Master Thesis

Assessing the marketing performance of online retailers:

A case study

Public Version

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UNIVERSITY OF TWENTE.

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Management Summary

This research analyzes how online retailers can assess their marketing performance. The rise of the internet and electronic commerce not only impacted the way firms do business, but also affected the buying process of consumers. Among other things, the internet enabled the creation of new business models, like online retailing. These businesses face different benefits and hindrances than traditional firms. Online retailers have a wider reach, can benefit from a flexible assortment presentation, and have more opportunities for customer data tracking. It has become crucial to be findable in search engines, while search and switch costs for customers have decreased. Besides this, consumers have the opportunity to share, and search for, experiences with products and stores. To deal with the intricacies of the internet, four stages are distinguished in the marketing strategy of online businesses: (1) product/service, (2) e-marketing organization, (3) website, and (4) social media. These four stages not only affect the marketing strategy, but also influence how online retailers can and should assess their (marketing) performance.

The marketing function of firms is occupied with targeting the right products and services to the right customers, with the aim of contributing to overall firm performance. Performance measurement supports firms in managing their marketing function, by assessing how well marketing activities contributed to: (1) winning and retaining customer preferences, (2) stimulating, facilitating, and accelerating sales, and (3) overall firm performance. In the literature review six models for marketing performance assessment are evaluated and compared. Each of these models illuminates a different part of the marketing performance (process). Based on the analysis an integral marketing performance measurement framework is proposed. In this framework the marketing performance is evaluated on nine dimensions: (1) strategy, (2) resources, (3) capabilities, (4) marketing actions, (5) market assets, (6) positional advantages, (7) customer impact, (8) market performance, and (9) firm & financial performance.

Because online retailers face different intricacies than traditional retailers, the measures by which the marketing performance is assessed should also be adjusted to these characteristics. One important

difference is that customers of online stores are both shoppers and information technology users. As a consequence the customer experience is distinct from that of a traditional store. At online retailers the moment of payment and product receipt do not coincide, which affects the customer perception of the delivery process. Online businesses also have to overcome a lack of face-to-face contact, making it important that website visitors sufficiently trust the online retailer. Another difference relates to the high level of technological uncertainty, due to which online businesses have to exploit both economics of scale and scope to ensure that large initial investments can be earned back.

These differences influence the manner in which online retailers can assess their marketing performance in several ways. First, technological and informational resources and capabilities have a high impact on the business success. Also marketing activities have to be conducted in a different way to successfully attract, serve, and retain customers. Next to this, the website has become the most important asset of the firm, compared to a store and its location in traditional retailing. Further do positional advantages exist on different levels, because advantages in delivery, web experience, and image are important for the customer perception and the success of firm. Finally, the measurement of the customer impact has altered, because website usage, social media sentiment and social media reach have become relevant indicators for tracking customer perceptions. To effectively deal with these differences in marketing performance measurement, the ORMPA model is proposed. Even though this model contains the same dimensions as the integral marketing performance measurement framework, all dimensions are adjusted for the characteristics of online retailing.

The ORMPA model can be operationalized by adapting the assessment characteristics to the business strategy, corporate context, and the task environment. These factors influence the time-span of the measurement, referent scores, and the measurement orientation. The strategy, resources, and capabilities dimensions can be assessed by means of an audit, while the performance of the other dimensions can be analyzed by means of a set of metrics. These metrics can be analyzed by data from web analytics software, consumer research, customer satisfaction surveys, social media messages and posts, helpdesk enquiries, customer relationship management databases, accounting data, shipment information, result pages of search engines and comparison shopping websites, usability research, environmental knowledge, and industry reports.

The empirical test of the ORMPA model indicated that this model can be applied to a firm setting and help in creating a complete overview of the marketing performance. All of tested dimensions uncovered different parts of the marketing performance. However, the empirical test also indicated that some performance factors from the strategy, resources, capabilities, and market asset dimensions are not yet sufficiently operationalized. The empirical test further showed that the ORMPA model can be adapted to firm contingencies by basing the measurement characteristics on the company strategy, corporate context, and the task environment. The last finding from the empirical test is that cause-and-effect relationships can be recognized between the different dimensions of the model, which implies that it is useful for marketing performance diagnosis.

One finding that potentially limits the applicability of the ORMPA model is that it is experienced as being too complex. Therefore a simplified ORMPA model is proposed that consists of three steps: (1) preparation, (2) realization, and (3) outcomes. The preparation stage covers the strategy, resources, and capabilities dimensions, while the realization stage comprises marketing actions, market assets, and positional advantages dimensions. Finally, the outcomes phase covers the customer impact, marketing performance, and firm and financial performance dimensions. This simplified model is useful in presenting the performance findings. Despite this, there are two important limitations to its use. First, it only shows the relative performance in comparison to a benchmark score, without referring to the actual performance. Second, many cause-and-effect relations are removed from the model, which makes it less suited for performance diagnosis.

Several limitations exist for the results of the research. The most important limitation for the case study firm is that the performance is only measured in a few countries, due to which the findings do not have to be representative for all countries. Next to this, there are two important scientific limitations. First, this model is only applied once, while no long term study is conducted to determine if the model is cost-effective in use. Second, it is only applied at one firm, which limits the generalizability of the findings to other online retailers. Therefore the cost-effectiveness and generalizability of the ORMPA model are two important areas for future research.

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Preface

The thesis laying in front of you presents the results of my research into marketing performance measurement systems for online retailers. This research is carried out to conclude the Master program ‘Business Administration’, track ‘Service Management’ at the University of Twente. In this preface I want to thank the persons that supported me during this project.

This project is supported and made possible by several people to whom I owe gratitude to. First I want to thank the directors of the case study firm, who made this project possible. I want to thank the directors, managers, and employees of the case study firm for their support and making their valuable time available. Jeroen Hoogeveen, Eric Hoefmans, and Rose Yeow supported me with reviewing my questionnaires and interview questions, for which want to thank them. Further I owe special gratitude to Li-Sa Lim, Sebastien Balestas, Germaine Siahailatua, Andreas Martin and Anne Lee for their support in preparing and executing my research, and for their continuous and valuable support. Another person I want to thank is Dr. David Barnes for sharing his papers on the topic of e-business performance management systems, which provided a valuable starting point of my research. In addition I owe a special gratitude to Johan Jongejan, Renate Westrik, Robin Meijboom, Floor Cornelissen, Marijke Schipper, and Siraj Zubair for their help with supportive activities, like acting as a sparring partner and executing usability research activities on the websites of the case study firm and its competitors.

Besides these persons, I would like to give special thanks to my supervisors: Dr. E. Constantinides and Prof. dr. C.C.J.M. Millar. During the complete process they have been very supportive, provided me with invaluable insights, left me a lot of freedom to share the research according to my own desires, and where able to keep me very motivated throughout the project. Last but not Least I want to thank my parents for supporting me during my educational career in several ways. Overall I not only had an amazing time during this project, but I also feel it is an invaluable experience for my personal and professional development.

Amstelveen, December 2010

Michel Bieze

1 Introduction

“Even if you are on the right track,
you’ll get run over if you just sit there.”
Will Rogers

The rise of the internet and standardized work-flow system has a striking effect on the way many firms do business and market their products (Friedman, 2007). New business models are created, of which some are solely aimed at selling products and offering information through the web. Paradigms about information provision, supply chain strategies and successful marketing techniques have changed, affecting both individual companies and industries in many ways. Above all, the internet has a staggering impact on retailing and the overall marketing process: “*no other innovation has received as much attention from retailers, manufacturers, consumers and the general public as has been accorded to internet retailing, or e-tailing*” (Grewal, Lyer & Levy, 2004, p.703). For many firms the internet has become an alternative or leading channel for communication, branding, transactions, and public relations (Song & Zahedi, 2006).

Due to the influence of the internet it is also likely that the measures of business and marketing success have altered. “*E-commerce introduces new business objectives, as well as new strategies for achieving these and this implies that the old measures of success may no longer apply*” (Hasan & Tibbits, 2000: p.442). This is especially the case for online firms, also known as pure e-businesses, dotcoms, or pure-plays. These companies solely rely on internet technologies to offer their products and services, without having any physical stores (Clarke & Flaherty, 2004). Online firms are among other things hindered by a lack of human face-to-face contact and an inability to touch, smell, and try products before making a purchase (Broillet, Dubosson & Trabichet, 2008). As a consequence it is both essential and challenging to create and maintain dependable fulfillment processes and a good back office that ensures a satisfactory customer service (Constantinides, 2002).

Due to the electronic nature of online firms, these companies have better abilities to measure their performance in many areas. Despite this advantage, research also indicates a wide dissatisfaction among managers of online firms regarding their business performance measurement systems (Marr & Neely, 2001; Adams et al. 2001; Neely et al, 2002b). Dotcoms tend to be preoccupied with measurement, while they fail to manage their organization based on the obtained data (Marr & Neely, 2001; Adams et al. 2001; Neely et al, 2002b). This is partially caused by an underdevelopment of non-financial performance measures, especially in the field of marketing (Clark, 1999; Ambler, 2006; Morgan, Clark & Gooner, 2002). Moreover, research in marketing performance assessment shows that a dissatisfaction with marketing performance measurement systems among practitioners (Clark, 2002; Amber & Kokkinaki, 2002). Kotler and Keller (2006) indicate that many firms have poor marketing control procedures, whereby especially smaller companies face problems with objective setting and performance measurement. To prevent a situation where companies just measure things for the sole objective of measurement, it is important that companies create insight in the information needed to manage the business. This is especially true for the overall marketing performance, since that contains important information about customer satisfaction, competitiveness, and other elements that are tightly related to current and future business success.

This research focuses on how the marketing performance of online firms can be determined. Marketing performance is an indication of quality of the marketing function of a company, both in terms of effectiveness and efficiency (Clark & Ambler, 2001). Hereby the marketing function comprises of all interactions of a (potential) customer with the company, both directly and indirectly, online and offline. A specific focus will be put on small and medium sized firms. Herein special attention is paid to the effects of environmental changes to the business strategy and information needs of managers and employees, as well as the limitations faced by small and medium sized enterprises (SMEs) as a consequence of the limited amount of resources that are usually available. This research is conducted by means of a case study. Section 1.3 will further introduce the case study firm, but first the following section will provide an outline of this chapter.

1.1 Chapter outline

This chapter introduces this research in the following way. First the case study firm is introduced and the practical background is discussed. After this the research objective and questions are discussed, while the last two sections elaborate on the motivation and report structure. Before continuing with the introduction of the case study firm, the following section first introduces the theoretical background of the study.

1.2 Theoretical background

Scholars in the field of marketing performance measurement have stressed the benefits of performance assessments. Morgan, Clark and Gooner (2002) for example point out that such evaluations can have five distinct functions: (1) provide inputs for planning, decision making and learning; (2) help strategy implementation by indicating which milestones and objectives are being achieved; (3) monitor 'vital sings' of a company and provide early warnings for potential future performance issues; (4) validate compliance with regulations and standards; and (5) convey marketing priorities and desired outcomes to staff and managers. However, the same authors also indicate that there exists a lack of theoretical and practical understanding about the marketing performance process. Likewise Clark (1999) and Lamberti and Noci (2010) suggest that the topic of marketing performance measurement is still largely uncovered, especially regarding the adaption of performance assessment to marketing strategy.

Despite that marketing performance research has enjoyed a growing popularity, little scientific research has been conducted in the area of retailing and online firms. This is especially the case regarding non-financial performance measurement. On the one hand research has been conducted research in the area of what constitutes good marketing practices (e.g. Kotler, 1977; Kotler, Gregor & Rodgers, 1977; Brownlie, 1993; Wilson, 1993; Piercy, 1997), marketing performance measurement in traditional firms (e.g. Morgan, Clark & Gooner, 2002; Rust et al., 2004; Gupta & Zeithaml, 2006; Ambler, 2006; Bush, Underwood & Sherrell, 2007; Grewal et al., 2009; Lamberti & Noci, 2010) and retailing (e.g. Hinfelaar, 2004; Farris et al., 2006; Grewal et al., 2006), while other streams of researchers focused on good e-commerce practices and the assessment of online marketing activities (e.g. Hasan & Tibbits, 2000; Lee et al., 2000a; Lee et al., 2000b; Straub et al., 2002; Constantinides, 2002, 2004; Weitz, 2006; Hasan, Morris & Probets, 2009; Waisberg & Kaushik, 2009; Kaushik, 2010; Turner, 2010). To the best of the knowledge of the researcher, little scientific work so far has attempted to bridge these streams to create an integral marketing evaluation framework for online firms. This research attempts to overcome this gap by combining the evidence from both fields.

1.3 Introduction to the case study firm

The case study was a world-wide operating online retailer in designer products (look-and-feel products). Due to the sensitivity of the data gathered in this report, all company related is removed from this public version due to confidentiality reasons.

1.4 Background and motive

First part of this section is removed for confidentiality reasons.

By conducting this case study research, several important contributions can be made to the firm. First and most important, marketing performance assessment can be used as a diagnostic tool to locate performance problems and determine where the company can or must improve. Second, it can help the company in determining if corrective actions help in improving the marketing performance if the company regularly applies the designed measurement framework. Third and last, it can support the continuity of the firm, because a higher marketing performance and customer satisfaction is likely to result in a better overall performance. In addition, if the contributions of this research would help the case study firm to actively manage the marketing performance, it is also likely that the company will be able to maintain a positive relationship with their suppliers. This research also aims to contribute to theory by showing how marketing performance evaluation can make practical contributions to the operations of the case study firm.

1.5 Research objective and questions

The previous sections outlined the background and motivation for this research. To contribute to the theoretical and practical aims described, the following research objective is formulated:

> **The objective of this research is to develop and test empirically a model for assessing the marketing performance of online retailers**

In this research the marketing function as a whole is analyzed, including elements like customer acquisition and retention, website and product performance, and the quality of the fulfillment process.

This research will use the marketing control process as the basis of this thesis. The marketing control process exists out of four stages: (1) goal setting, (2) performance measurement, (3) performance diagnosis, and (4) corrective action (Kotler & Armstrong, 1999; Kotler & Keller, 2006). Since this study aims to assess the marketing function by developing a model for marketing performance measurement, the second step is the focus area of this thesis. The marketing control process and research scope are visualized in figure 1.1.

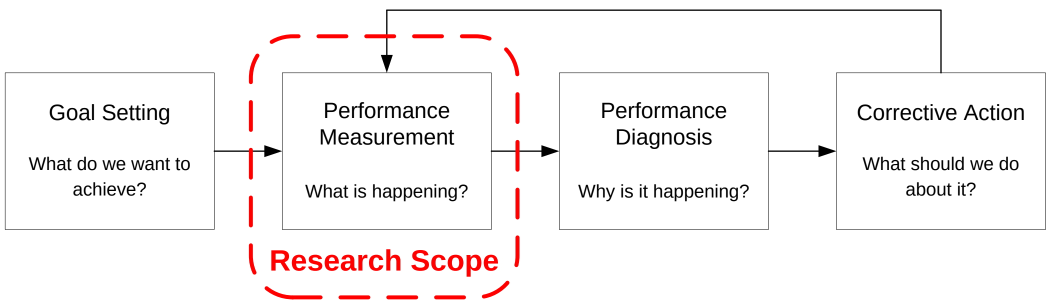

Figure 1.1: Research scope

Adapted from: Kotler & Armstrong, 1999, p. 53; Kotler & Keller, 2006, p. 717.

To fulfill the objective of this research, the following main question is formulated:

How can online retailers measure their marketing performance?

To answer the main question, several sub questions need to be answered in this thesis. First theoretical insight need to be created in the factors and dimensions that constitute the marketing performance of electronic retailers. After that, these factors and dimensions need to be operationalized, before they can be applied to measure the marketing performance of the case study firm. Last, the findings from the empirical test can be evaluated to determine the usefulness and applicability of marketing performance measurement factors and dimensions in practice. This leads to the following set of research questions for to be answered in this thesis:

1. What dimensions and factors constitute a model for determining the marketing performance of online retailers?
2. How can the model for measuring the marketing performance of online retailers be operationalized?
3. What is the current marketing performance of the case study firm on the dimensions and factors that constitute the model for marketing performance measurement at online retailers?
4. What insights about the usefulness and applicability of the model for measuring the marketing performance of online retailers can be derived from the case study?

The combined answer on these four questions answers the central question and fulfills the research objective. Each of these questions will be answered in a different chapter of this thesis. The next section elaborates on the used research approach to answer these questions.

1.6 Research approach and structure

It is felt that the amount of academic work on the topic of marketing performance measurement of online retailers is still quite scarce. On the other hand, the field of business performance measurement is already a hot topic in literature (Neely, 2004; Kennerley & Neely, 2003; Marr & Schiuma, 2003). Therefore a mixed qualitative and quantitative research method is used that takes a combined applied and explorative research approach.

Even though this research has to some extend an explorative nature, still a theoretical lens was used as a starting point of the study. The first research question aims to create a theoretical perspective that can be used to create a method to determine the marketing performance of the case study firm. This theoretical lens is created by means of a literature review. Also the operationalization of the model is to a large extent also based on a theoretical review, although here both scientific as well as practitioners literature was used. In addition is the operationalization checked with the case study firm and adjusted where relevant based on their insights from practice.

The remaining part of the research questions were answered by an empirical analysis which was conducted according to an emergent research design. During the study, data gathering and analysis were executed in parallel rather than in successive independent steps. First information was gathered, analyzed, and interpreted about the business strategy and operations of the case study firm. After this, the same steps are executed to formulate metrics for measuring the marketing performance. Based on those insights the theoretical model was adapted to the situation of the case study firm.

After completion of the model, it was applied at the case study firm to determine the current marketing performance and test the adapted performance measurement model. In the last step of the research, areas for improving the marketing function were formulated based on the insights in the marketing performance of the firm. The complete research structure is visualized in figure 1.2. The research methodology, including the methods used for data collection and analysis, are discussed in more detail in the next chapter.

1.7 Motivation

This research provides new theoretical insights as well as practical insights for The case study firm. In the field of performance measurement, this thesis creates insights in how online retailers can measure their marketing performance. It contributes to practice by not only helping The case study firm to indicate how they can measure their marketing performance, but also by determining the current performance. Because marketing performance is highly dependent on external, uncontrollable actors like customers and competitors, assessing marketing performance is a difficult thing to do (Clark, 2002). Hereby it is assumed that better measurement leads to better marketing (Ambler & Kokkinaki, 2002). The uniqueness of this thesis is that to the best of the knowledge of the researcher, none of the published work on marketing performance measurement has adopted their model to the situation of online retailers.

1.8 Report structure

The structure of this thesis follows the research structure presented in figure 1.2. The next chapter elaborates on the research methodology, before chapter three presents the marketing performance measurement theories used in this research. The second research question is answered in chapter four, which elaborates on how the model from the theoretical framework can be operationalized. After the model is adapted to the case study firm, chapter five elaborates on the application of the model at the case study firm, before the findings from the case study about the applicability and usefulness of the model are discussed in chapter six. Finally, the last three chapters discuss the conclusions, recommendations, and areas for future research.

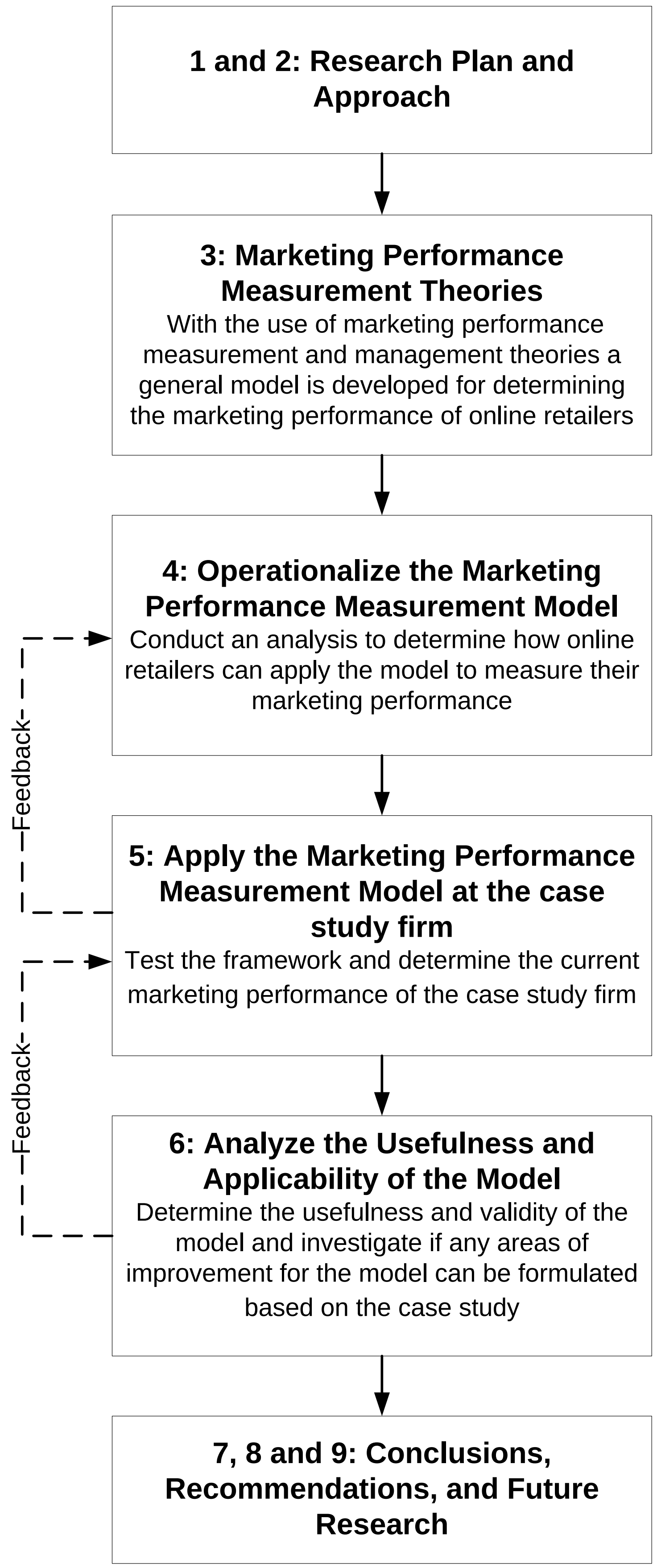

Figure 1.2: Research structure

2 Research Methodology

"Out of clutter, find simplicity.
From discord, find harmony.
In the middle of difficulty, lies opportunity."
Albert Einstein

The development of a performance measurement system is not a simple linear progression process (Bourne et al, 2000; Kerklaan, 2006). In practice the design, development and use phase overlap, while once in use the system requires periodic refinement and updating. Such a complete implementation cycle cannot be fully captured within the boundaries of this thesis, due to which this research aims to complete the design phase as comprehensive as possible. This chapter introduces the methodologies used in order to accomplish the research objective in a scientific way. The aim of this chapter is to explain how this study is executed, by elaborating on the literature review, data collection, data analysis, quality considerations and research limitations. Before describing this, the next section will first introduce the research design.

