. Daniel et al. (2002) identified four sequential stages of e-commerce adoption, where firms at a specific stage undertake all activities of the previous stages and some in addition. The third stage adds receiving orders online, as it is our medium level of the transactional dimension. Firms at the most advanced stage add after-sales service and payment capabilities, which is also similar to our findings. Daniel et al. (2002) suggested that the companies in the third stage were about to develop transactional capabilities in addition to information provision. Lee and Grewal (2004) discussed adopting the Internet as a communication channel and as sales channel. Hence, they also perceive the communication channel as an initial step before adopting a sales channel. The channels are recognized as consecutive steps of development stages. Our study deviates from these and other studies by specifying two separate dimensions of website development. Our empirical findings indicate that website advancement should be treated as two related but different sequences of e-commerce adoption: transactional and relational aspects. Thus, depending on strategic decisions, many options for website development are possible. For example, website can demonstrate highly advanced relational functions and less sophistication in transactional functions, or websites can be at a low advancement level in both functions.
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Study 2: Transactional and informational functions of websites: Which is more important for success?

In Chapter 3 (study 2), we show empirical support for the chain of e-commerce effects, starting with website features, which refers to website content and is determined by companies, through the intermediate steps of informational and transactional website success, overall website success and market performance, ultimately to financial performance. This framework enables us to determine the relative importance of the informational and transactional functions of a website, to identify which website features impact website success, and to show that website features contribute to the financial performance of a company. Our results indicate that both the informational and the transactional functions contribute to the success of websites. This finding is in contrast to Lee and Grewal (2004), who studied Internet adoption as a communications channel and as a sales channel. Only in the first case did they find a positive effect on firm performance. Since their study involved data from the Internet boom period until 2000, it seems we can show that since then, Internet use by both suppliers and customers has matured significantly (Chu et al., 2007). In addition, we found that both informational and transactional features sets have a positive impact on their respective website functions success and that firms can improve website performance through providing relevant website features in the whole customer purchase process. This result differs from Saeed et al. (2003) who found no support for the relationship between website features in the acquisition (our transactional function) and ownership stages (our informational function) and performance. This divergence might be due to different approaches in classification of website features into stages of the purchase process. In Saeed et al. (2003) features could belong to one or more stages of the customer purchase stages, while in our study, each feature was specific for only one stage. Therefore, presence of website features specific for each stage is important for website and company success.
**Study 3: The effect of complaint behavior and service recovery satisfaction on intentions to repurchase on the Internet.**

In Chapter 4 (study 3) we compared how repurchase intention depends on customer complaint behavior and service recovery satisfaction. In general, our findings show that negative experiences and complaints do not lead automatically to disadoption of the Internet as a purchase channel. The e-business market does not necessarily cause complainants to stop being online buyers. What is more, we find remarkable differences between the studied consumer groups with respect to intentions to repurchase on the Internet. Consumers who have negative experiences, complained about them and were satisfied with the complaints handling, have higher repurchase intentions than consumers who did not have a reason to complain and consumers who did not complain about their negative experiences (silent complainers). Thus, we empirically demonstrate the service recovery paradox for the online purchase setting. The service recovery paradox has been shown in several publications for offline settings (De Matos et al., 2007) but not yet for an online setting.

Also, our results suggest that for repurchase intention on the Internet, complaining internally is better than complaining externally. Also, Goetzinger et al. (2006) stated that online sellers receive the greatest benefit when consumers choose to complain directly to the e-tailer because of their awareness of the problem and their ability to respond. Customers who decided to complain to an external organization and were satisfied with the response also demonstrated high purchase intention. However, if they were unsatisfied with the response to the complaint, the percentage of repurchase intention considerably drops. To conclude, our findings add important insights to the existing literature through an empirical comparison of different complaint behavior groups on their intentions to repurchase online. Our results underline the importance of service recovery and satisfying complaint handling for electronic commerce.
FIGURE 5.1. OUTLINE OF THE CONTRIBUTIONS OF THE THREE STUDIES

Overall conclusions
The three studies included in this dissertation indicate directions to follow on how to link the customer purchase process to e-commerce. Study 1 adds knowledge on how a website can develop and advance by pursuing customer-focused website goals. Study 2 shows the link between website content based on customer's needs and company success. It also shows that successful online
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customer support in the informational and transactional stages relates positively to company performance. Study 3 focuses on customer support in the post-purchase stage, showing the importance of service recovery for future Internet purchases. Figure 5.1 outlines the main contributions of the three studies.

5.2 Managerial implications

The results reported in this thesis do hold several important practical implications for developing e-commerce strategies.

First, in Chapter 2 (study 1), by showing how website goals can be derived from the various stages of the customer purchase process we offer managers a tool to support the development of customer-oriented websites. For each of the stages managers can determine which features or functions could support customers better. Additionally, managers can use the model to review their current website: it shows them the major strengths and weaknesses of their website in terms of supporting customers in their decision process. Also, these results allow a firm to determine the current status of advancement of its website, which is crucial for the further design of an e-commerce strategy and suggest which goals could be pursued given the current stage of a firm’s website. Thus, the results of this study may serve as a benchmark and as a tool for screening, evaluating, designing and improving the website.