2.1 Research design

The previous chapter indicated that an applied and exploratory approach is used in this research, while making use of both qualitative and quantitative research methods. To fulfill the research objective, the researcher is not only interested in theoretical constructs and approaches, but also in what works in practice and what not. The researcher will therefore bring a pragmatic worldview to the research. The last element determining the best research strategy is the type of main question. In this study, the main question can best be typified as a 'how' question. Yin (2003) points out that that there are several research strategies suited to answer 'how' questions, among which the case study. Because the researcher is interested in what would work in practice and attempts to apply knowledge within a certain setting, also the action research can be a valuable strategy to fulfill the research objective.

In a research multiple strategies of inquiry can be combined (Yin, 2003). Therefore a combined case study research and action approach research strategy were used. Eisenhardt (1989) defines a case study as "*a research strategy which focuses on understanding the dynamics present within single settings*" (p.534). Case studies enable the researcher to capture the specific nature of one or a few unit(s) in some point (or over a period) in time (Gerring, 2007). The design of a marketing performance measurement system requires a holistic view and deep insight in the organization, for which a case study seems the most suited strategy of inquiry. Also action research is expected to lead to valuable insights, because in this strategy the researcher does not act as an outside observer, but as a participant that brings his/her knowledge to the study (Cassell & Johnson, 2006). Where a case study only allows for reflecting the needs, visions and challenges of the analyzed units, action research can help in overcoming problems where the company and existing theories cannot fully deal with.

Different types of case studies can be distinguished based on the number of cases and the amount of units per case (Yin, 2003). This research makes use of a single case and single unit of analysis case study. Using a single unit of analysis seems more suited since the overall marketing performance is determined by the interaction and cooperation between departments, rather than by individual functions or departments.

Within the 'family' of action research also different types can be recognized. Based on their different philosophical underpinnings, Cassell and Johnson (2006) distinguished the following five main types: (1) experimental action research, (2) inductive action research, (3) participatory action research, (4) participatory research practices, and (5) deconstruction action research practices. From these five approaches, participatory action research focuses on cooperating with subjects throughout a research project in an organizational setting. To capture the rich context of The case study firm required to effectively apply the marketing performance measurement model, this action research type is most suited for this research.

2.1.1 Motivation for research design

The combination between the case study and the action approach are considered the best approach for this research. First, because little scientific literature is available on the topic of marketing performance measurement in online retailing, there is little need to test existing theories, models and frameworks. Instead, this topic first has to be explored. Hereby the researcher is not solely interested in the theory that is grounded in the view of the participants, but in an in-depth exploration of this topic within a bounded time and activity. Therefore the case study and the action research strategy seem most suited for this study.

Considering the potential contributions to science, it would have been better to analyze multiple cases rather than a single case (Yin, 2003). However, because limited time was available for the study, this can also weaken the research since the attention has to be divided over multiple cases (Miles & Huberman, 1994). Merriam (1998) also points out that case studies require deep and careful investigation to prevent misinterpretations about the phenomenon and/or subject, and to maximize the access to evidence. Furthermore Miles & Huberman (1994) also recommend that inexperienced researchers limit themselves to a single unit of analysis. Considering these arguments it was decided to purely focus this research on The case study firm, and not to add other online retailers as cases to the research.

The case study strategy is combined with participatory action research for two reasons. First, this enable the researcher to bring his knowledge or external insights to the case study. This enables the researcher not only to describe the viewpoints and experienced challenges by the subjects, but also to make a contribution to overcoming these issues and enabling organizational change (Cassell & Johnson, 2006). Second, the two strategies supplement each other, because both strategies of inquiry attempt to study a phenomenon in its natural setting. The case study allows for creating an understanding of the business needs and the extent to which current theories are applicable, while the participatory action research supports in adjusting the theories in order to make them suited for The case study firm.

2.2 Literature review

The literature review supports the researcher in focusing the research, searching for the right data in the case, and extracting information from this data. Thereby theory can provide a background to adequately position the empirical research activities (Kitchenham, 2004) and prevent the exploration of a topic that is already explored.

The databases ‘Web of Science’, ‘Scopus’, and ‘Business Source Elite’ were used to search for articles in the fields of marketing performance, e-business performance, and (online) retailing. All articles from the results were assessed on title, abstract, relevance and applicability to The case study firm, after which they were selected and used based on their actual content. A cited reference search and an analysis of references are conducted for all included articles to identify additional literature (including book chapters) not yet detected during the literature review.

2.3 Data collection methods

In case studies several data collection methods can be used, including documents, archival records, interviews, direct observations, participant observations, physical artifacts (Yin, 2003), and audio-visual material analysis (Creswell, 2007). The pragmatic worldview advocates for the application of multiple data sources, in order to create a reliable and complete understanding (Creswell, 2007, 2009).

Within the data collection methods, a distinction is made between secondary and primary data. Secondary data is already collected and interpreted, but for another situation than the one at hand. This means that it at least has to be re-manipulated and reinterpret a second time. Primary information relates to information and data that does initially not yet exist and must be created and manipulated by the researcher (Hair, Bush & Ortinau, 2002).

For the case study several primary and secondary data sources are used. The primary data sources used in this research are in-depth interviews, field notes from meetings and observations made during the action research, a strategy survey among top management, social media contributions of customers and consumers, and a usability test among six participants. The main secondary data sources used are company and competitor websites, online tools for assessing website and search engine marketing performance, result pages from the search engine Google, marketing materials, promotional texts and banners for third party websites, data files with product information for comparison shopping websites, company files and documents, customer e-mails directed to the customer service department, results from a customer survey offered at The case study firm websites, and existing marketing performance reports.

The remaining part of this section will elaborate on the primary data sources and company documents, while other secondary data sources are discussed where relevant on other places in the report.

2.3.1 Interviews

In total seven in-depth interviews were conducted among five respondents; three directors and two department managers. Only the IT department manager was excluded due to his lack of proficiency in English. The in-depth interviews were half-structured and recorded, so that they could be transcribed and their content could be compared. To ensure that respondents would speak openly, confidentially for all interviews was ensured and all audio recordings and transcript were saved outside the office. One interview was conducted as a group interview among all three directors, while the other interviews were individual. During these individual interviews two directors were interview twice. The interview formats can be found in annex 1, while chapter 5 presents an overview of the main topics discussed. Next to the half-structured in-depth interviews, also several informal interviews were conducted with employees from the marketing and customer service department. To enhance the quality of the findings, the interviews were pretested among two entrepreneurs.

2.3.2 Field notes

Field notes form an additional source of primary data used in this research. Notes were made during departmental and personal meetings and contained observations as well as impressions. In addition notes were made of relevant conversations with third parties like online marketing consultants hired by the firm. Field notes were also made during the analysis of secondary data sources like customer e-mails (questions, complaints, and etcetera) and specific analyses made within the firm as part of the action approach (like the percentage of on-time deliveries and etcetera). The notes were used as a supplement of the information gained from interviews. A disadvantage of field notes is that they are likely to contain an observer bias, since the commentator acts as a filter and determines what data is important or not recorded before the data analysis phase (Ryan & Bernard, 2003).

2.3.3 Strategy survey

To analyze the strategy of the company and prepare the first interviews, also a strategy survey was conducted among the directors. This survey, which is based on Van der Marck (2005) and Jeston and Nelis (2006), can be found in annex 4. To enhance the quality of the findings, the survey is checked on English by a native speaker, while it was pretested among two entrepreneurs.

2.3.4 Social media data

For this case study, social media messages about the firm were analyzed. Only websites were analyzed that are indexed within the top 100 search results in Google on the brand name or indexed in Google Realtime on the brand name. Google Realtime is a tool that provides an overview of recent Twitter messages. In total 277 social media posts are indentified, of which nine are excluded from the evaluation because they are not in Dutch or English. All messages are coded three times, whereby the third time a code-recode consistency was achieved of 82 percent compared to the second time. Next to the social media messages, also survey results about the case study firm on third party websites from the Netherlands and UK were analyzed. This customer feedback from surveys was mainly available on comparison shopping websites.

2.3.5 Usability test

Based on theories from Travis (2003) and Constantinides (2004) a simple usability test was conducted on the websites of the case study firm and five Dutch competitors. For this usability test six students from the University of Twente were asked to perform activities listed in annex 3 on the Dutch website of and three competing websites. For the selection of students a convenience sample was used among persons that were unfamiliar with the websites of The case study firm. The amount of six students was selected because under the assumption that if each problem with the website has a chance of around 30 percent of occurrence at any participant, then it is likely that 90 percent of all problems are identified in the analysis (Travis, 2003). Because the test participants are all students at the University of Twente, they are expected to be quite comparable in their background. Therefore it is assumed that using more respondents will relatively have not that much impact on the findings.

2.3.6 Documents

Collected documents are meant to support the evidence from the interviews and field notes. Documents that are examined include marketing materials, tactical performance reports of marketing activities, applications used for performance management, marketing activity performance reports and the introduction document for new employees.

2.3.7 Action approach

To create a good feeling of the elements of marketing performance in online firms, the researcher conducted several marketing activities for a shorter or longer period of time. Examples of these activities are: setting up and managing online marketing campaigns, answering consumer questions on third party websites, identifying and following up with customers that posted negative reviews, answering customer e-mails, handling complaints, and train new marketing employees and interns in some areas of online marketing. The online marketing campaigns that were setup and managed relate to affiliate marketing, comparative shopping websites, and search engine optimization and advertisements.

Due to the combination of data collection methods used, this case study research is likely to create a stronger validation of the constructs due to the triangulation of data collection (Eisenhardt, 1989; Yin, 2003). However, the actual quality of the evidence depends at least as much on the analysis as on the collection. Therefore the next section elaborates on the techniques used to create information out of this data.

2.4 Data analysis

Data analysis is the most essential step to build theories from case study research, even though it is also considered the most difficult and least systemized phase (Eisenhardt, 1989). The procedures for conducting data analysis are flexible, tailor made, and have to be amended and choreographed where necessary (Creswell, 2007; Miles & Huberman, 1994). In this research data collection and data analysis frequently overlapped, due to which the researcher can benefit from flexible data collection. Eisenhardt (1989) proposes that by executing these steps in parallel, the researcher can take advantage of advanced understanding of the case and the problem and make adjustments during the data collection process.

Where relevant, qualitative data was coded into themes to make sense out of the collected data. In these occasions a thematic analysis method was used, since the research focuses on understanding the data and building theories from it. Boyatzis (1998) proposes that to assure reliability and consistency, all transcripts should be coded by multiple coders after which their inter-rater reliability should be determined. Since this research is conducted by a sole researcher and there is no budget for hiring a second coder, quality can only be assured to a limited level at this point. Based on the recommendation of Miles and Huberman (1994), a priori codes deducted from existing literature were used to start the theme identification process. These codes were not prefigured and are updated or removed during the analysis process, whereas new codes have emerged from the data. Depending on the data, themes were identified and assigned based searching for 'similarities & differences' and by 'cutting & sorting' transcripts and documents.

2.5 Quality considerations

To increase the possibility that the research leads to trustworthy results that are as good as possible reported, Creswell (2007) proposes eight equally important validation strategies. These strategies are: (1) prolonged engagement in the setting and persistent observation; (2) triangular use of different and multiple sources, methods, investigators and theories; (3) peer review as external verification of the research process; (4) negative case analysis; (5) clarifying researcher bias; (6) member checking; (7) providing rich and thick descriptions in the reporting; and (8) external auditing. Due to the limited resources available for this thesis it was impossible to fully apply all these strategies, especially for the use of an external audit and multiple investigators. The researcher has been in the setting from the period July 2009 till April 2010, whereby observations were made during the period October 2009 till April 2010. Also when the researcher left the setting, he was granted access to some marketing and performance reports. This access was provided till August 2010.

All transcripts were member checked to ensure that respondents gave voice to their opinions in the right way. Participants also got the opportunity to reflect on the identified themes and on the reporting. Since the thematic analysis of qualitative data was only coded by one person, the themes were also checked for code-recode consistency. This verification is proposed by Miles and Huberman (1994) to promote the reliability of the coding process under one coder.

2.6 Limitations

This chapter described the research methodology and the quality considerations for this study. Despite these quality considerations, some important limitations exist for this research. First there are some limitations to the trustworthiness of the study, because this research is conducted by a single researcher that also acts as an observer and coder. As a consequence, the researcher might bring a personal bias to the interviews, data interpretation, and outcomes of other research steps. In addition, using one researcher prevented that multiple viewpoints from multiple researchers were brought to the study, which might have influenced the outcomes.

A second limitation arises from the number of cases studied. In this research only one case is analyzed, which does not have to be typical for all online retailers. As a consequence the generalizability of the results regarding the validity and usefulness of the model can be limited, because no insights are gained in the areas where The case study firm might be an atypical online retailer.

Another limitation relates to the length of the study. In this research the model is only applied once, while no insights are gained in how well managers are able to manage the company based on the retrieved performance information. Next to this are performance metrics usually tuned once they are in use, because during that stage managers start recognizing their information needs better (Bourne et al, 2000; Kerklaan, 2006). An additional problem is that during the short time span of the research, the actual relation between performance measures and overall business performance cannot be determined. As a consequence the findings of this research are limited for practice because no proof can be given that the application of the model is considered useful by managers, nor if the application leads to improved business performance.

A fourth limitation exists for the determination of the marketing performance. In this process information from some markets are used, due to which hidden evidence might exist in the data of other markets (Taleb, 2007). Thereby several data sources are based on information in excel files (used by the company), which might be sensitive to errors and faults. So for some data sources might not have been fully reliable, which might also have affected the reliability of the outcomes. Due to the differences in files and data formats also not all analyses are conducted over the same period (of time), what also could have influenced the representation of (elements of) the marketing performance. As a consequence the marketing performance levels identified in the case study might be biased, which can limit the possibilities to draw conclusions on the usefulness and validity of the model. Where relevant this potential bias is clarified in the analysis and results.

A last limitation exists for the insights in customer satisfaction as well as consumer brand awareness and brand knowledge. These perceptions were not measured by a survey or by in-depth interviews, but derived from alternative sources like customer service e-mails, and social media contributions of customers. Even though these alternative sources provide some insights in satisfaction and brand knowledge, they might also contain a bias. Where relevant this bias is further clarified in the analysis and results.

3 Theories on Marketing Performance Measurement

“In most companies, sales and marketing expenditures are several times greater than capital expenditures.
Yet, capital expenditures are subject to a far greater amount of analysis and evaluation than marketing expenditures.”

Jagdish Sheth & Rajendra Sisodia

Marketing and business performance management systems do not only provide insight in how a company is performing, but also support the navigation to future competitive success (Kaplan & Norton, 1996). To use such a system as a navigation tool, managers must have confidence in and rely on the used measures. This requires that metrics are reliable, related to firm performance, and collectively fully cover the business. In this chapter different marketing performance measurement frameworks are discussed, based on which an integrated model is proposed. To ensure that this model reflects the eccentricities of online retailing, the discussion is followed by an analysis on how electronic stores differ from traditional ones. After this, the integrated framework is adapted to online retailing. But first the concept of marketing performance management is introduced.

3.1 Introduction to marketing performance measurement

Marketing performance measurement is part of (business) performance measurement, a field that aims to support strategy execution by creating insights in company performance. Even though performance measurement is often associated with the evaluation of employees, it is in fact a broader, multidisciplinary and cross-functional discipline that covers all areas and layers of an organization (Marr & Schiuma, 2003; Eckerson, 2006). Performance measurement can be described as “*a series of organizational processes and applications designed to optimize the execution of business strategy*”

(Eckerson, 2006, p. 30) and is part of the organizational planning process. This planning process ideally exists out of four steps: (1) plan, (2) do, (3) check, and (4) act (Deming, 1982; Walton, 1986). Business performance measurement focuses on the third step, in order to observe the quality of strategy execution and to identify areas for improvement. The organizational processes and applications used to determine the performance cover a wide range of activities, like data collection and analysis, performance assessment, and intervention design to improve performance.

Marketing performance measurement aims to assess "*the relationship between marketing activities and business performance*" (Clark & Ambler, 2001, p. 231). Herein marketing relates to all activities conducted to stimulate, facilitate, and accelerate sales (Lee et al., 2000; Alsem, 2007). Effective marketing practices result in success with winning and retaining customer preferences, which supports the achievement of long-term goals (Ambler & Kokkinaki, 2002). In this process marketing should not be conceived as a separate function within firms, but as shared responsibility of the business as a whole (Drucker, 1954; Grönroos, 2007). Marketing performance measurement focuses on assessing (1) how well customer preferences are won and retained, (2) to which extend that contributed to the stimulation, facilitation, and acceleration of sales, and (3) how that impacted overall firm performance. Marketing performance evaluations can in these processes contribute to the following four functions: (1) annual-plan control, (2) profitability control, (3) efficiency control, and (4) strategic control. The first and last function differ from each other in the sense that annual-plan control attempts to evaluate if planned results are realized, while strategic control strives to assess if the best market, product, and channel opportunities are pursued (Kotler & Keller, 2006).

In the last three decades marketing performance measurement has been strongly influenced by several new marketing perspectives and paradigms (Blythe, 2006; Alsem, 2007). Especially the change from transactional marketing that focused on maximizing the number of one-time transactions to relationship marketing which is centered around developing long-term relationships with profitable customers has been influential on marketing performance measurement (Clark, 2002; Palmer, Lindgreen & Vanhamme, 2005). Under the transaction perspective customers are considered as passive targets while marketing is seen as a cost center (Lamberti & Noci, 2010). Marketing performance measurement under this perspective focuses on the amount and quality of one-time sales and transactions. In contrast, marketing performance measurement according to the relational view concentrates on assessing the quality and value of long-term relationships with customers and other parties (Palmer, Lindgreen & Vanhamme, 2005; Bush et al., 2007). A central element of this paradigm is the management of customer expectations, both in the pre-sales and after-sales processes (Blythe, 2009). Both perspectives are not mutual exclusive and can safely co-exist within a firm (Pels & Saren, 2005).

Within relational marketing three streams can be distinguished, being the (1) ‘services marketing’, (2) ‘management of relationships’, and (3) ‘industrial marketing and purchasing’ perspective. Where ‘services marketing’ accentuates the role of service in enhancing the quality of customer relationships and improving loyalty, the ‘management of relationships’ view concentrates on consumer interactions, dialogues, and value perceptions (Palmer et al., 2005; Bush et al., 2007). To capitalize on the efforts in interactions and dialogues, the firm should concentrate on attracting those customers who their loyalty can be won and retained (Reichheld, 1996). Last but not least, the ‘industrial marketing and purchasing’ is occupied with business-to-business relationships and business networks. This marketing approach also takes into account the buy-side of a company, as well as the relationships with suppliers of complimentary networks, products and services (Palmer et al., 2005; Bush et al., 2007).

Theories on marketing performance measurement are organized around two streams, which evolved along with the marketing perspectives. These two streams are (1) marketing productivity measurement and (2) marketing audit (Morgan et al., 2002). The marketing productivity paradigm deals with determining the efficiency by which inputs are transferred into outputs, while the marketing audit school of thought tries to determine the quality and effectiveness of the marketing inputs (Sheth & Sisodia, 2002; Alsem, 2007). The relationship between marketing efficiency and effectiveness is exhibited in figure 3.1.

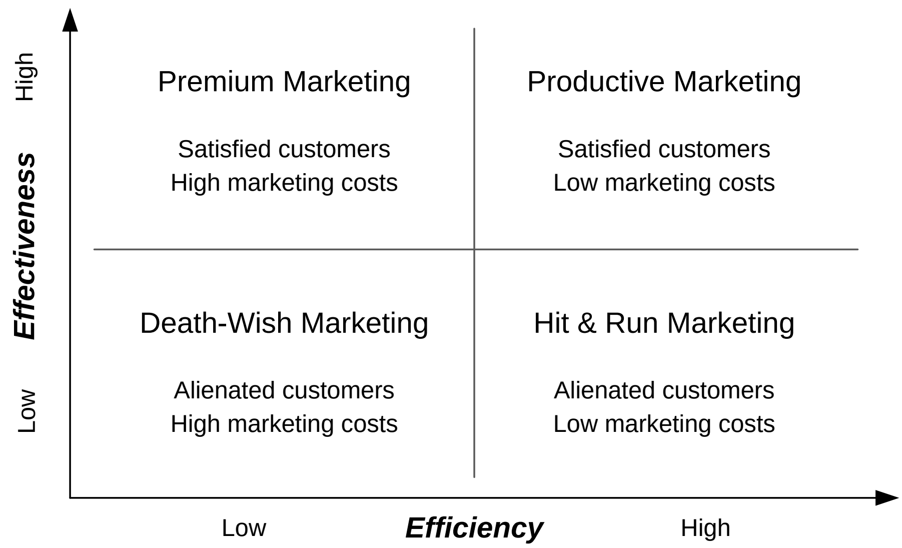

Figure 3.1: Marketing efficiency and effectiveness

Source: Sheth & Sisodia, 2002, p. 352.

3.2 Marketing productivity versus marketing audits

Traditionally the measurement of marketing performance concentrated on assessing marketing productivity. Drawing on the principles of scientific management, early efforts attempted to determine the amount of output generated per unit of marketing input. These studies aimed to quantify how marketing contributed to the success of industries and firms (Clark, 2002). In the early decades of the previous century especially industry level studies were popular, which attempted to quantify how input measures like man hours, capital, and number of employees employed affected output measures like value of sales, services provided, units shipped, and value added within industries (Bonoma & Clark, 1988). Over time, the center of marketing performance measurement research shifted from an industry to a firm level. Company level studies attempted to optimize marketing resource allocation with the objective of maximizing financial returns (Clark, 2002), usually using a short-term and cost reduction perspective (Sheth & Sisodia, 2002). The analysis of resources mainly focused on marketing expenses, investments, and employee numbers, while outcomes were measured in terms of profit, sales (units and value), market share, and cash flow (Bonoma & Clark, 1988). In the 1970s and 1980s a shift occurred in marketing performance measurement when researchers and firms started to pay more attention to non-financial performance measures like market share, quality of services provided, and marketing adaptability. In recent decades this development continued in order to find more advanced methods to optimize marketing resource allocation (Clark, 1999, 2002; Morgan et al., 2002).

The marketing productivity approach made two important contributions to marketing performance measurement. First, this stream created a conceptual model that provides insights in the efficiency dimension of marketing performance. Second, it has raised a concern for recognizing and measuring marketing costs and revenues. Despite these advantages, the marketing performance perspective also has some limitations. This paradigm assumes that both marketing inputs and outputs can be accurately valuated and remain stable over time, due to which the use of this concept in practice in challenging (Morgan et al., 2002). Moreover it relies upon a deep understanding of the cause-and-effect relationships in the marketing process. In reality there still is little knowledge about the marketing performance process, due to which it is often described as a black box (Shiffman & Kanuk, 1994; Piercy, 1997; Vorhies & Yarbrough, 1998; Kotler & Armstrong, 1999; Morgan et al., 2002; Gupta & Zeithaml, 2006; Bonnemaizon, Cova & Louyot, 2007). A third problem is that productivity focuses on amounts of inputs and outputs, without assessing the quality of the inputs and outputs. Thereby this paradigm attempts to ignore performance dimensions like effectiveness and adaptability (Skinner, 1986; Morgan et al., 2002).

As a consequence of its strong focus on financial and accounting output measures, the marketing productivity approach frustrated many marketing practitioners. It is claimed that this focus underestimates the long term value of marketing. In response, an increased focus on defining and improving 'good' marketing inputs occurred during the last twenty-five years. This stream attempts to assess if companies pursue the right marketing activities and create valuable assets, to ensure that marketing makes a valuable contribution to the long term financial performance of firms (Clark, 2002). One of the most popular instruments to assess the quality of inputs is the marketing audit. The objective of the audit is to make a systematic, critical, and impartial assessment of the quality marketing activities and marketing assets, while taking into account the situation of the company (Brownlie, 1993). Elements under investigation in the audit are: customer philosophy, marketing organization, marketing information, strategic orientation, operational efficiency, marketing environment, marketing systems, marketing productivity, and the marketing function (Kotler, 1977; Kotler et al., 1977). Bonoma (1985) argues that good marketing practices constitute of the interaction between marketing skills and marketing structures. This advocates that marketing practices, skills, and the interaction between the two should make part of the assessment. In recent years assets have been under increased intention of researchers from the audit stream (Clark, 2002). An asset is defined as: "*any physical, organizational, or human attribute that enables the firm to generate and implement strategies that improve its efficiency and effectiveness in the marketplace*" (Srivastava, Shervani & Fahey, 1998, p. 4). Two main types of marketing assets can be distinguished: (1) relational and (2) intellectual assets. The first type covers relationships with important external stakeholders like customers and distributors, while intellectual assets comprise all knowledge a company has about its environment. Good marketing practices under the assets perspective are supposed to create valuable relational and intellectual assets that can be used to reach a superior performance in the long term (Srivastava et al., 1998).

The marketing audit approach made major contributions to marketing performance measurement. Not only was the audit stream the first that systematically attempted to determine the effectiveness of the marketing function, but it also played an initiating and important role in the concepts of marketing orientation and marketing capabilities. In practice, marketing audits suffered from a number of implementation problems, ranging from the availability of auditors to accessibility to information and receiving cooperation from management (Morgan et al., 2002). Next to the implementation problems this stream also faced conceptual challenges. Audits tend to be disconnected from the overall control system (Brownlie, 1993) and have a rather periodical character. Thereby most audits are developed as a qualitative checklist from a universal best practice point of view, without adopting the constructs under measurement to firm contingencies (Morgan et al., 2002).

Due to recent developments in marketing, both the productivity and the audit stream have shown increased attention to brand equity, market orientation, customer satisfaction, and customer loyalty (Srivastava et al., 1998; Clark, 2002; Bush et al., 2007). Both brand equity and market orientation are often considered as an asset, whereby brand equity either represents the customer responses to brand awareness and knowledge (Keller, 2003), or the financial value of the brand to the firm and investors (Simon & Sullivan, 1993). Market orientation corresponds to the quality with which information about customers and competitors is developed and used. Using these four streams, several marketing productivity and audit models are proposed for measuring marketing performance.

3.3 Models of marketing performance measurement

There are several frameworks proposed to evaluate marketing performance. Most of these models accentuate a different part of the marketing productivity causal chain, like the effect of marketing actions, marketing assets, subsidiary performance, or relationships with suppliers and third parties. This section discusses and compares six marketing evaluation frameworks, based on which an integrated model is formulated.

3.3.1 The marketing actions model

A Global model for determining how marketing actions influence customer behavior and financial performance is proposed by Gupta and Zeithaml (2006). The authors propose a simple framework that shows how marketing actions induce customer perceptions, which subsequently influences behavior. It are these actual customer actions that eventually are responsible for the firm performance. This model is visualized in figure 3.2.

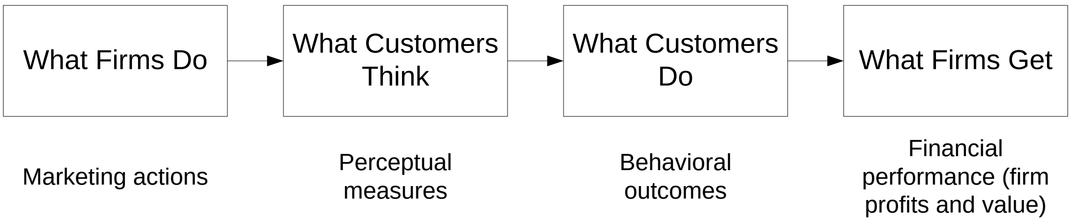

Figure 3.2: Conceptual model to determine the impact of marketing actions
Source: Gupta & Zeithaml, 2006, p. 719.

The authors propose that marketing performance measurement systems should use two types of customer metrics: (1) perceptual and (2) behavioral measures. The former attempts to measure the influence of marketing on the black box in consumer behavior, which is assumed to predict future customer behavior based on hypnotized relationships. Examples of perceptual metrics are: customer perceptions, customer attitudes, intentions to purchase, loyalty, service quality, commitment, perceived value, and trust. Behavioral measures cover actual purchase decisions and behavior, and measure customer acquisition, retention, up-selling and cross-category purchases. Insight in such information can used to make decisions about which customers to acquire, programs regarding customer retention, and cross-selling initiatives (Gupta & Zeithaml, 2006).

3.3.2 The relationship marketing model

Based on an analysis of the three streams within relationship marketing, Bush et al. (2007) propose a conceptual model for measuring marketing productivity from a relationship marketing perspective. This framework proposes that marketing efforts result in customer responses in terms of satisfaction, trust, commitment, and loyalty. These responses can be valued by means of two types of market-based assets that contain a reservoir of not yet exploited potential revenues: (1) customer equity and (2) brand equity. By capitalizing on these assets companies are able to enhance their cash flows, or improve turnover and profitability Rust et al. (2004). Such improvements in firm performance are expected to enhance firm value in terms of shareholder value and market capitalization (Bush et al., 2007).

3.3.3 The marketing productivity chain

Another conceptual framework to evaluate marketing performance is proposed by Rust et al. (2004), which is presented in figure 3.3. These authors offer a conceptual chain-of-effects that is not only linked to marketing actions, but also to the overall state of the firm. In this model strategy relate to the strategic and tactical (marketing) plans, which usually deal with business growth and renewal. Tactical actions focus on the execution of marketing initiatives to realize income and short-term growth.

3.3.4 The shareholder value model

Based on the viewpoint that marketing is occupied with developing and managing market-based assets, Srivastava et al. (1998) propose a conceptual framework that shows how the exploitation of market-based assets can result in enhanced market performance and shareholder value. In contrast to many other frameworks, this model covers the ‘industrial marketing and purchasing’ relationship marketing perspective as well as benefits derived from network effects. According to this model marketing actions lead to the development of two types of marketing based assets: (1) customer relationships and (2) partner relationships in terms of channels, co-branding, and networks. By exploiting these market-based assets companies can enhance their market performance in several ways: speed up market penetration, charge price premiums, attract a larger share of the market, extend markets, decrease sales and service costs, or improve loyalty and retention. Finally the market performance influences shareholder value in terms of profitability, revenue, and time of cash-flow.

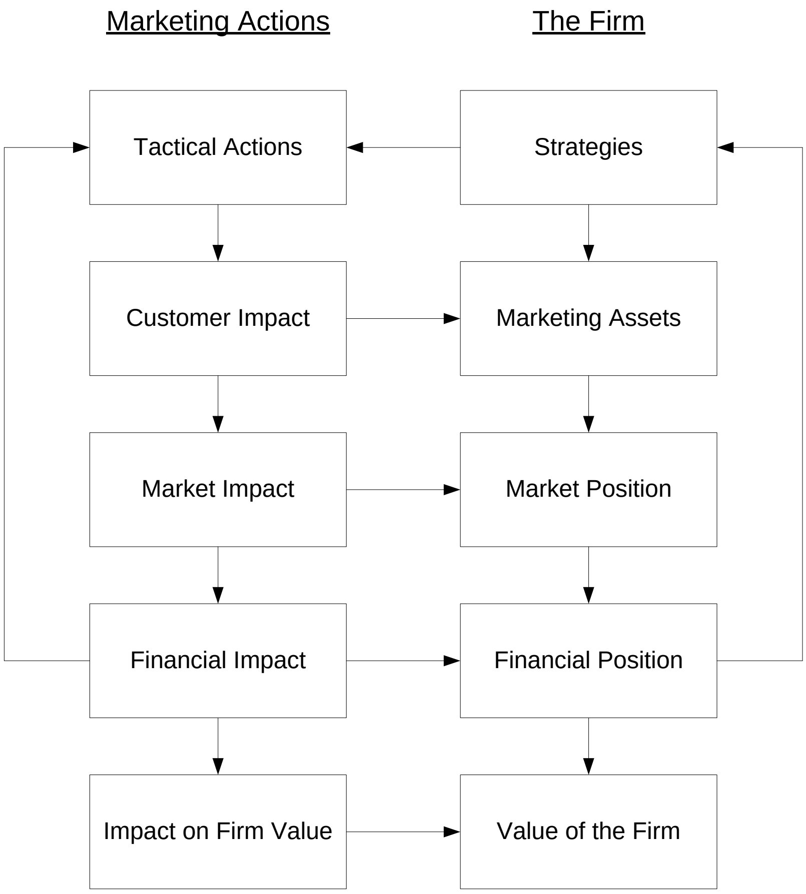

Figure 3.3: The marketing productivity chain

Source: Rust, Ambler, Carpenter, Kumar & Srivastava, 2004, p. 77.

3.3.5 The normative marketing performance assessment model

After an extensive literature review on marketing performance measurement, Morgan et al. (2002) propose a normative model for marketing performance assessment. The normative system approaches marketing as a multidimensional and dynamic process that exists of four broad phases: (1) sources of advantage, (2) positional advantages, (3) market performance, and (4) financial performance. Sources of advantage are established due to the creation, attraction, development, and the use of resources and capabilities. This model is visualized in figure 3.4.

3.3.6 The subsidiary marketing performance assessment model

The last performance measurement model identified focuses on assessing the marketing performance of subsidiaries, which at The case study firm also could be used to determine and compare the performance in different countries. This framework assumes that different subsidiaries have different means, which affects the asset creation process and subsequently subsidiary performance. Thereby subsidiaries can also experience different environmental factors that affect the market asset creation processes and the market yield processes (Grewal et al., 2009). This framework is exhibited in figure 3.5.

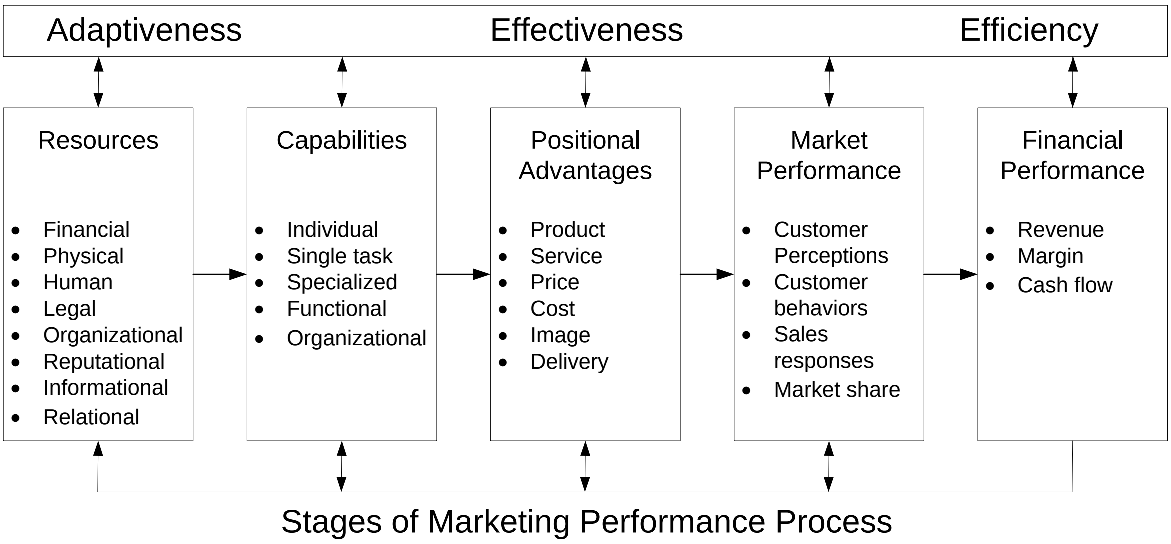

Figure 3.4: A normative performance measurement model

Source: Morgan, Clark & Gooner, 2002, p. 367.

3.3.7 Towards an integral model of marketing performance measurement

A summary of the comparison of the six marketing performance assessment models is presented in table 3.1, based on performance dimensions that explicitly are incorporated in (or follow from) the discussed frameworks. A full comparison of the models on the different (sub) dimensions can be found in annex 4. In the evaluation no attention is paid hypothesized relationships between factors, since determining the direction and strengths of links in the black-box of marketing has proven difficult in reality (e.g. Zaltman, 2003). From the comparison follows that the marketing productivity chain and the normative marketing performance assessment framework have the highest overall scores.

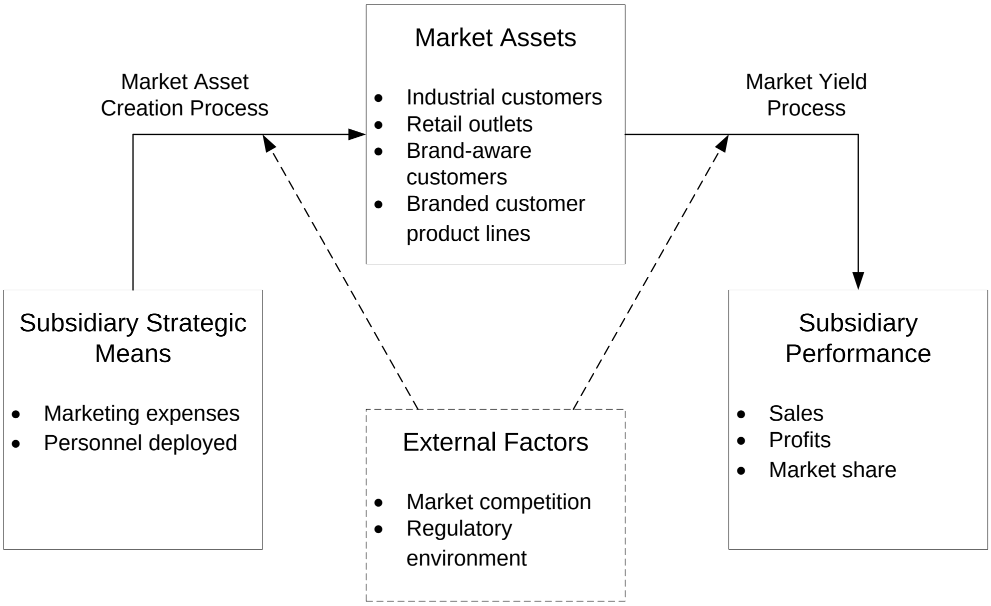

Figure 3.5: The subsidiary marketing performance assessment model

Source: Grewal, Iyer, Kamakura, Mehrotra & Sharma, 2009, p. 119

The normative performance assessment model is seems to be very suited in determining the overall performance in terms of efficiency, effectiveness, and firm impact. When it comes to marketing outputs and perspectives, the marketing productivity chain seems most complete, while none of the models seems to cover the area of inputs well. From the elaborate comparison (see annex 4) followed that the subsidiary marketing performance assessment framework is most complementary to these two models. Based on a combination of these three approaches an integrated performance measurement framework is formulated, which is presented in figure 3.6.

Model / *Performance dimension*	Marketing actions	Relationship marketing	Marketing productivity chain	Shareholder value	Normative marketing performance assessment	Subsidiary marketing performance assessment
Marketing Performance	+/-	+/-	+/-	+/-	++	-
Marketing Inputs	-	-	+/-	- -	-	+/-
Marketing Outputs	-	- -	++	-	+	+/-
Marketing Perspectives	- -	-	+/-	+/-	+/-	+/-
Overall impression	-	-	+	+/-	+	+/-

Table 3.1: Comparison of the six marketing performance measurement models

In the integrated marketing performance measurement framework the process is initiated by the combination of strategy, resources, and capabilities. These three elements are mutually influenced by each other. Resources are productive assets with a value creation potential, which form the input of organizational processes (Srivastava et al., 1998; Grant, 2005). The realization of this potential depends on the quality and degree by which resources are used in combination with capabilities to create valuable outcomes (Porter, 1996; Grant, 2005). Herein capabilities refer to the skills of a firm to fulfill productive activities (Grant, 2005) in order to transform resources into valuable outputs (Day, 1994; Vorhies & Yarbrough, 1998). This combination of strategy, resources, and capabilities result in marketing actions that ideally are in line with the business strategy.

When a company conducts different marketing actions or executes comparable marketing activities in different ways (Porter, 1996), a company can create positional advantages and market assets. Positional advantages cover the relative marketing positions of the company in the market, which have a direct (and temporary) impact on sales and customer relations (Morgan et al., 2002). The main impact of market(-based) assets is longer term, whereby there is usually a considerable time lag between the marketing actions and revenues(Srivastava et al., 1998; Grewal et al., 2009). Through positional advantages and market assets, the marketing actions have a customer and a market impact. The customer impact takes place in terms of customer perceptions, which among other things include brand awareness, brand associations, brand attitudes, brand attachment, brand experiences (Ambler, bhattacharya, Edell, Keller, Lemon & Mittal, 2002; Rust et al., 2004), satisfaction, trust, and loyalty (Palmer et al., 2005; Bush et al., 2007). The market impact shapes actual customer behavior in terms of sales, which eventually provides the basis of company performance.