In Chapter 3 (study 2), we show that firms can improve website performance through providing relevant website features in the entire customer purchase process. Managers can use the features sets proposed in study 2 as a starting point for website improvement. What is more, a chain of effects established in that study (starting with website features and ending with financial performance) is helpful for managers trying to justify e-commerce investments. An established link with financial performance, albeit through some intermediate steps, is essential in e-commerce accountability debates. Also, our findings on informational and transactional website functions imply that there is, in general, no reason to limit Internet activities to information,
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communication or interaction-related tasks. Providing relevant support in the transaction stage also contributes to greater overall website success.

Chapter 4 (study 3) shows that managers may win back dissatisfied customers so that the Internet channel is not discarded for future shopping; though it requires accurate response to customer complaints. The most optimal for electronic commerce is that customers complain directly to the e-tailer (internally). Therefore, management should encourage customers to complain internally. With successful internal complain management, the e-tailer gets direct information from the consumer but also the consumer will probably repurchase online in the future. Regarding external complainants, it is crucial to ensure that they are satisfied with the response to the complaint. External complaints should therefore be carefully monitored and handled. Moreover, e-commerce management should encourage silent complainers to voice their complaints, as their repurchase intention is otherwise relatively low. Finally, management should understand that their customers’ satisfaction with complaint handling is essential for the future of online businesses.

5.3 Future research

The findings and implications of this dissertation indicate the need to further investigate the link between customer needs and e-commerce strategies. This thesis has investigated issues from two fields, customer behavior and electronic commerce. By merging these fields we present new insights regarding customer-oriented e-commerce strategies. We hope that we have demonstrated how knowledge of the customer purchase process can be adapted to e-commerce strategies. Nonetheless, future directions for research can be based on the findings of this thesis.

In the first two studies (chapters 2 and 3), the focus was on how companies use websites to support customers in their purchase processes. We studied the supplier’s perspective and only one channel, the Internet. Likely future extensions are to study the same issue from a customer perspective (Torkzadeh and Dhillon, 2002). Also, new insights could be gained by
including other channels as well (Bendoly et al., 2005; Dholakia et al., 2005). There is a variety of channels available to customers during the different stages of the decision-making process, such as bricks-and-mortar stores, catalogues and phone. Future research could study the stages of advancement within a mixed multichannel environment.

An interesting avenue for future research would be to investigate how performance is related to website advancement level, as proposed in study 1. Investigating this link would be beneficial for both researchers and practitioners. This would provide insights into whether firms are successful in implementing subsequent website advancement stages. Subsequent possible research could test the link between e-commerce strategy and performance separately for the business-to-business and business-to-consumer settings.

Study 3 on online consumer dissatisfaction, shows the importance of placing complaints internally with an e-tailer. Thus, the search for website improvements supporting customers in placing their complaints in a straightforward way should be continued. Actually, new technologies are continually emerging and customers are becoming increasingly sophisticated and demanding (e.g. McEachern, 2003), so increasingly sophisticated features are expected to be invented and incorporated online to facilitate complaints handling.

Moreover, further research could investigate whether the findings regarding service recovery and repurchase intention for individual e-tailer differ from our conclusions at the e-channel level.

An additional valuable extension of the findings in study 3 would be to study different complaint behavior groups and their repurchase intentions in a multichannel setting. Teerling (2007) studied relationships between offline and online customer (cross-channel) behavior showing that behavior in one channel influences behavior in another channel and vice-versa. In view of that, customer dissatisfaction with online purchase may have cross-channel effects on purchases offline. Furthermore, dissatisfaction with purchase in bricks-and-mortar shop might impact future purchases from an online counterpart.
Recently Verhoef et al. (2007) distinguished the research-shopper phenomenon, which is the tendency of customers to use one channel for search and another for purchase. The most popular form of research shopping was using the Internet as a search channel and a store as a purchase channel, but there was also store-Internet research shopping. In this thesis we studied the impact of customer dissatisfaction in the post-purchase stage on future online purchase intention. Indeed, an interesting research problem is how dissatisfaction at the pre-purchase stage of the customer purchase process influences purchases online and/or offline.

Finally, in this thesis we have focused on the extent to which a website supports customers in their purchase process. Although this is crucial for online success, it is not the only factor managers have to consider when developing or maintaining websites. Other important factors include the match with the firm’s marketing and IT strategy, the competitive situation and opportunities and/or limitations associated with the current website architecture. It would be interesting to extend the findings of this thesis by including a more diverse set of factors simultaneously. The ultimate goal of such research would be to develop a website scorecard that provides a comprehensive and complete overview of the strengths of the current website and the avenues open for further improvement.