This model can be used to analyze and comment on subsidiary performance as well as the marketing performance of the firm as whole. Hereby the causal chain in the model might not fully represent actual real world relations between the factors, especially regarding the relations coupling marketing actions to market performance. Despite that these relations are important for those who investigate the marketing value chain, the connections themselves are less relevant (but not unimportant) in the marketing performance evaluation of firms. Another important limitation of the framework is that some assets are excluded for practical application reasons. Marketing assets are hard to evaluate due to (1) the unavailability of suited accounting tools and (2) the unpredictability of markets. Because there are no theoretical accounting tools available that create an understanding which proportion of the marketing actions create immediate sales and which ones relate to building to the future, it is challenging to estimate how much is invested in marketing assets and what their actual value is. Next to this, cumulative marketing investments in assets can suddenly become worthless due to major shifts in the marketplace (Sheth & Sisodia, 2002). This is especially a risk in the fast changing e-commerce markets.

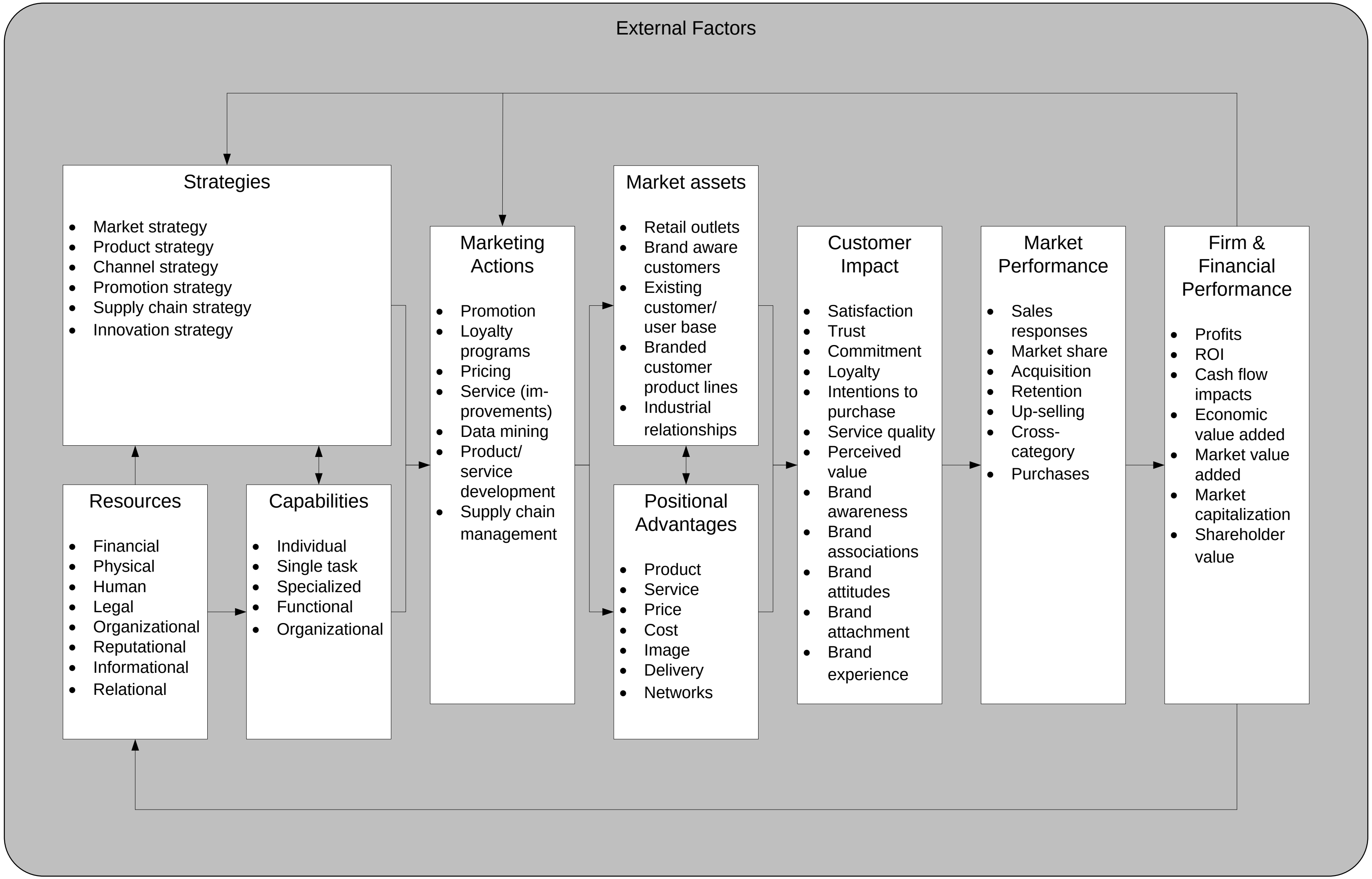

Figure 3.6: An integrated marketing performance evaluation framework

Source: composition of the researcher based on theories discussed in this chapter

Before this model can be used, it needs adaption to the specific situation of a company. The next section elaborates on how this model can be adopted to an online retailer.

3.4 Adoption of the framework to online retailing

The previous section proposed a model for marketing performance measurement in an average company. There is a wide variation among firms in the way they monitor their (marketing) performance, suggesting that there is no 'one-size-fit-all' system that is applicable within a wide range of companies. Therefore marketing performance measurement systems should represent firm and industry contingencies. Because no marketing performance model has been identified that fully captures the value chain of online firms, an analysis has to be conducted about how the integral framework can be adopted to firm contingencies. After this, the model can be adapted to the peculiarities of online retailing. Morgan et al. (2002) propose a contextual framework to adjust marketing monitoring systems to organizational characteristics. This model is presented in figure 3.7. In this framework, strategy, corporate context, and the task environment provide the dimensions that influence the marketing performance evaluation design. Eventually, the design characteristics influence the performance of the system in use (Morgan et al., 2002). This contextual model can be used to adapt the integral model to the situation of The case study firm.

Online retailers face different contingencies than traditional and hybrid (combined online and offline) stores. This is for example reflected in the marketing strategy, which for online firms exists out of four distinct stages: the (1) product/service strategy, (2) (e-)marketing organization, (3) web 1.0/website strategy, and (4) web 2.0/social media strategy. The difference dissimilarity between web 1.0 and 2.0 is that in web 1.0 applications the website owner has full control over content presented at a website, while in web 2.0 applications users and customers determine and contribute the content.

The four stages are conceived as four successive steps, whereby early stages have to be sufficiently fulfilled before a company can successfully execute their strategy in later steps (Constantinides et al., 2008; Constantinides, 2010). These four stages can be used for marketing performance measurement in two ways. First, it indicates that marketing performance in online firms should be measured on each of the four levels in order to create a good understanding of the total marketing state of the firm. Second, it supports the understanding that a poor performance on a higher level can be the result of problems in lower levels. For example, a firm with a state of the art website can still suffer from a poor web performance due to problems in the product-service domain and/or marketing organization.

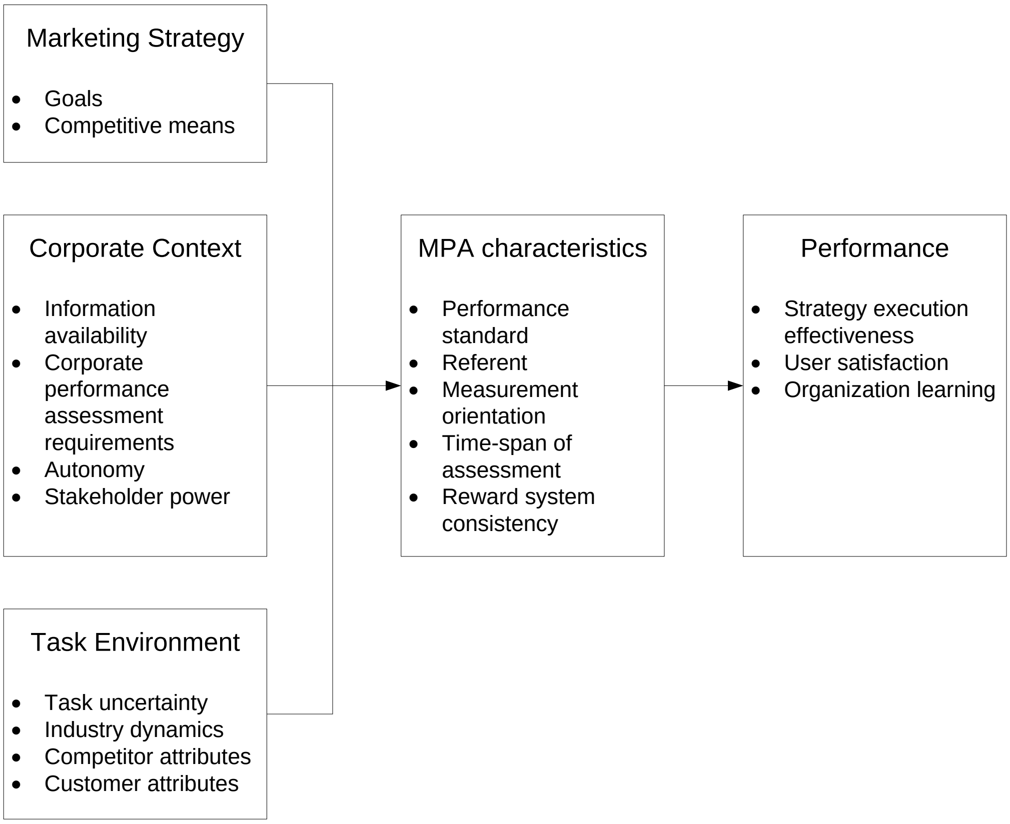

Figure 3.7: A contextual marketing performance assessment model

Source: Morgan, Clark & Gooner, 2002, p. 368.

Next to the different stages of marketing performance, also the indicators that reflect success are different. One of the critical success factors in traditional retailing is the productivity of physical and human resources (Collins, 1992; Anderson, 2006). As a consequence, traditional performance indicators consider things like the number of sales per square meter or employee, the tenure of staff and managers, and the average cost per employee. Since constraints exist for the geographical reach of physical stores (Anderson, 2006), also location strategy is a key success factor in traditional retailing. This is for example reflected in measures related to the average number of surrounding households, the population per store, the average distance to competing stores, and the average market value per square meter of selling space (Levy & Weitz, 1992; Collins, 1992; Thomas, Gable & Dickinson, 1999; Hinfelaar, 2004). Another constraint exists for the available store space, due to which the optimization of merchandising effectiveness and shelf space is a key focus area of traditional retailers (Anderson, 2006).

Online stores face different circumstances and constraints. Most outstanding is the dual role of customers in online settings, who are besides shoppers also information technology users (Cho & Park, 2001). This implies that not only the online customer experience is distinct from offline, but that it also is more complicated (Constantinides, 2004). Important effects of internet technologies and e-business on (digital) marketplaces relate to reductions in search costs for prices and products (Bakos, 1991; Papazoglou & Ribbers, 2006), an increased geographical reach, opportunities to offer a larger assortment (Evans & Wurster, 1999; Anderson, 2006), richer customer data (Evans & Wurster, 1999), improved interactivity (Li & Chang, 2004; Godin, 2007), and lower switching costs for consumers due to the wider reach and reduced search and transaction costs (Reichheld, Markey & Hopton, 2000; Fernández & Nieto, 2006). Firms thereby should attempt to exploit both economies of scale and scope to ensure that large initial investment in websites can be earned back (Bakos, 1991; Papazoglou & Ribbers, 2006; Anderson, 2006), while facing challenges caused by a relative high technological uncertainty (Bakos, 1991), higher switching costs in supplier relations and technological applications (Bakos, 1991; Papazoglou & Ribbers, 2006; Song & Zahedi, 2006), new powerful information intermediaries like search engines and comparison shopping websites that link customers to retailers (Chaffey, 2007), and an increased connectivity and a more powerful effect of network externalities (Bakos, 1991). A full overview and explanation of these differences can be found in annex 5. Based on these differences it can be expected that several of the traditional retailing metrics are irrelevant for online retailers.

Assuming that in online retailing the metrics that determine product quality have remained the same, the next sections discuss how the other stages the e-marketing strategy can be used to assess the performance of online stores. To create some background to that discussion, first an elaboration will be made about the differences between online and offline retailing and the main challenges of online stores.

3.4.1 Differences between offline and online retailing

Despite that the internet can be an efficient medium to offer and order products, distance selling is not new. In many countries catalog retailers have already been around for decades. It is sometimes claimed that for such companies the internet has only changed the front end of the process (e.g. Porter, 2001), although due the internet has also changed merchandising management and customer expectations for these firms. However, in comparison with catalog retailing and tradition shopping, the internet offers other benefits and limitations to consumers. This discrepancy is likely to affect consumer behavior. Table 3.2 provides an overview of the most important benefits and limitations of online shopping.

Benefits for shoppers:	Limitations for the 'opportunity to' or 'ease with':
1. Convenience of shopping from home	1. Browse through collection
2. More alternatives	2. Locate information for product evaluation
3. More information	3. Use all five senses in product evaluation
4. Personalization of information	4. Receive personal attention
5. Information for problem solving	5. Have their privacy and personal information protected
6. Provision of additional services	6. Provide a stimulating shopping experience that can be shared
	7. Pay with cash or debit card
	8. Receive the product at the moment of purchase

Table 3.2: the benefits and limitations of online retailing from a consumer perspective

Based on: Alba et al., 1997; Weitz, 2006.

In order to become and stay a successful online retailer, a general company has to master seven important resources. These key resources are: (1) a well-known brand name and trustworthy image, (2) retail skills, (3) customer information, (4) complementary services and products, (5) unique merchandising, (6) web-based information systems, and (7) good fulfillment systems. By managing the brand-name and image are important to attract customers and improve their trust in purchasing information, while retail skills help in assembling appealing assortments and managing inventory. Customer information can be used to personalize product presentations and offerings. This information can also be used to make recommendations about complementary products and services, what should help to create a one-stop shopping experience. If a company is able to supply and create a demand for unique merchandising, it can reduce price competition. The last two key resources are required to effectively present information on the website, support customers in browsing through the assortment, manage the fulfillment process, efficiently ship orders to customers, and to receive and process returns (Weitz, 2006).

Based on the relationship marketing point of view, Cook and Walters (1991) proposed that all retail firms should attempt to maximize customer satisfaction and reach high performance on the following five critical success factors: (1) increase sales revenues, (2) increase transaction profitability, (3) decrease or stabilize operational costs, (4) increase the productivity of physical and human resources, and (5) add value to the customer offer. The third three factors can be improved by the principles of transactional and relationship marketing. Almost all these factors also hold for online retailers, except for the productivity of physical and human resources. Following the four stages of online marketing strategy, it would in e-tailing be more important to improve the effectiveness and efficiency of the e-marketing organization, website, and social media presence instead.

3.4.2 E-marketing organization

Because in online retailing the moment of purchase and delivery often not fall together, customer satisfaction is largely affected by order fulfillment and delivery times (Constantinides, 2004). Next to these elements, the back-office synergy is decisive for the total customer experience. However, in practice online service is "*the Achilles heel of many internet businesses*" (Constantinides, 2002, p. 66). Many firms show shortcomings in customer question and complaint handling, helpdesk support, delivery tracking, delivery reliability, return convenience, and after-sales service (Constantinides, 2002). Research in the field of e-commerce performance has stressed the importance of fulfillment and back-office processes. Torkzadeh and Dhillon (2002) for example identified internet shipping errors (in terms of the wrong product or shipping errors) and internet customer relations (relating to return assurance, ease of return, and after-sales service) as important performance elements where online stores can distinguish themselves. Besides this, also the importance of customer service, delivery satisfaction, delivery time and charge, and additional information services for the total customer experience are underlined (Cho & Park, 2001).

3.4.3 Website and merchandising performance

A physical retail store can be seen as a social meeting place where customers and employees are both part of, due to which their behavior both forms and affects the physical setting (Sandbacka, 2006 as described by Grönroos, 2007). This implies that in a traditional store customers are influenced by the physical setting, which includes environmental cues, employees, and other customers (Bitner, 1992; Grewal et al., 2006; Grönroos, 2007). Van der Kind (1999) even distinguishes between the external and in-store marketing mix, whereby the in-store marketing mix comprises of personnel, physical distribution, presentation, and productivity. In online retailing customers do not enter a physical store setting, but make use of a user interface in the form of a website. Instead of the physical surrounding, the customer experience is influenced by website elements like content, navigation, and interactivity (Constantinides, 2004).

In the early days, website performance measurement focused on the number of impressions, hits, clicks, referral sites, and daily visitors (e.g. Bertot, McClure, Moen & Rubin, 1997; Porter, 2001). Over time companies realized that such measures are only loosely coupled to website success, due to which the center of attention shifted towards measuring the unique number of visitors, conversion rates, bounce rates, average time spend on the website, click paths, and return visits (e.g. Hasan et al., 2009; Waisberg & Kaushik, 2009; Kaushik, 2010). Most of these metrics are interrelated to each other and the business as a whole. The most important measures for determining the marketing performance are sales figures, turnover, and enquiries. These three indicators are influenced by three primary performance measures: (1) traffic sources, (2) website usage, and (3) conversion rates. The traffic sources indicate how visitors enter the website and what the most important referral website are. Website usage denotes to the audience and site persuasiveness, which can be expressed in unique visitors, first time visitors, time spent per visit, visitor loyalty, and etcetera. Last, the conversion rates signal how well the website has attracted its target audience and how well visitors are converted into customers. These three primary measures are influenced by factors that make-up the total web-experience, like usability, interactivity, safety, trust, aesthetics, marketing mix, and content (Constantinides, 2004). Firms can use web analytics software to track their performance on the three primary performance indicators. Because these analytics only provide insights in what the performance is, the web-experience can be audited to create insights in how this performance potentially can be improved. Such audits can for example be conducted by means of a functionality analysis, eye-tracking usability research, or a/b tests.

Since the raise of social media, measuring website performance alone is not sufficient anymore. Customers are willing and able to share their experiences online, while many visitors are capable to search for online customer reviews before making a purchase (Constantinides, 2010). Therefore it is important that firms track their web 2.0 performance and reputation, even if they are not actively engaged in social media (Constantinides et al., 2008).

3.4.4 Measuring social media performance

Web 2.0 is the last stage of a successful online marketing strategy. Firms can engage in social media in a passive or active way. Using the passive way, social media is a source of data collection, for example regarding customer voice and market information. When firms want to achieve more than solely tap into marketing intelligence, social media can also be used in active ways for PR and direct marketing activities, reaching specific audiences and influencers, tapping in on and redistributing customer creativity and reviews, and for co-producing products and services with customers (Constantinides, et al., 2008).

The measurement of social media performance largely depends on the business objectives. Despite this, Murdough (2009) proposes that in the most firms social media performance measurement should attempt to quantify the impact of the customer dialogue. Herein the assessment can be organized around three pillars: (1) reach, (2) discussions, and (3) outcomes. Reach relates to monitoring the quantity of mentions as well as the quality of the contributors. Herein special attention should be paid to how influential each of the authors is and where discussions about the firm or its brands occur. By analyzing discussions between consumers, insights can be gained in the topics where conversations center around and the general sentiment among the contributors. Outcomes show the contributions of social media to the firm, which can for example center around (in)direct economic outcomes like site traffic, purchase intentions, and generated sales (Murdough, 2009).

An alternative approach to social media performance monitoring is provided by Lovett, Owyang, Peterson, Li and Tran (2010), who propose that there are four primary objectives that can be used as the basis for performance measurement in web 2.0. These aims are: (1) foster dialogue, (2) promote advocacy, (3) facilitate support, and (4) spur innovation. The fostering of dialogue can be measured by the share of voice, audience engagement, and the conversation reach. Here the share of voice relates to relative percentage the company is mentioned in comparison to competitors, while audience engagement indicates what proportion of site visitors actively contribute to discussion about or social media activities of the firm. The promotion of advocacy can be determined by the number of active advocates, as well as their impact and influence. To track the facilitation of support through social media, companies can focus on measuring the satisfaction score, resolution time, and resolution rate. Last but not least, the extent that innovation can be spurred by assessing topic trends, sentiment ratio, and the idea impact.

The strength of this model is that it not only assumes social media to be marketing tool, but also as a medium for customer support. However, most objectives and performance indicators are designed for companies that actively engage in social media, which might not be wise for firms that experience problems in lower levels of the electronic marketing strategy (Godin, 2007; Constantinides et al., 2008; Constantinides, 2010). A last factor that can significantly influence the marketing performance of online retailers are relationships with online intermediaries, who can be an important source of traffic and customers.

3.4.5 Relationships with third parties

A last important marketing performance difference initiated by the internet is the importance of relationships with third parties, especially the new information intermediaries (Constantinides, 2002). As indicated before, the raise of the internet resulted in lower search and switching costs, a larger reach, and a bigger influence of network externalities. In the new information search process, consumers increasingly make use of the new information intermediaries like search engines, comparison shopping websites, and forums to compare products, offerings, and retailers. Having an appealing presentation on these new information intermediaries can be an important source of high quality traffic, while consumers might not even consider an alternative that fail to be findable at these intermediaries. Despite that these relationships with third parties are complementary to traditional promotion activities, good co-operations can be an important source of success of both traditional and online retailers (Constantinides, 2002).

3.4.6 Integral marketing performance measurement model for online retailers

The previous paragraphs discussed how the integral marketing performance measurement model proposed in figure 3.6 can be adjusted to online retailing, by use of the contextual marketing performance assessment model of Morgan et al. (2002) and an analysis of the specific properties of online retailing. Figure 3.7 exhibits the online retailing marketing performance assessment (ORMPA) model, which is an adopted version of the integral marketing performance measurement model that now includes the described marketing performance attributes of online firms. Here the factors that determine the performance in each of the stages of the marketing performance process are adjusted. Despite that some of the factors still cover the same name, they might cover different things. This is for example the case for human resources, where it is not necessary anymore to analyze the effectiveness and efficiency of store personnel. At the same time, informational and technological competencies have become crucial for the success in online markets.

While the ORMPA model includes only a few examples of capabilities, three types of capabilities can be distinguished: (1) inside-out, (2) outside-in, and (3) spanning processes. Inside-out capabilities are incorporated inside the firm to deal with market requirements, competitive challenges, and external opportunities. These processes for instance relate to financial management and cost control, human resource management, integrated logistics, and technology development. Outside-in capabilities connect the inside-out processes to the external environment, and determine how well the firm is able sense and exploit external possibilities. Outside-in capabilities crucial for market driven firms relate to market sensing, customer linking, technology monitoring, and channel bonding. Hereby the spanning capabilities integrate the two former capabilities, and for example relate to strategy development, order fulfillment, pricing, service delivery, purchasing, and new product/service development (Day, 1994).

Following the discussion of section 3.2, marketing audit literature can be used to assess the quality of marketing inputs and outputs of strategy, resources, capabilities, and assets. According to Brownlie (1996), some of the authoritative works that can be used to shape and align such an audit include Kotler et al. (1977), Kotler (1977) and Wilson (1993). The other elements can be assessed by marketing productivity measures, or by a combination of both streams. For this information about website performance, sales performance, and customer loyalty can for example be used.

The ORMPA model visualized in figure 3.8 serves as a basis for the remaining part of the report. However, before it can be to measure the marketing performance, the next chapter analyzes how this framework can be operationlized.

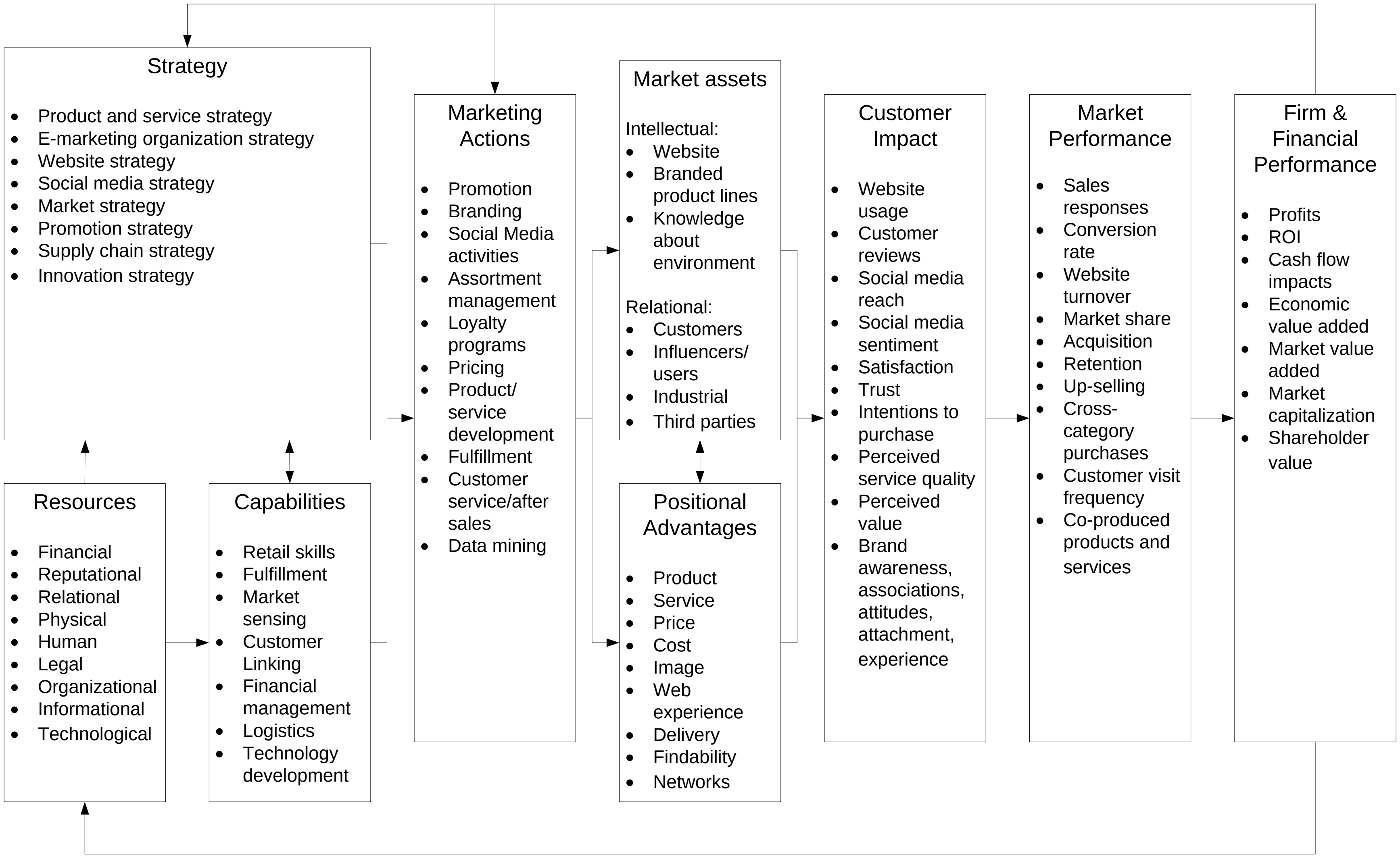

Figure 3.8: Online retailing marketing performance assessment (ORMPA) model

Source: composition of the researcher based on theories discussed in this chapter

4 Operationalization of the ORMPA Model

“Translation seems to sabotage the words.
You know what is said,
is not what is heard…
You hear what I say,
but it comes out all wrong...
You say what I see,
still you speak in different tongues.”
David Dewaele (Soulwax)

Each company has unique characteristics and a different strategy, due to which “one-size-fits-all” marketing performance measurement systems that can be applied in all companies do not exist. Even in cases where the measures of success are comparable, companies might interpret performance data in alternative ways due to differences in organizational contingencies. Therefore this chapter describes how the ORMPA model introduced in the previous chapter can be translated to the specifics of an online retailing firm, so that managers can use it to gather useful and insightful information. Herein attention will be paid to the alignment with organizational characteristics, operationalization of measures and data sources, and performance benchmarking and reporting.

4.1 Strategy, corporate context, and task environment

In line with the contextual marketing performance assessment model presented in figure 3.7, the characteristics of an marketing performance evaluation are influenced by three major factors: (1) the marketing strategy, (2) the corporate context, and (3) the task environment. These three factors among other things influence the criteria on which performance is assessed, the measurement orientation, referent scores, and the time-span of the assessment (Morgan et al., 2002). Herein the measurement orientation affects the areas of marketing performance that are emphasized. According to Day and Nedungadi (1994) this orientation can be customer oriented, competitor focused, or internal oriented. In a customer orientation measures like customer satisfaction and retention are accentuated, while in a competitor focus sales growth and market share punctuated. Last, in the internal orientation financial performance measures like profitability and ROI are emphasized. Because the marketing strategy is shaped by the competitive strategy, the next section will first discuss the important elements of the business strategy before elaborating on the three factors that influence marketing performance assessment characteristics.

4.1.1 Business strategy

The strategy of a company describes how "*it intends to create value shareholders, customers, and citizens*" (Kaplan & Norton, 2004, p. 4). Hereby the business strategy is concerned with finding ways to compete in markets and creating a unique position among competitors (Andrews, 1980). The business strategy can be described by three static elements: the mission, core values, and vision (Kaplan & Norton, 2000, 2004). Next to this, several theories exist to typify competitive strategies, like the four strategic types of Miles and Snow (1987), the three generic strategies of Porter (1980, 1985), and the value disciplines of Treacy and Wiersema (1993, 1995). Miles and Snow (1987) distinguish four different competitive strategies based on the way companies want to manage their market share, being the: (1) defender, (2) prospector, (3) analyzer, and (4) reactor. Porter (1980, 1985) proposes that in order to successfully create and maintain a competitive advantage, companies should either pursue a cost leadership, differentiation, or a focused strategy. In pursuing the latter, organizations can distinguish themselves by targeting a market niche using a cost leadership or differentiation strategy. Last but not least, Treacy and Wiersema (1993, 1995) indicate that companies can create a sustainable competitive advantage by pursuing one of the following three value disciplines: (1) operational excellence, (2) product leadership, or (3) customer intimacy. Hereby firms should attempt to maximize their performance on one of these value dimensions, while meeting the threshold levels set by the market on the other two dimensions.

Each of the strategic types proposed by Miles and Snow (1987), Porter (1980, 1985), and Treacy and Wiersema (1993, 1995) attempts to create business success in different ways. Therefore these types also put different requirements on organizational structure and processes. As a consequence the measures of (expected future) success are different, which affects the areas that demand primary attention in performance measurement (Kaplan & Norton, 2000, 2004). For example, customers that buy products from a firm pursuing an operational excellence strategy are likely to base their purchasing decision on price and convenience. For customers buying from a firm focusing on customer intimacy the decision is likely to be based on the possibility to receive customized products and/or services that exactly meet tailored specifications. Next to this, a firm following a defender strategy might base its level of business success on the extend by which it is able to maintain a certain market share, while for enterprises engaged in a prospector strategy the share of revenues from newly introduced products and services is a better indication of success.

4.1.2 Marketing strategy

A component of the overall strategy that is closely related to the business strategy is the marketing strategy. From the latter two elements influence the characteristics of marketing performance evaluation: (1) marketing goals (e.g. Govindarajan & Gupta, 1985) and (2) resources (Meyer, 1994). Both the marketing goals and the intended use of resources have to be reflected in the referent scores and benchmarks in order to make marketing performance evaluation useful (Eccles, 1991; Kaplan & Norton, 2000, 2004). An inability to align the performance evaluation with goals and resources results in two problems: (1) the use of wrong measures, or (2) a failure to use the right metrics. While the former may result in a misalignment of resources and strategic activities, the latter might lead to an ignorance of strategic important activities (Dixon, Nanni & Vollman, 1990).

4.1.3 Corporate context

Besides the marketing strategy also the corporate context affects the properties of marketing performance assessment. From a theoretical perspective, four corporate factors are important in this respect: (1) information availability, (2) corporate performance monitoring requirements, (3) business unit autonomy, and (4) stakeholder power (Morgan et al., 2002). The following paragraphs discuss these four elements in more detail.

4.1.3.1 Information availability

Information availability relates to the extent that required performance data is already collected, or the ease with which additional data can be gathered. Piercy (1997) suggest that measurement choices are more often based on information availability than on strategic goals. From a theoretical point of view, performance measures need to be cost-effective, implying that for each metric the trade-off between measurement costs and derived business value from measurement should be optimized (Zur Meuhlen & Shapiro, 2009).

4.1.3.2 Corporate performance monitoring requirements

The performance monitoring requirements reflect the information needs of top management and the alignment requirements with other performance measurement systems (Morgan et al., 2002). Because marketing performance reporting is likely to be integrated with other performance measurement systems in the firm, it is preferable that they have a comparable level of sophistication. A very sophisticated performance measurement system can provide more information to understand the reasons of the current level of performance. However, experience with deploying and using less sophisticated measures and systems is required before managers can successfully use more advanced metrics (Bourne et al., 2000; Tangen, 2005). To align marketing performance evaluation with other measurement systems, existing performance measurement systems in the firm can be classified among three levels: (1) third class, (2) second class, and (3) first class. Third class systems are simple and are composed of traditional financial performance measures. Second class systems provide a more balanced view due to the inclusion of non-financial measures, as well as the use different time horizons. First class systems contain an advanced information architecture, focus on hypothesized causal relationship in performance measures, and contain formal procedures for the evolution of the system. This latter class is meant for companies that are advanced in performance measurement, because it requires experience in order to manage the business based on the feedback of these metrics (Tangen, 2005). To ensure that employees and managers are able to use the gathered performance information, but do not consider it as being too simplistic, it is desirable that new performance measurement systems are around the same level as the existing systems.

4.1.3.3 Business unit autonomy and stakeholder power

The last two corporate context factors are business unit autonomy and stakeholder power. Business unit autonomy is only relevant for larger firms with multiple units or independent subsidiaries. In these cases, the extent by which business unit managers can influence the design of a marketing performance measurement system is dependent on their autonomy and the information requirements of corporate management (Morgan et al., 2002). The last factor, stakeholder power, can influence the measurement orientation and data collection. Especially when stakeholders outside the firm are powerful, the system might partially reflect performance information that is important to these stakeholders. Performance management theories have identified several important stakeholders that can influence performance information representation, like investors, managers, customers, employees, alliance partners, suppliers, regulators, communities, pressure groups, and intermediaries (Adams et al., 2001; Neely et al., 2002a, 2002b).

4.1.4 Task environment

The last contextual factor influencing the characteristics performance evaluation is the task environment. From the task environment four aspects are likely to affect marketing performance evaluation: (1) task uncertainty, (2) industry dynamics, (3) competitor attributes, and (4) customer attributes (Morgan et al., 2002). The following paragraphs discuss these four elements in more detail.

4.1.4.1 Task uncertainty

Uncertainty is an indicator about the completeness of the information about alternatives and future events (Daft, 2006). This completeness tells something about the predictability of the environment wherein firms operate. In an uncertain environment there is less experienced consensus about the causal chain of activities that induce performance, while there are higher costs associated with measuring outcomes. Due to the incompleteness of information about alternatives and future events, financial indicators also provide a less reliable indication of current and future business performance (Morgan et al., 2002).

4.1.4.2 Industry dynamics

Industry dynamics influence the time spans between different stages of marketing performance process. Examples of these time spans are the time between acquiring sources of advantage and achieving positional advantages, or the time between improving market performance and financial performance. Therefore industry dynamics influence the time periods over which performance should be assessed (Morgan et al., 2002). Beside these time spans, marketing performance evaluation can also be dependent on the stage in the product and organizational life-cycle (Eccles, 1991).

4.1.4.3 Competitor attributes

Competitor attributes affect how well marketing performance measurement should portrait managerial representations of advantage. When competition in an industry is concentrated, firms usually tend to put more emphasis on managerial illustration of competitive advantage (Day & Nedungadi, 1994). In these cases competitor interactions are often seen as a driving force of marketing performance.

4.1.4.4 Customer attributes

Customer attributes form last environmental factor that influence the marketing performance measurement properties. These attributes relate to the traits and behavior of customers. Two customer attributes that have a strong influence on marketing performance measurement are: (1) the concentration of buyers, and (2) the size of the customer base. A high concentration of buyers makes it more likely that the customer base is prevailed by a few customers, increasing their buying power and importance in the marketing performance process (Day & Nedungadi, 1994). In this case, the largest business value of marketing performance measurement can be gained when it has a more informal and personal nature. When the company serves are large customer base that is not dominated by a few customers, marketing performance measurement might require sophisticated systems for data collection, analysis, and mining (Blattberg, Glazer & Little, 1994).

4.2 Operationalization of the performance dimensions

After discussing the organizational and environmental factors that influence marketing performance evaluation characteristics, this section elaborates on the operationalization of the dimensions of the ORMPA model. This ORMPA model was introduced in the last chapter, and consists of nine dimensions that each are composed of different factors. The possibility and necessity to measure these factors depend on their relevancy (Wilson, 1993), information availability (Piercy, 1997), their cost-effectiveness in use (Zur Meuhlen & Shapiro, 2009), and business needs. A component is relevant when it is directly related to the quality of operations and strategy execution. Information availability and cost-effectiveness have to be considered to ensure that performance measurement makes a positive contribution to firm performance. The following sections describe how each of the nine performance dimensions of the ORMPA model can be assessed based on an analysis of metrics and measures that can be used to determine the performance for each factor that makes up a performance dimension. Because strategy, resources, and capabilities are hard to evaluate independently of each other, these three dimensions are discussed together in one section.

4.2.1 Strategy, resources, and capabilities

As indicted in the previous chapter, marketing audits are a popular tool to assess the quality of marketing inputs. Because there is already a wide range of marketing audit literature available, relevant parts of existing theories can be selected and combined to evaluate the first three dimensions of the marketing productivity process. In line with the ORMPA model, the audit questions should concern the following ten categories: (1) strategy, (2) financial, (3) reputation, (4) relationships, (5) physical, (6) human, (7) legal, (8) organization, (9) information, and (10) technology. Marketing audits have a strong focus on internal operations as well as developments and opportunities in the environment (Kotler, 1977; Kotler et al., 1977; Wilson, 1993; Blythe, 2009). Audit questions related to the evaluation of the quality by which development and opportunities in the environment are detected and analyzed can be derived from general marketing audit theories. Despite this, the assessment of the internal operations is different for online retailing. Therefore a special audit for evaluating the internal marketing operations of online retailers is developed for this research. This audit can be found in annex 5. Based on the insights gained on the contextual performance measurement design factors, relevant parts of marketing audits are combined to form the basis of this questionnaire. This audit is based on theories from: Kotler (1977), Kotler et al. (1977), Wilson (1993), Brownlie (1993), and Piercy (1997). To adapt the instrument to online business and retailing, it is further tuned by using theories of: Alba et al. (1997); Adams et al., (2001), Constantinides (2002, 2004), Weitz (2006), Murdough (2009), and Lovett et al. (2010).

The audit questions do not provide insights in the quality of the strategy, resources, and capabilities. Instead, they create an understanding about how well these three dimensions together are managed, how much effort is put into their optimization, and how well The case study firm attempts to align them with the rest of the business. In short, it provides an insight in how well the company is committed to a marketing orientation. Poor results on the audit do not imply a poor marketing performance, but might form an indication that this performance is unsustainable or can be further enhanced.

4.2.2 Marketing actions

The ORMPA model for online retailers identified several activities that can be assessed to determine the overall efficiency and effectiveness of the marketing actions. The most important actions are: (1) promotion, (2) branding, (3) social media activities, (4) assortment management, (5) loyalty programs, (6) pricing, (7) product/service development, (8) fulfillment, (9) customer service/after sales, and (10) data mining. The following paragraphs discuss the operationalization of these factors. Assortment management and new product and service development are discussed together.

4.2.2.1 Promotion

Companies can conduct two types of promotion activities: (1) advertising and (2) sales promotion (Blythe, 2009). Advertising is defined as "*a paid insertion of a message in a medium*" (Blythe, 2009, p. 181). Many online stores focus mainly on pull advertising activities, even though the larger ones also executing push marketing activities. Pull advertising aims at attracting consumers that are already actively searching for the company their products and services. Contrarily, push advertising is related to targeting messages at entire groups of consumers, in order to reach those that have (or may create) an interest in the products and services offered by the company (Kotler & Keller, 2006). Traditional marketing activities often concern push advertising, since before the rise of the internet it was difficult to target individual consumers already actively searching for products and services.

Because the evaluation of promotion effectiveness should be based on the activities conducted by the firm, this discussion will focus on the promotion activities of the case study firm. At the time of the research, the case study firm mainly focused on online pull advertising activities, even though they started experimenting with some push marketing advertising activities. SEO relates to all website optimization activities conducted to improve the ranking of the website for relevant keywords in the result pages of Google. In contrast, SEA relates to placing advertisements among the sponsored links of search engines. Despite that the dominant search engine Google is not paid for high rankings in the natural search results, SEO is considered a promotional activity because the company is putting much efforts and resources into obtaining and maintaining good rankings in the search results.

SEO, SEA, Comparison Shopping and Affiliate Marketing.

Despite that SEO, SEA, comparison shopping, and affiliate marketing activities can support a company in achieving several objectives, most online retailers primary conduct these activities to generate traffic and enhance sales. Metrics to measure the performance of these activities are adopted from theories of Lee et al., (2000a, 2000b), Farris et al. (2006), Hasan et al. (2009), Waisberg and Kaushik (2009), Kaushik (2010). Required data can be collected from web analytics software used by the firm and/or marketing partners like the affiliate networks. Measures that are used to evaluate these activities are the total number of visits attracted with this activity, share of visitors in relation to the website total, change in number of visitors in relation to a previous period, percentage of new visits, bounce rate, average time on site, number of pages viewed per visit, and visitor loyalty. The sales effectiveness of each activity can be analyzed in terms of the total number of sales generated, visits to sales conversion rate, revenue, share of revenue to website total, average order value, and the revenue per visit. In addition to these measures, SEO and SEA activities can also be assessed according to the relative dependence on top keywords and entrance pages, as well as the engagement in time and number of page views of top keywords. A relative high dependence of a few keywords indicates a higher risk, since a decrease in findability on these keywords can have a large impact on the number of visits and sales generated. A high dependence on a few entrance pages might symptom a poor customization of keywords to the entry page, something what would result in a low visitor engagement in time and number of page views. Also additional attention can be paid to affiliate marketing activities. Here attention can be paid to the adaption of the campaign among publishers and the relative dependence on top publishers in terms of traffic and sales, and campaign abandonment by affiliates. A publisher or affiliate is a third party website that has included referral links on its website in return for a commission per generated visit or sale by that link. In annex 6 an explanation and interpretation of the above measures can be found.

Link Building

Link building can contribute to three aims: (1) enhance the findability in search engines, (2) increase the number of visitors from relevant referral websites, and (3) own the brand name. The first objective can be determined by the number and quality of referral websites, the link names (also known as anchor text) used, and the Google PageRank of the homepage. PageRank is an appraisal that indicates the importance of a website based on the quantity and quality of its inward and outward links. Annex 6 provides an explanation and interpretation of these measures. The second objective can be evaluated based on the traffic generated from the referral websites, while the third can be assessed by the number of websites with a negative sentiment about the brand, as well as their relative positions in the search engines.

Localized eBay stores

Localized eBay stores can contribute to three important objectives: (1) sales generation, (2) traffic generation, and (3) reputation management. The quality by which the first aim is pursued can be analyzed by the share of products that is sold during the auction or sales period, the average number of bids on action products, the average profit margin (after correction for advertising costs), and the average difference between the sales price and the listed item price listed on the website. The second objective can be analyzed by the amount of traffic generated to the website from eBay, as well as the share of traffic in relation to website total. The third aim can be evaluated by the number of store reviews posted on eBay, their average sentiment, and the share of positive reviews to negative reviews.

Sales promotion

Sales promotions are "*short-term incentives offered to customers with the intention of increasing sales in the immediate future*" (Blythe, 2009, p. 185). Amongst other things, sales promotions can relate to coupons and money off vouchers, seasonal discounts, two for one, bundling of complementary products, and free gifts with purchases (Blythe, 2006, 2009). Farris et al. (2006) propose several metrics that can be used to evaluate the effect of sales promotions, among which the (1) incremental sales, and (2) percentage sales on deal. The incremental sales measures the share of additional sales generated by the promotion in comparison to the baseline sales, while the percentage sales on deal indicates the number of sales with temporary promotions as a percentage of total sales. This last metric can be expressed in both number of items sold as turnover. Most other metrics proposed by Farris et al. (2006) relate to sales promotions via coupons, which might not be relevant for many online retailers.

Push marketing activities

Because push marketing activities are usually aimed at entire groups of potential customers, different measures can be used to evaluate the performance of these activities. Metrics that can be used to measure the performance of push marketing activities are: (1) ad awareness, (2) ad knowledge, (3) net reach, (4) effective reach, (5) share of voice, (6) and cost per order. Ad awareness relates to the percentage of a consumer segment or total population that is conscious of the company their advertisements. Ad knowledge refers to the percentage of a segment or total population that shows specific knowledge of an advertisement. Net reach measures the total number of unique customers that viewed or heard an advertisement, whereas effective reach refers to the amount of people that are exposed enough times to an advertisement to make it sink in. The share of voice indicates the percentage of advertising presence (in time, space, or number) in comparison to the presence of competitors. Last, the cost per order indicates the advertising costs per transaction (Farris et al., 2006).

4.2.2.2 Branding

Even though branding sometimes is perceived as an extension of promotion and advertising (Keller, 2003), it in reality covers a whole range of activities that relate to creating a brand identity as well as enhancing brand awareness and knowledge (Keller, 2003, 2006). The ultimate goal herein is to positively influence consumer responses to marketing activities like pricing, communications, product managements, and so on (Keller, 2003, 2006; Blythe, 2009). Despite this, companies only have partial control over their brand, since "*the real power of a brand is in the thoughts, feelings, images, beliefs, attitudes, experiences and so on that exist in the minds of consumers*" (Keller, 2006, p. 547). Franzen (2007, 2009) proposes that branding results in five types of assets: (1) mental, (2) relational, (3) behavioral, (4) distribution, and (5) market assets. Where mental assets relate to brand associations in a person his memory, relational assets refer to the emotional connection between a person and a brand. Behavioral assets concern the (un)conscious repeated purchases at a certain retailer. Fourth, distribution assets refers to positional advantages in opportunities to buy from the brand (for example due to its prominent visibility on partner websites), while market assets relate to market position characteristics that influence its financial performance, market share, margins, and so on.

In line with the ORMPA model, the results and outcomes of all these branding activities can be determined in the latter dimensions of marketing performance (market assets, positional advantages, customer impact, market performance, and firm performance). However, four elements of branding should be considered here to determine the collective quality of all the marketing actions from a branding perspective. These four elements are: brand (1) clarity, (2) relevance, (3) distinctiveness, and (4) consistency in promotional activities. Clarity relates to the extent by which consumers accurately interpret and evaluate the meaning of marketing messages, while relevance allude to the level to which the target audience gives buying from the retailer a serious consideration. The third element, distinctiveness concerns the uniqueness of the marketing program and positional advantages in comparison to comparison to competitors. Last, consistency comprises of the uniformity and integration of the marketing communication and different actions (Keller, 2003, 2006). The four branding elements can be measured by means of consumer research, as well as by a content analysis of social media conversations about the company and its products. Herein an evaluation can be made of the perceived distinctiveness according to the intended strategic advantages, trust, and clarity of the marketing message, while the actual positional advantages can be evaluated in a later dimension of the ORMPA model. To evaluate the consistency, also all marketing expressions (including the website) can be content analyzed for consistency in content, lay-out, brand names, and brand logos.

4.2.2.3 Social media activities

As indicated in the previous chapter, web 2.0 performance measurement can either be organized around the pillars (1) reach, (2) discussions, and (3) outcomes (Murdough, 2009), or around the four main objectives (1) dialogue fostering, (2) advocacy promotion, (3) support facilitation, and (4) innovation stimulation (Lovett et al., 2010). In line with the ORMPA model presented in the previous chapter, social media reach and sentiment are analyzed in another dimension of the model independent of how actively the company engages in web 2.0 activities.

Online retailers that actively engage in social media can use all, or a selection of, these measures, depending on their activities. Also companies that are not yet actively involved in web 2.0 activities can still use measures from these pillars and objectives to determine the quality of their current social media presence. First, outcomes can be analyzed in terms of how well customer reviews and discussions contribute to site traffic, purchase intentions, and sales. Firms that already conduct activities related to online reputation management, can also evaluate the resolution time and rate of online complaints or negative reviews. Hereby attention should be paid to the number of testimonials and the amount of suggestions for product and service enhancements (Kaplan & Norton, 2004). Also attention can be paid here to the share of voice, to determine how often the website is referred to in comparison to competitors.

4.2.2.4 Assortment management & product / service development

Since the costs for including product information on a website are negligible (Anderson, 2006), the quality by which online stores manage their assortment can be assessed by the level of alignment between product exposure and consumer interest (Lee et al., 2000b). Depending on assortment size, this can analysis can be conducted on a product, brand or product group level. Lee et al. (2000b) proposes that the product assortment can be analyzed by the top selling products, the conversion rates per product group, product purchase frequency and quantity, product (group) click trough rates, product (group) cart start rates, and product abandonment in the shop cart. In addition a Pareto analysis can be conducted to determine the share of products that make up the largest parts of the sales, both on a product group and website level. A Pareto analysis, also referred to as the 20/80 rule, assumes that a small part of the products and brands are likely to be responsible for a large share of the total sales (Reid & Sanders, 2007). This evaluation can help to understand if the product presentation on the website is according to relative consumer interest. In addition, it can also help to understand which products make up such an important share in sales that they always should be stock available, and which ones occasionally are allowed to be unavailable (Levy & Weitz, 1992).

To finalize examination of the quality of assortment management, also attention should be paid to complementary value added services (Kaplan & Norton, 1996, 2004). These can be evaluated by the total amount of value added services sold, the amount of transactions including value added services, and the percentage of value added services in total turnover. The last part of assortment management for online retailers relates to the impact of new product and service developments. Kaplan and Norton (2004) propose that the success of these new product and service developments can be tracked by their six months revenues. To assess this performance, also attention can be paid to the share in traffic of new products and services in comparison to website total, as well as their share in turnover.

In firms that use less sophisticated information systems and web analytics software, the assortment management evaluation might be largely constrained/driven by data availability. For example, information about click through rates, cart start rates, and shop cart abandonment rates are not available on a product group level when the analysis is conducted with data obtained from Google Analytics. Instead, the following information can be analyzed on a product group level: number of (unique) page views, average time on page, bounce rate, exit rate, and the revenue per page view. More importantly, the conversion rates and total sales value on the product group level can be compared with the previous figures to determine if product exposure is aligned with consumer interest. Such comparisons can for example be made by the use of charts or scatter plots (Lee et al., 2000a).

4.2.2.5 Loyalty programs

Customer loyalty requires more than loyalty programs, since "*techniques alone will not keep customers loyal*" (Lynch, 1995, p. xiii). Despite this, loyalty programs can help in creating additional switching costs for customers, due to which they might be easier to retain. One general indicator that can be used to measure the performance of loyalty programs is the percentage of customers in a loyalty program in relation to the total amount of customers in a period. Also the cost of the loyalty program per participating customer can be determined (Farris et al., 2006), the average length of the relationship of customers in the program, as well as the program churn rate (Blythe, 2006, 2009). The program churn rate is the percentage of customers in the program that become inactive or default. Loyalty programs can be analyzed by data derived from customer relationship management databases.

There are some indications that in online retailing customer profitability increases over the lifetime of the relationship (Reichheld & Shefter, 2000; Reichheld, Markey & Hopton, 2000). Based on this assumption also the total yearly turnover of customers in the loyalty program can be compared to other customers, the average yearly turnover per active loyal customer in comparison to the average of new customers, and a comparison of average order frequency and volume per relationship year.

4.2.2.6 Pricing

Besides loyalty programs, pricing is also an essential element in obtaining and retaining customers. Kotler & Keller (2006) distinguish between the following five pricing objectives: (1) survival pricing, (2) maximum current profit, (3) maximum market share, (4) maximum market skimming, and (5) product-quality leadership. Where survival pricing mainly focuses at recovering variable and fixed costs to increase survival chances, maximizing current profit pricing attempts to find and pursue the price levels that optimize ROI based on demand and cost analyzes. Third, maximum market share, attempts to find profitable price levels that maximize market penetration, whereas price skimming attempts to maximize prices at product launches in order to gradually decrease them during the product life-cycle. Last, product-quality leadership aims to deliver products and services with a high perceived quality at a price that just still is in reach for the target customers (Kotler & Keller, 2006; Blythe, 2006). There are many pricing strategies to pursue any of these objectives (*ibid*), especially since online retailers also have the possibility for variable pricing based on (past) visitor behavior (Kotler & Keller, 2006).

For each objective the outcomes are measured in a later dimension of the ORMPA model. However, independent of the pricing strategy, the evaluation of product pricing should at least determine the quality by which demand and cost are predicted. Both can be expressed by the actual demand or cost levels as a percentage of the expected amount. The reason for this is that expected costs and demand are to some extent interrelated, while at least one of these two factors forms the basis of the pricing strategy under any of the objectives. A last metric that online retailers can use is the percent good value. This metric expresses the percentage of total customers that consider the value of the product and service to be good, which implies that the total purchase price paid is lower than the maximum price they were willing to pay for the product (Farris et al., 2006).

Additional metrics retailers can consider are the reservation price, price elasticity of demand, and the optimal price. The reservation price is the maximum price that customers are willing to pay, while the optimal price is the optimum of the function of reservation costs and price elasticity (Farris et al., 2006). Nonetheless, many manufacturers already conduct these analyzes, which resulted in the recommended retail price. Therefore these metrics might not be considered as useful for all pricing objectives. Despite this, retailer brand perceptions and awareness can influence the price premium a company can charge as well as the elasticity of demand, making it questionable if the recommended retail price is the optimum price for a random online retailer.

4.2.2.7 Fulfillment

In online retailing, fulfillment is the ability of a business to follow up on orders by delivering the right products, in the right quality, at the right customer (or place), within the promised time. Since in European countries commercial law is consumer protective, the quality of return and refund policies should also be considered as part of the fulfillment performance in these countries. As indicated in the introduction, in online environments fulfillment becomes crucial due to lack of human face-to-face contact and an inability to touch, smell, and try products before making a purchase (Broillet, Dubosson & Trabichet, 2008). Van Grembergen and Amelinckx (2002) point out that the fulfillment process can be tracked by the following five elements: (1) on-time delivery of products and services, (2) level of stock-outs, (3) level of shipping errors, (4) number of problems in order processing, and (5) number of problems in logistical processing. Next to these measures, other elements of the fulfillment performance regard the quality of return processing, which can for example be expressed in the average return notification-to-refund time (Gunawan, 2007).

These metrics in combination seem to summarize the most important areas of the fulfillment performance, except for the level of stock-outs. Netessine and Rudi (2006) indicate that online retailers in some occasions make use of an alternative supply chain strategy: drop shipping. Here the wholesaler stocks and owns the inventory on behalf of the retailer. After an order is received, the wholesaler directly ships the product to the final customer. Since larger retailers may use multiple suppliers that potentially have an overlap in their assortment, the percentage of orders delivered might be a better measure in these cases. This metric indicates the percentage of orders where the customer eventually received the order, and seems in this case a better metric than the level of stock-outs.

4.2.2.8 Customer service and after sales

Customer service and after sales performance relate to a number of things, like helpdesk availability, the quality of customer service responses, the availability and quality of order tracking, as well as cooling-off, return, and refund policies. Since not all online retailers use sophisticated information system to track customer service and after sales performance, this evaluation might be largely constrained/driven by data availability.

The analysis of customer service quality should be conducted both quantitative and qualitative. Quantitative data can be used to measure things like the total number of received e-mails, the average response time (Gunawan, 2007), the fix rate, the average resolution time (Kaplan & Norton, 1996, 2004), the percentage of first time resolutions, and the percentage of customers that has not contacted customer service. These metrics can provide insight in the quality of customer service provision

(Accenture, 2007). In addition to the quantitative analysis, e-mails can be content analyzed to identify reoccurring themes in customer questions and complaints.

4.2.2.9 Data mining

The last marketing action is data mining, which makes part of the larger field of business intelligence. Business intelligence can be defined as "*a set of mathematical models and analysis methodologies that exploit the available data to generate information and knowledge useful for complex decision-making processes*" (Vercellis, 2009, p. 4). Herein data mining refers to models that can be used to learn from the data (Vercellis, 2009), whereby learning is "*an iterative process within which progress is defined by 'discovery', through either automatic or manual methods*" (Westphal & Blaxton, 1998, p. 6). Data mining can among other things help in discovering new purchasing trends, find faults or irregularities in customer information, find strong and weak points in website content, and improve marketing campaign targeting, and provide more focused support and offers to customers (Westphal & Blaxton, 1998).

It is very hard to assess the quality of the used algorithms, heuristics, and statistical analyzes. However, depending on the proposed improvements formulated based on the insights obtained with data mining, an analysis can be made about the expected contributions of improvement initiatives to overall turnover. In addition, the share of implemented initiatives with a significant positive impact on business performance in relation to the total number of implemented initiatives can be determined. Where relevant, also improvements based on discoveries of data mining in advertising effectiveness, website performance, customer acquisition, customer support, customer loyalty, up-selling, cross-category purchases, and etcetera can be assessed.

4.2.3 Market(ing) assets

The ORMPA model identified several intellectual and relational market assets. The most important assets are: (1) the website, (2) branded product lines, (3) knowledge about the environment, (4) relationships with customers, (5) relationships with influencers and users, (6) industrial relationships, and (7) relationships with third parties. According to marketing performance management theories, these assets can be assessed by means of the marketing audit stream (Srivastava et al., 1998; Clark, 2002). This section discusses how online retailers can evaluate these seven marketing assets.

4.2.3.1 Website

The most important asset of an online retailer is its website, because that is the intended location where consumers search for product information and place purchases. The best way to assess the quality of the website is by usability and consumer research, although such research usually is expensive and results are only relevant for a short period of time.

Instead of conducting in-depth usability research that involves the analysis of video and eye-tracking recordings of website usage, smaller firms can also decide to gather and analyze first impressions of website functionality and usability. Such an analysis can be conducted in three steps. First, the website functionality can be determined and compared to competitors based on a checklist. Annex 7 proposes a sample functionality checklist based theories from Hasan and Tibbits (2000), Straub et al. (2002), Travis (2003), Wu, Mahajan and Balasubramanian (2003), Constantinides (2004), and DeLone and McLean (2004). Second, the firm can invite consumers from the target audience to perform tasks on the company and competitor website under the presence of company staff. During the execution of the tasks, the time required to complete tasks can be tracked, as well as difficulties reported by participants. Respondents should also be given the possibility to comment on their experience of the functionality factors, so that the company can create additional insights in points of improvement. Third, a customer survey can be conducted among website visitors and customers to obtain additional feedback on the website.

There are several website elements where the functionality research can focus on. Based on Travis (2003) and Constantinides (2004) the following three website functionality/usability factors are selected to determine the quality of the website: (1) usability, (2) interactivity, and (3) content factors. Usability can be analyzed by the convenience in use, the information architecture, and navigation. Hereby information architecture relates to the hierarchy and grouping of products and information, while navigation relates to consistency and ease by which people can browse in and between product and information groups. Interactivity relates to search facilities, site speed, and the convenience of the ordering process. Search facilities in this regard indicate if the search function on the website leads to fast and reliable results, so that users can easily find the information or products they are looking for. A simple sample for a usability research to be conducted with participants can be found in annex 8. In this sample special attention is paid to website usability, interactivity, and content factors.

4.2.3.2 Branded product lines & knowledge about the environment

Private label brands and the number of branded product lines can be an important source of competitive advantage in retailing (Levy & Weitz, 1992). While offering unique brands that fulfill a special customer needs (in niche markets) can reduce price competition and elasticity, offering more branded product lines can strengthen the position of the retailer towards suppliers as well as third parties. When the business strategy puts a strong focus on offering unique brands and products, attention can be to the additional profit margins or the price premium the company is able to charge for these products, as well as the price elasticity of unique brands and products. In contrast, when the strategy focuses on a strong position towards third parties, attention can be paid to the relative number of branded product lines and products in comparison to competitors.

Besides branded product lines, the knowledge about the environment can be an important source of future business success. During the execution of marketing activities a company naturally gains and processes suck knowledge. Despite its importance, it is hard to evaluate the quality of this knowledge, as well as the quality by which it is incorporated in strategy and marketing actions. The quality of environmental information is already partially evaluated in the strategy, resources, and capabilities audit. Due to the difficulties associated with a further assessment of this knowledge, it will not be further assessed here.

4.2.3.3 Relationships with external stakeholders

Relationship assets result from the relational bonds between a company and its important stakeholders. The bonds that shape these relationships can differ per stakeholder type. For example, where brand equity it is the outcome of comprehensive advertising and high product quality standards, it can be expressed in the strength and value of the relationship between a firm and its customers (Srivastava et al., 1998). In general it is hard to economically valuate relationships (Sheth & Sisodia, 2002), while a high degree of industry dynamics can further enhance the uncertainty about the potential future revenues of relational assets. Therefore this research will not attempt to valuate these assets. Instead interviews with management, customers, influencers, suppliers, and other important external parties can be conducted to assess the unique advantages that are available that are available to the online retailer as a consequence of their relationships. Herein special attention can be paid to unique advantages that are not available to, or exploitable by, competitors.

4.2.4 Positional advantages

Positional advantages relate to the relative market positions of a company in comparison to its competitors. These relative (dis)advantages are expected to have a direct impact on sales and customers relations over the time of their existence (Morgan et al., 2002). As follows from the theoretical analysis, positional advantages for online retailers can exist on nine areas: (1) product, (2) service, (3) price, (4) cost, (5) image, (6) web experience, (7) delivery, (8) findability, and (9) networks. In the analysis of positional advantages special attention should be paid to the areas on which a firm wants to create a competitive advantage, as well as the areas that form the basis of industry competition. Companies that strongly relate on a pull marketing strategy should also emphasize potential (dis)advantages in findability in search engines and comparison shopping websites, since for these retailers findability is a prerequisite for being taken into consideration in the purchase process and thus in attracting a customer base.

In these nine areas (dis)advantages can exist on multiple levels. For example, a firm can have a disadvantage stemming from longer delivery times, while it has advantages in the geographical area it ships to and is better able to provide the right product of the right quality, at the right time at the right address. Advantages in products can for instance exist on a level of a higher quality, larger range, or unique options. Advantages in service levels can among other things exist on helpdesk contact options, response times, guarantees, return and refund policies, after sales services, and etcetera.

There are several methods that can be used to determine the relative position on these nine areas. For example, the website can be compared to competitors to create insights in differences in products, prices, promised service levels, web experience, and promised delivery times. Orders can be placed at competitors to experience their actual service quality and delivery reliability. Customer surveys and consumer research can be used to gain insights in the image (in comparison to other firms), differences in web experiences as perceived by visitors, and experienced delivery reliability. An analysis of the presence of a retailer and its competitors in search engines and comparison shopping websites can indicate the relative (dis)advantages in findability, whereby the sentiment of customer reviews among the first results also can indicate differences in perceived image. Next to all this, a social media analysis can be conducted about the firm and competitors to create a further understanding about how customers and website visitors perceive the web experience, experienced delivery times and reliability, service quality, and overall image.

Several positional advantages are firm specific, due to which the measurement has to be tailored to firm characteristics. There are for example so many ways and areas in which firms can experience cost advantages, that there is no general way to measure such advantages. This is also the case for network externalities, which can be very industry and company specific.

4.2.5 Customer impact

The execution of marketing activities, exploitation of market assets, and the capitalization of positional advantages are aimed to influence consumer perceptions. The impact of these activities can be tracked by website usage, customer reviews, social media contributions of consumers, customer satisfaction, trust, intentions to purchase, perceived service quality, perceived value, and brand perceptions and awareness. The following sections elaborate on the measurement each of those elements, whereby social media contributions and perceived value are discussed together. Also trust and perceived service quality are talked through in combination because they directly related to each other.

4.2.5.1 Website usage

Website usage data from web analytics software can be used to evaluate the impact of marketing actions on customer perceptions. This data can be used to understand if the right audience is targeted and if website content appeals to the visitors (Waisberg & Kaushik, 2009). This understanding can be created by tracking and benchmarking the following metrics: the number of page views, page views per visit, visits, unique visitors as well as the bounce rate, average time on site, and the percentage of new visits (Farris et al., 2006; Hasan et al., 2009; Waisberg & Kaushik, 2009; Kaushik, 2010; Turner, 2010). For the comparison with other websites, benchmark data is for example available from websites in comparable size in Google Analytics (Hasan et al., 2009) and from specific US retailing websites (Coremetrics, 2009).

4.2.5.2 Customer reviews, social media reach, social media sentiment, and perceived value

A social media analysis can create insight in customer reviews, social media reach, and social media sentiment. The performance on these metrics can be determined by the quantity of mentions as well as the quality and sentiment of the contributions (Murdough, 2009). A content analysis can be conducted to determine the overall sentiment of the reviews. In this analysis special attention can be paid to reasons that made customers order from the retailer and the perceived advantages regarding the product and retailer.

4.2.5.3 Customer satisfaction and service quality

Customer satisfaction and service quality perceptions can be measured in two ways. First, a customer satisfaction survey can be conducted to create an understanding of the average satisfaction of buyers. Second, satisfaction and quality perceptions can be derived from a content analysis of social media and customer service e-mails, where some customers will share their satisfaction and experiences in dealing with the firm.

When only customer service e-mails and buyer contributions in social media are analyzed, the risk exist that results are biased. This bias is due to potential hidden evidence (Taleb, 2007), because the customers that provided feedback on these sources might have different experiences and perceptions than customers that never contacted customer service or shared experiences in social media.

4.2.5.4 Trust

Even though trust is often named as an important element in online retailing, this notion is difficult to measure (Hoffman, Novak & Peralta, 1998; Lee & Turban, 2001). Blomqvist and Ståhle (2000) indicate that in business-to-business settings, inter-organizational trust results from interpersonal trust between individuals from partner firms. When in business-to-consumer markets the trust of a customer in a retailer would derive from his trust in the store staff, consumers may have more difficulties in trusting online retailers due to the lack of direct interpersonal contact. Interpersonal trust can also be derived indirectly from a past history of exchange with other customers. As a consequence it is found in online retailing that company size and reputation are important factors that influence the perceived trustworthiness and risk perceptions, as well as the intentions to become a loyal customer (Jarvenpaa, Tractinsky & Vitale, 2000). To make this notion more complicated, McKnight and Choudhury (2006) point out that trust and distrust are different concepts, whereby distrust among other things influences the willingness to share information with or make purchases at a certain retailer.

Besides (inter)personal trust, institutional trust also plays an important role in transactions between customers and firms (Zucker, 1986; Grabner-Kräuter & Kaluscha, 2003; Redding & Witt, 2007). Institutional trust is based on formal systems that do not directly relate to personal characteristics or a history of exchange (Zucker, 1986). An important difference between traditional and online retailing in this respect is that in traditional retailing the formal (e.g. legal) system under which the store operates is clear, while in online environments this is can be unclear. Consumers can easily access websites from companies that operate from other countries, while location and ownership information stated on a website can be misleading or unreliable.

Due to the complexity of the concept of trust, no good ways to measure trust are identified in this research. In addition can the perception of interpersonal and institutional trust differ per county (Redding & Witt, 2007). Despite this, indications of (dis)trust can potentially be derived from the social media and customer service e-mail analysis. Herein special attention can be paid to consumers that might be willing to purchase from a website, and that doubt the trustworthiness and quality of the merchant or the authencity of the products. Next to this attention can be paid to the perception of transaction and customer data security, as well as the perception of company legitimacy. The findings for trust can potentially not be generalized to all customers and countries, but might provide an indication about the general perception.

In case the social media and customer e-mail evaluation indicates that the website is not trustworthy, additional research can be conducted in this field. According to Wang and Emurian (2005) the trustworthiness of a website can be evaluated by four design factors: (1) graphic design, (2) website structure, (3) website content design, and (4) social-cues. These four design factors, which potentially are cultural dependent, can best be evaluated by means of consumer research among persons from the target audience that are not yet familiar with the website.

4.2.5.5 Intentions to purchase

The purchase intentions of consumers at a retailer can be determined in two ways. First, consumer research can be conducted to analyze the general willingness to buy products from the retailer website. Second, the extend by which visitors that have purchase intentions can be converted into customers can be evaluated. In this analysis attention can be paid to the shop cart abandonment rates. A high shop cart abandonment rate is an indication that there are barriers that prevent visitors from buying form the website. Next to this, customer e-mails directed at the customer service department can be content analyzed to create insights in potential problems with buying from the website. Such problems for example can relate to a lack of trust in the company, inconveniences in the purchasing process, or the absence of popular payment methods.

4.2.5.6 Brand awareness and knowledge

Brand awareness and knowledge can be measured by means of consumer research and customer surveys. In such research attention can be paid to brand awareness, brand knowledge, experiences, attachment, associations, and etcetera. Brand awareness relates to the percentage of a consumer segment or the total population that is conscious of the retailing brand, while brand knowledge refers to the percentage of a segment or total population that shows specific knowledge of a brand (Farris et al., 2006). The other factors attend to relate more to how consumer experience the brand, how loyal and involved they feel with the brand, and with which feelings and positional advantages they associate the retailing brand.

In case customer and consumer research is too expensive, some understanding of the brand awareness can be gained by comparing the share of voice and audience engagement from the retailer and competitors. In addition, the number of brand advocates and brand opposites in social media can be determined and compared to competitors. Last but not least, the number of referral websites can be compared to the number of competitors. Together with the other areas used to determine the level of customer impact, this creates some insights in brand awareness and knowledge.

4.2.6 Market performance

Market performance is directly related to number of sales and revenues, and can be determined by (1) sales (responses), (2) conversion rate, (3) website turnover, (4) market share, (5) customer acquisition, (6) customer retention, (7) up-selling, (8) cross-category purchases, (9) customer visit frequency, and

(10) co-produced products and services. Most of these measures are straight forward, whereby information can be gathered from industry reports, sales reports, databases with customer information, and web analytics software. Market share can be determined based on the total industry turnover in the country, while customer retention can be evaluated by the share of customers that place repeat purchases.

4.2.7 Firm and Financial Performance

The last dimension of the ORMPA model is firm and financial performance. Eventually profitability is one of the main objectives of most companies. This last dimension attempts to determine how well the marketing function has contributed to this aim. In finance literature a wide range of metrics and measures can be found to measure firm and financial performance. In this research seven measures are illuminated: (1) profits, (2) ROI, (3) cash flow impacts, (4) economic value added, (5) market value added, (6) market capitalization, (7) and shareholder value. The first two measures are quite straight forward and are not discussed here in further detail. Srivastava et al. (1998, 1999) propose that marketing activities can impact cash flows in the following ways: enhance the cash flow level, promote cash flow velocity, decrease cash flow vulnerability and volatility, and improve the residual firm value. Economic value added is a metric that indicates a firm's profitability after correcting it for the cost of financing the company. Additionally, the market value added indicates the excess of current market value over the total capital invested by owners and investors. Market capitalization is an indication of the total company value, which for public listed companies can be calculated by the number of outstanding shares times the share price. Last but not least, shareholder value is the total value of the firm after deduction of outstanding debt (Brealey, Myers & Allen, 2008).

Depending on the business and supply chain strategy, the firm could also determine the impact of marketing activities on other efficiency ratios, like the sales-to-assets ratio, days in inventory, inventory turnover, and average collection period of customer invoices (in days). The days in inventory indicates the average speed by which a retailer turns over its inventory, while inventory turnover indicates the average value in inventory (Brealey et al., 2008).

This section discussed the operationalization of the nine performance dimensions of the ORMPA model introduced in the previous section. Referent scores or benchmarks can be used to interpret the scores on the factors that make up the dimensions (Eccles, 1991; Kaplan & Norton, 2000, 2004). In the next section some background will be given to the concept of benchmarking, to ensure an appropriate application.

4.3 Benchmarking

Benchmarking is a broad concept that refers to comparative learning beyond firm and industry boarders (Wentink, 2005), which comprises of two main activities: (1) comparing results to competitors, and (2) comparing operational processes to best practice operations and organizations. Despite that benchmarking can support the interpretation of quantitative metric values, it also has several important limitations. As a consequence, it is not always insightful or meaningful in practice.

The first and most important problem is that companies (and alternative web analytics applications packages) measure marketing performance in varying ways (Ambler & Roberts, 2006). For example, a simple metric like sales conversion rate is in practice measured by different formulas. Examples of such formulas are the number of sales divided by the number of visitors, the number of transactions divided by the number of visitors, or the number of sales divided by the number of unique visitors. Even for a common measure like marketing ROI is in practice measured in at least six different ways (AMA, 2005). Besides different measurement formulas, differences can also occur due to measurement reliability. It is for example expected that there significant differences in measurement reliability between different web analytics applications, making data comparisons less insightful.

A second limitation follows from differences in operations and assets. According to strategic management literature, the essence of a good business strategy lays in doing different things or executing comparable activities in different ways (Porter, 1996). However, the basic assumption of benchmarking performance data is that the processes are executed in a similar way, making their performance comparable. In reality each company requires a unique set of web metrics to track their performance (Kaushik, 2010). This not only results from varieties in products and geographical locations, but also because of differences in design, lay-out, product presentation, and content choices.

The last limitation is related to the current marketing performance. Research from Harrington (2004) in process and quality management indicates that benchmarking has a negative effect on return on assets and customer satisfaction in situations where process performance is low. According to that research, positive effects only are realized when process performance was already moderate to good. If this also would hold true in (online) marketing processes, benchmarking would only be useful and desirable if the performance is already being perceived as average or good by the company.

Besides these limitations for benchmarking, firms should in some circumstances also be careful in using internal referent values to interpret performance data. Especially in situations of high task uncertainty and high industry dynamics the environment might change fast, due to which comparisons to historic data or longer term goals might not always give an accurate impression about how well the firm coped with environmental opportunities and threats. Or as Eccles (1991) indicates: "*what matters is how a company is doing compared with its current competitors, not with its own past*" (p. 134).

With this elaboration about the limitations to the use of benchmarking and referent scores for assessing performance the ORMPA model is completely operationalized. This chapter discussed how strategy, corporate context, and the environment can be used to determine the evaluation characteristics. In addition an elaboration was given about the measures, metrics, and data sources that can be used to measure the marketing performance. Based on these insights the next chapter can now discuss the application of the ORMPA model the case study firm.

5 Case Study

"The measure of success is not whether
you have a tough problem to deal with,
but whether it's the same
problem you had last year."
John Foster Dulles

This case study chapter is removed because of sensitivity and confidentiality of the information.

6 Results

“The most exciting phrase to hear in science,
the one that heralds new discoveries,
is not 'Eureka!' but 'That's funny...' ”
Isaac Asimov

Theoretical models in the field of business administration are most valuable when they not only represent (hypothesized) theoretical constructs, but also lead to valuable insights in practice. Therefore this chapter discusses the theoretical findings from the empirical test of the ORMPA model. In this elaboration three aspects are of special interest. First, the usability in practice is of interest because that influences the usefulness of the model. Second, the hypothetical cause-and-effect relations are of concern, because the model contains several performance dimensions. For this reason an evaluation is conducted to determine if hypothetical cause-and-effect relations can be derived from the different factors and dimensions incorporated in the model. Many performance measurement systems for online firms lack a balanced view in terms of leading and lagging measures (Barnes & Hinton, 2007; Hinton & Barnes, 2009). Therefore it is useful to check if hypothetical cause-and-effect relations between factors and dimensions can be identified in the performance scores of the model. Third, it is valuable to check if the model is not too simplistic or complicated, or that dimensions do not overlap. The theoretical and practically validity of the model can be harmed if the dimensions are not mutually exclusive. The different sections of this chapter elaborate on the findings from the empirical test on these three aspects. But first the next section analysis if requirements that follow from design factors discussed in section 4.1 (and applied in section 5.2) are realized in the ORMPA model.

6.1 Realization and implications of the design factors

The characteristics of marketing performance measurement systems are influenced by three factors: (1) strategy, (2) corporate context, and (3) task environment. This section discusses the extent by which the requirements set by these three factors are reflected in the operationalization of the ORMPA model.

6.1.1 Strategy

From a strategic point of view, the operationalization of the ORMPA model should reflect two strategic elements: (1) strategic goals and (2) competitive means. Two types of strategic goals can be distinguished. First, there are goals directly related to the competitive strategy, like creating a competitive advantage in price or service. As follows from the case study these goals can be reflected in the positional advantages dimension. Second, there are overall strategic goals, that for example relate to increasing revenues, profitability, and customer satisfaction. In the ORMPA model these goals can be tracked in the customer impact and market performance dimensions.

Regarding the intended creation and use of competitive means, the case study firm formulated goals in four areas. The first area was not measured in this research, but can be tracked in the marketing actions and market performance dimensions. The relationships are covered in the market asset dimension, while the other two areas are evaluated under the strategy, resources and capabilities dimensions. Therefore the conclusion can be drawn that the strategic elements are sufficiently covered in the ORMPA model.

6.1.2 Corporate context

Deleted because confidential.

6.1.3 Task environment

The last dimension that influences the characteristics of marketing performance assessment is the task environment. Herein four important elements can be distinguished: (1) task uncertainty, (2) industry dynamics, (3) competitor attributes, and (4) customer attributes. Except for technological developments, the task uncertainty is perceived as low by the case study firm. This implies that data gathering and analysis can be automated, because the measurement costs should be justifiable due to the longer term use of the data sources and metrics. On the other hand, industry dynamics are considered high, which argues for the use of short time horizons. Most of the data used in the case study stems from 2009 or 2010, whereby especially website analytics data is quite recent. It is also felt that these short time horizons are necessary, because data from early 2009 is not relevant anymore for the current situation of the firm. This is for example the case for the calculation of the market shares, where it can be questioned if market figures from a couple of years ago still reflect the current market conditions.

The latter two factors relate to competitor and customer attributes. Competitor traits are included in the positional advantages dimension. The management of the case study firm feels that all important factors are included in this dimension. From the customer attributes follows that there is a small concentration of buyers and a large customer base. This is also verified by the application of the model, which showed that the case study firm receives orders from a relative large customer base, in which all customers are about equally important to the firm in terms of revenue. According to Blattberg, Glazer and Little (1994) this allows for a more sophisticated and impersonal performance evaluation, which also justifies the use of the quite elaborate ORMPA model.

6.2 Usefulness of the ORMPA model

In practice marketing performance measurement theories are not only used because they meet requirements that follow from the marketing strategy, corporate context, and task environment. Instead, these systems need to create useful insights in practice too. Before this research, The case study firm already tracked their marketing performance to a small extent. The application of the ORMPA model not only unveiled the performance of many untracked marketing elements, but also created new insights in the relative importance of some of these elements.

Another limitation results from the operationalization of the dimensions of the ORMPA model. Currently relational assets like customer and supplier relations are mainly analyzed with qualitative data, while respondents from the case study firm indicated that this assessment should also be based on qualitative data. This is especially the case for supplier relations and relationships with third parties like comparison shopping websites and affiliate networks. Due to the current operationalization, also the findings for branding, customer satisfaction, and customer perception might be biased, because these findings are not compared with results from consumer research and customer surveys. Even though on forehand it was expected that this information would not be valuable, it is felt after the research that this information would have helped in verifying the findings. Next to this, these additional customer and consumer data sources would also have supported the analysis about the extent by which the social media messages and sentiment reflect the overall customer perceptions.

A last restriction follows from data availability boundaries. It was not always possible to measure the performance in a direct and reliable way, because not much data could be retrieved from automated information systems. The findings are as a consequence sometimes more an indication of the performance. The directors of the case study firm are mainly interested in reliable performance data to base decision making on, due to which this is a limitation. However, since the case study firm is currently working on improving their information systems, and data processing will become less time consuming after the implementation of these systems, this restriction should only have a limited effect on the overall judgment about the applicability of the ORMPA model.

6.3 Cause-and-effect relationships

An advanced performance assessment not only provides insight in the marketing performance, but also shows hypothesized causal relationships between the measures (Kaplan & Norton, 2000, 2004; Tangen, 2005). These relationships help identifying which resources, capabilities, actions and relationships need improvement to further enhance customer perceptions and market performance. The presence of such relationships determines the quality by which the ORMPA model can be used for performance diagnosis, and serve as a basis for corrective action (Kotler & Armstrong, 1999; Kotler & Keller, 2006). Because the ORMPA model consist of multiple dimensions, the evaluation should consider if hypothesized causal relations between factors can be recognized in the case study findings. It is outside the scope of this research to investigate all potential causal relations between the factors, especially since these findings are likely to be biased due to the use of different time-horizons. Therefore the following paragraphs elaborate on three examples where potential causal links are found at the case study. In these examples attention is paid to relations in three elements of the model: (1) fulfillment, (2) data mining, and (3) website and promotion.

6.3.1 Causal relations in fulfillment

Deleted because of confidentiality, but involved factors are displayed in table 6.2.

Strategy, Resources & Capabilities	Marketing Actions	Market Assets	Positional Advantages	Customer Impact	Market Performance
• Supply chain strategy • Physical resources • Relational resources • Fulfillment capabilities • Logistical capabilities	• Fulfillment • Customer service / after sales	• Supplier relations • Customer relations	• Delivery • Image	• Satisfaction • Trust • Customer reviews • Social media sentiment	• Retention • Cross category purchases • Sales responses • Turnover

Table 6.2: The most important causal relations influenced by fulfillment

6.3.1 Data mining

Deleted because of confidentiality, but involved factors are displayed in table 6.3

Strategy, Resources & Capabilities	Marketing Actions	Market Assets	Positional Advantages	Customer Impact	Market Performance
• Informational resources and capabilities • Technological resources and capabilities • Retail skills	• Data mining • Loyalty programs • Assortment management	• Knowledge about the environment			• Cross category purchases • Retention • Up-selling • Sales responses • Website turnover

Table 6.3: Factors that are expected to have strong relationship with data mining

6.3.2 Website and promotion performance

Deleted because of confidentiality, but involved factors are displayed in table 6.4

Strategy, Resources & Capabilities	Marketing Actions	Market Assets	Positional Advantages	Customer Impact	Market Performance
• Website strategy • Promotion strategy • Relational resources • Technologi-cal resources	• Promotion • Assortment management	• Website • Relations with third parties	• Web experience • Findability • Product	• Website usage • Intentions to purchase	• Sales responses • Conversion rate • Website turnover • Customer acquisition

Table 6.4: Most important factors related to website and promotion performance

This section discussed three cases whereby expected causal relationships between the factors of the ORMPA model are clearly visible. After discussing the theoretical findings regarding the usefulness and applicability of the ORPA model, the next section elaborates on performance reporting.

6.4 Model complexity and performance reporting

To ensure that the marketing performance assessment model is useful in practice, it should not be too simple nor too complex. The application of performance management models should provide relevant stakeholders with the ability to manage their business, which implies that findings are presented in a simple way. Humans have a limited information processing capacity (Miller, 1956). As a consequence, providing more data than humans can handle is likely to result in less accurate decision making (O'Reilly, 1980). Besides that the model should not provide too much data, it is important that (the operationalization of) the different dimensions not overlap. The theoretical validity of the model and practical usability of the results is highest when the dimensions and measures are mutually exclusive and collectively exhaustive.

During the case study two problems are found with the formulation and operationalization of the ORMPA model. First, a model consisting of nine dimensions seems to be to complex, due to which stakeholders can lose the total overview over the findings. During the interviews two directors indicated that they prefer a simple performance reporting that can easily be understood, and from which the findings can be seen at a glance. It seems that this condition/wish is not fulfilled with the current formulation of the model.

Second, in the discussion of ORMPA model and some of the performance findings with the company, it is found that the current division of dimensions and factors leaves much room for discussion. For example, a debate arose about the difference between marketing actions and market assets. Here it is felt that the website is used as an input for promotional activities, especially since it is a precondition for a successful integration in search engines and affiliate networks. It is also felt that some of the relational assets are used as inputs for marketing actions, while the relationship itself is strengthened or weakened by these actions. A comparable discussion arose around the relation between positional advantages and marketing actions. At The case study firm it is felt that positional advantages not only result from marketing actions, but that such actions are also based on perceived positional advantages.

It is also proposed that the cause-and-effect relations between marketing actions, positional advantages, and customer impact do not fully represent the reality. During one interview the customer service manager indicated that she expects that customers base their satisfaction on different factors at different stages of the purchasing process: "*I think there are different things customers value in different stages. Before they buy something they really care about reliability and price. But once they paid they value delivery time and how we deal with inquiries*". After the fulfillment process customers can even be very satisfied when failures are recovered well, even if these failures are the consequence of delivery and logistical problems. According to this interpretation, some perceptions are based on positional advantages, while others on marketing actions. Thereby these steps are sometimes hard to distinguish from each other in reality. Last, relations between customer impact and market performance might contain faulty representations. Katz & Shapiro (1985) indicate that firms with a larger customer base usually can attract new customers at a faster rate. Also in online settings it is expected that companies who seem to have a large customer base also are likely to be perceived as more trustworthy, which enhances the ease by which they can attract new customers (see annex 3). Based on the interpretation of the managers, some of the relations in the ORMPA model seem more reciprocal than consecutive, due to which another representation of the model and findings can enhance its acceptance in practice.

Another problem with the ORMPA model is that the strategy, resources, and capabilities dimensions represent different theoretical constructs, but that these are hard to distinguish from each other in the operationalization and application of the model. This problem seems partially related to firm size. In small and medium sized firms the strategy often tend to be less formalized, while often resources and capabilities are less well identified and described.

Based on the feedback gained from the empirical test of the ORMPA model, an improved and simplified model is presented in figure 6.1. This model exists out of three dimensions that represent the successive main stages of the marketing performance process. The first step focuses on preparation by covering the strategy, resources, and capabilities. Preparation refers to the marketing planning stages and the available resources and capabilities. The second step, realization, relates to marketing actions and intermediate results in the form of market assets and positional advantages. These intermediate results form the basis of customer perceptions and behavior, but can also be further exploited and developed by marketing actions. The last dimension covers the outcomes in the form of customer perceptions (impact), market performance, and firm and financial performance.

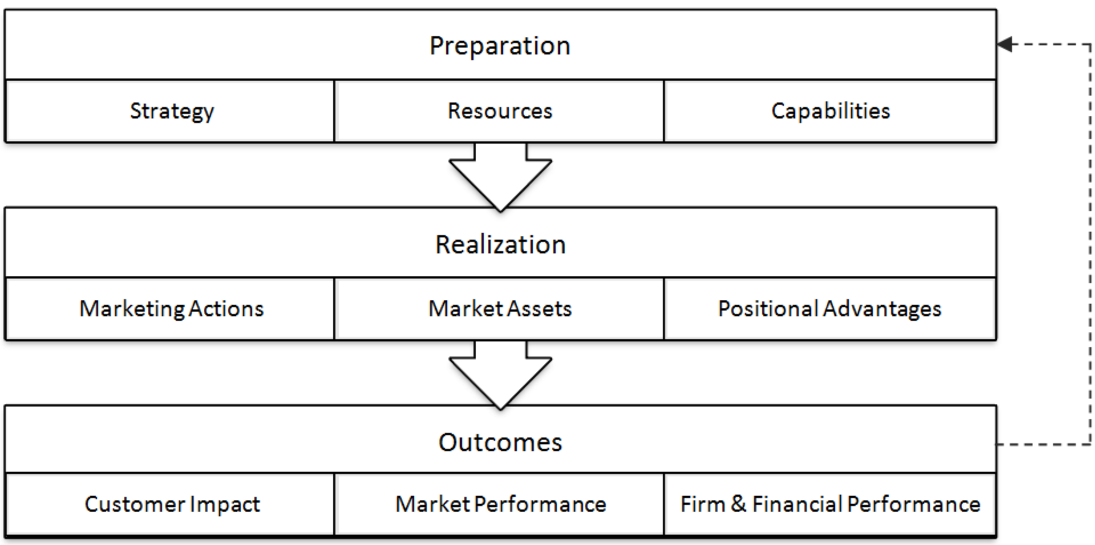

Figure 6.1: Simplified ORMPA model

Besides the spider diagram presented in figure 5.11, figure 6.2 provides a sample about how the marketing performance can be reported based on the simplified ORMPA model. In this one-page report the dimensions are grouped to the preparation, realization, and outcome stage. Herein all elements that belong to a certain dimension are presented at the same level. For each factor the standardized performance is shown by means of one of the tree colors of a traffic light. This presentation is an example, whereby the performance can also be indicated with other colors, symbols, and scales. In this presentation the factor weights are not incorporated, something what could be desirable by users of the report.

The simplified ORMPA model provides two important advantages. First, due it is simplified representation it is easier to understand, which is likely to enhance its acceptance in practice. Second, it allows for a simpler performance reporting, due to which it more likely that relevant stakeholders take the time to study the results. However, the simplified ORMPA model also has two important disadvantages that limit its value in practice. First, it only shows the relative performance in comparison to a benchmark, while it does not show the performance in actual numbers. Within the current interpretation only insight can be gained if a score is below, on, or above benchmark, without having insights in how much it is above or below benchmark. When for example analyzing positional advantages one would like to know such differences, because they can provide valuable input in fine-tuning the strategy, resources, capabilities, and actions. A second limitation is that many cause-and-effect relationships are removed from the simplified model. This makes it harder to understand the causes of the performance on some factors, like for example the impact of marketing actions on positional advantages. As a consequence users might become more occupied with improving the performance of certain factors in one of the latter dimensions, rather than with improving the performance of underlying factors from earlier dimensions. For example, a manager might easily become more occupied with improving the conversion rate of the website, rather than with improving things like data-mining, assortment management, web-experience, customer reviews, and social media sentiment. These latter five factors can have a strong impact on the conversions rate.

Because several cause-and-effect relationships are not included in the simplified ORMPA model, it is recommended to still use the original ORMPA model presented in figure 3.8 for the actual analysis and overall performance reporting. Hereby the simplified model can be used to provide a summary of the findings, for stakeholders that do not require a detailed insight into the marketing performance. For analysts it is expected that the former model provides a more elaborate framework to analyze cause-and-effect relations and to come to priorities and recommendations to improve and/or maintain the market and firm performance.

In conclusion it is found that the empirical test of the ORMPA model contributed to useful insights. Hypothesized cause-and-effect relations are recognized between factors from different dimensions of the model, which allows for identifying and prioritizing improvement opportunities. However, in practice the ORMPA model also has been found too elaborate for performance reporting. Therefore a simplified version is proposed in which several causal relations are removed. This simplified version can also serve as the basis for performance reporting. After discussing the results of the empirical test of the ORMPA model, the next chapter elaborates on the conclusions of this research.

7 Conclusions

"Science is built upon facts,
as a house is built of stones;
but an accumulation of facts is no more a
science that a heap of stones is a house."
Henri Poincare

The objective of this research was to develop and empirically test a model for assessing the marketing performance of online retailers. Herein a special emphasis was placed on small and medium sized firms. This research made several contributions to this aim, while it also created insights in the marketing performance of the case study firm. First the theoretical contributions are discussed, after which this chapter elaborates on the conclusions regarding the marketing performance of The case study firm.

7.1 Theoretical conclusions

In this research several insights are created in the main dimensions and factors on which the marketing performance for online retailers exists. Even though several frameworks for the measurement of marketing performance are identified in the literature review, none of them fully covers the contingencies of online retailing. Therefore the ORMPA model is proposed, which provides a complete overview of all factors that can be used to assess the marketing performance of online retailers. This model constitutes of nine dimensions, being: (1) strategy, (2) resources, (3) capabilities, (4) marketing actions, (5) market assets, (6) positional advantages, (7) customer impact, (8) market performance, and (9) firm and financial performance. Based on an empirical test a simplified ORMPA model is proposed that can be used for marketing performance reporting, which consists of three dimensions: (1) preparation, (2) realization, and (3) outcomes. This model is easier to understand and provides a framework to share the marketing performance findings at a glance. However, there are two important limitations to this simplification. First, it only shows the relative performance in comparison to a benchmark, without the actual performance. Second, many cause-and-effect relations are removed from the model, due to which it is less suited for identifying and prioritizing improvement opportunities. As a consequence the simplified alternative is less useful for executing the marketing performance analysis, as well as for gaining an in-depth insight in this performance.

A second contribution of this research is that it showed how the ORMPA model can be applied in practice. For the operationalization of the ORMPA model, the contextual marketing performance assessment model of Morgan et al. (2002) can be used. This model distinguishes between the three factors (1) strategy, (2) corporate context, and (3) task environment. These three factors influence the time-span of the measurement, referent scores, and the measurement orientation. This research showed that the application of this contextual model at the case study firm lead to useful insights in the ideal measurement characteristics. Besides this, the research also proposed an audit and an elaborate set of metrics that can be used to assess the performance in each of the dimensions. The case study showed that the audit and most of the metrics are useful in practice, although for some measures improvement opportunities exist (e.g. regarding the measurement of supplier performance).

Last, this research showed how the ORMPA model can be applied to a firm setting and can help in creating a complete overview of the marketing performance. All of the dimensions tested in this research uncovered different parts of the marketing performance, although the first three dimensions (strategy, resources, and capabilities) are evaluated in combination. Also hypothesized cause-and-effect relationships can be discovered between factors from different dimensions, which suggest that this model can be used for marketing performance diagnosis and improvement. However, in practice it also turned out the strategy, resources and capabilities dimensions are harder to distinguish from each other. This might be due to the firm size, although it might partially also be caused by using one audit for measuring the first three dimensions (without explicitly distinguishing between resources and capabilities).

7.2 Conclusions about the case study firm

Besides theoretical contributions, this research made practical contributions to the case study firm. These contributions are deleted due to their sensitivity and confidentiality.

7.3 Limitations

There exist several limitations for the conclusions drawn from this research. Chapter two already pointed out the following limitations for this study. First, a limitation exists for the trustworthiness of the study, because the research is conducted by a single research that also acted as an observer and coder. A second limitation exists for the number of cases analyzed. The case study firm might not be a typical case (in regard to all online retailers), which might harm the generalizability of the results. Third, because the model is only applied once, no insight is gained on how well managers are able to manage their business based on the gathered information. Next to this, also no insight is gained in how useful managers find the metrics in practice, and they way managers fine-tune the metrics based on their information needs. A related limitation is that due to the short time span of this research, no insight can be gathered in the relation between the marketing performance as determined by the ORMPA model, and the overall business performance in the same and consecutive periods. A fourth limitation is that some dimensions are only applied in one or a few markets in which The case study firm is active, due to which their might still exists hidden evidence in other markets. Also some of the data sources might have been unreliable, which might have affected the quality of the analysis and findings. Due to data availability problems also some performance factors are measured in an indirect way (for example by interviews rather than performance data analysis), which could have impacted the reliability of their found performance. The last limitation identified in chapter two relates to the way that consumer brand awareness and brand knowledge are measured. These metrics are not determined by a survey or in-depth interviews, but by alternative sources. As a consequence these findings might be biased.

Based on the execution of the research, there are also some other limitations identified for the conclusions drawn on this research. First, some marketing assets are not included in the model because these might not be useful for small and medium sized firms. Among these assets is the brand, which is an important asset to be included for listed companies. As a consequence a theoretical flaw is present in the model, due to which it is less suited for public firms and companies that fully want to value their assets in their financial accounting systems.

Another limitation exists for the operationalization of the ORMPA model. The strategy, resources, and capabilities audit is focused on internal elements that are mainly analyzed by yes and no questions, while the actual quality of all strategies, resources and capabilities is not analyzed. Besides this, factors that influence the quality of online retailing experience and convenience are not included in the operationalization of the model. Such experiences can among other things relate the perceived control that visitors feel in using the website, the shopping enjoyment perceived by customers, the actual intentions of visitors to return to the website, and the number of unplanned purchases made by consumers (Koufaris, 2002). Last, social responsible marketing is missing from the ORMPA model and its operationalization, which for example could have been expressed in a performance factor called internet ecology (Torkzadeh & Dhillon, 2002).

A last limitation is related to the overall performance assessment. The researcher did not conduct a sensitivity analysis to evaluate the impact of differences in weighting factors and standardizing their performance. This allows for a discussion about the validity of the overall performance assessment on for example these dimensions.

8 Recommendations

"The creative process involves getting input,
making a recommendation, getting critical
review, getting more input, improving the
recommendation, getting more critical
review... again and again and again."
Unknown

Recommendations are based on the research, but do not follow as direct from them as conclusions. This chapter discusses the recommendations for theory, practice, and The case study firm.

8.1 Recommendations for science

This section describes the recommendations for science. These recommendations do not cover the areas for further research, but give attention to the points of attention. The recommendations for science are:

1. **Use an iterative design method to study the design of performance measures and measurement systems.** A large share of the theoretical work on performance measurement systems approaches the design from a waterfall method. This implies that they distinguish between several stages like requirement setting, design, implementation, verification and maintenance. Hereby a former stage has to be fully completed before the start of the next phase. However, in this research it is felt that stakeholders create awareness of the requirements over time, whereby experiences from latter stages help in discovering actual needs. Based on this impression it is recommended to develop and implement the performance measures step by step, so that their definition and data collection can simply be adjusted based on these insights. It is felt that by using an iterative design method, whereby a few clearly

defined requirements are realized in a short time frame, will lead to a set of performance measures that better reflect the actual information needs of the business and stakeholders.

2. **Create a common definition and operationalization of performance measures.** As pointed out in this research, there exists a wide variety in theory in practice how measures with the same name are defined and operationalized. This problem affects communication between practitioners and scholars, and it limits the possibility for benchmarking. It will also promote scientific research in the field, because it decreases the chance that differences in findings cannot be caused by differences in definitions and operationalizations.

3. **Apply the ORMPA model in full to create a good understanding about the relation between marketing performance and overall firm performance.** Quantitative research in the field of marketing performance measurement often attempts to study the relation between a few marketing performance measures and firm performance measures. Based on the impression of the researcher, it is expected that a better understanding about the relation between marketing performance and firm performance can be created by applying the model in full.

After discussing the recommendations for science, the next section elaborates on the recommendations for practice.

8.2 Recommendations for practice

Based on this research the following recommendations for practice are made:

1. **Base the measurement frequency on the following four factors: (1) firm size, (2) technological advancement, (3) customer base characteristics, (4) and industry dynamics.** One practical question that follows from this research is how often the model should be applied. For this question no clear answer exists, because the frequency by which it can be applied cost-effective can differ per company. First, this depends on the firm size and technological advancement, which influences available resources and measurement costs. The lower the measurement costs and the more resources are available, the more likely it is that it can be applied in a cost effective manner. However, it is also depends on the customer base. If the customer base is small and has a high buyer concentration, the marketing performance does not have to be measured as often as when the base is large with a low concentration. Fourth, it depends on the industry dynamics, which determine how fast positional advantage

can be gained or lost (and market assets might decrease in value). The lower the dynamics, the less often it needs to be applied. However, overall it is recommended to at least measure the marketing performance every six months. But in more dynamic industries with large customer bases some dimensions might need to be measured continuously, whereby the other dimensions are at least evaluated on a monthly basis in order to make use of the model in the most useful way.

2. **Tune the model based on firm characteristics, experiences in use, and advanced insights in information needs.** In this research first a general operationalization of the ORMPA model is proposed, before the operationalization was tuned to the case study firm. Porter (1996) proposes that a good strategy focuses on doing different things, or doing comparable things in a different way. Therefore it is recommended to not consider the ORMPA model and its operationalization as a best practice that can be implemented directly at any online retailer. Instead, any firm applying it should ensure that those elements that make the company unique are reflected in its marketing performance measurement system. The ORMPA model should be considered as a framework that provides a full outline of the performance dimensions and factors that determine the marketing performance of an average online retailer, but that should be fine tuned in order to make it reflect the intricacies of specific online businesses.

After discussing the recommendations for science and practice, the next section elaborates on the recommendations for The case study firm.

This chapter discussed the recommendations for science, practice, and The case study firm. Next to the research conclusions and recommendations, also some areas for further research are identified. The next chapter elaborates on these areas.

9 Future Research

"It is through science that we prove,
but through intuition that we discover."
Henri Poincare

In this research the ORMPA model is developed, operationalized, and applied. As far as can be assessed by this research, the ORMPA model is a suited framework for online retailers to measure their marketing performance. However, also some theoretical questions are not answered by this research, based on which the following areas of future research are formulated:

1. **The generalizability of the ORMPA model for online retailing.** This research uses a single-case study design, due to which no conclusions can be drawn about the applicability and usefulness of the model for other online retailers. Therefore further research should be conducted to test this generalizibility. In such research the model can for example be applied at firms operating in more mature markets, like online book retailers or online computer stores**.** These insights are also useful for online retailers that target both mature and immature online markets. In such research potentially also attention can be paid to effect of strategic and environmental factors on the operationalization of the ORMPA model. Examples of such factors are the (maturity of the) market, culture, firm size, task environment, supply chain strategy (self-owned inventory vs. drop-shipping), and the customer base (in size and concentration).

2. **The relations between the different dimensions of the ORMPA model.** In this research no analysis is made of the effect of changes in the performance on early dimensions on the performance on latter dimensions of the model. Because the actual relations are not tested, they remain hypothetical. Therefore future research can study these relationships by means of

a quantitative longitudinal study. Based on such insights the model can be fine tuned in order to improve its validity.

3. **The cost-effectiveness of ORMPA model in use.** In this research no analysis is made of the cost associated with measurement, as well as extent by which the ORMPA model enables managers to manage the marketing function. However, such insights are crucial in the adoption of the model. This for example can be tested by means of a longitudinal study, whereby the marketing and firm performance of online retailers that apply the ORMPA is compared to counterparts that do not apply it.

4. **The weighting and standardization of performance factors and dimensions.** The methods to standardize the performance and weight performance factors and dimensions is not necessary the best method. However, the standardization and weighting has a strong impact on the performance interpretation and findings. Therefore further research can be conducted to analyze indication referent scores per industry, best practice standardization methods, and recommended weights. Such insights would further enhance the usability and reliability of the ORMPA model.

5. **Reliable measurement of the strategy, resources, and capabilities dimensions.** In this research a strategy, resources and capabilities audit is proposed. This audit indicates the preparation of the firm for each of the measured factors, but does analyze the actual quality of the strategy, resources, and capabilities. Therefore an area for future research remains how these dimensions can be fully analyzed, so that statements can be made about the quality of the performance factors in these dimensions. Such an analysis can probably partially or largely be conducted by means of a systematical literature review in this topic.

6. **Applicability of the ORMPA model at large sized online retailers.** Despite that this research focuses on SMEs, the model is probably also applicable at large size enterprises or large multinationals. Not only are such insights useful to broaden the applicability of the model, but it provides also guidelines for online retailers on how to evolve their marketing performance measurement system as they grow. Therefore future research could analyze how the ORMPA model can be applied at large online retailers like for example Amazon.

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Online performance measurement tools

- Google Adwords: http://www.adwords.google.com
- Google Adwords Keyword Tool: https://adwords.google.com/o/Targeting/Explorer?__u=1000000000&__c=1000000000&ideaRequestType=KEYWORD_IDEAS#search.none
- Google Analytics: http://www.google.com/analytics/
- Google Realtime Search: http://www.google.com/realtime
- Link Diagnosis: http://www.linkdiagnosis.com/
- Search Status: http://www.quirk.co.za/searchstatus
- Yahoo! Answers: http://answers.yahoo.com/

Annex 1: Interview Schemes

Interview 1: Strategy

Objective:
To create an initial understanding of the company strategy as you perceive it.

Questions:
1. What are the main strategic objectives of the company?
2. What are the main (or potential) strengths of the company?
3. Which key processes, skills, and other elements (like for example location) are essential for the long term success of the company?
4. Based on these strengths; what are the common objectives all employees should work towards too?
5. Based on which elements (price, product features, relationship, lock-in, image, etc) should customers decide to purchase products or services from our firm?
6. In what way does the company want to differentiate from competitors?

Interview 2: In-depth Strategy Interview

Objectives of this interview
The objective of this interview is to create an in-depth insight in the company strategy.

Interview approach:
The first part of the interview focuses on the higher order strategy. The second part goes into more detail into the opportunities and threats that the company experiences, while the last focuses on how The case study firm wants to position itself in its environment.

Part 1: high (abstract) strategy description

1. How would you describe the mission of the company? In other words; what is the purpose of the company and why does it exist?
2. What are the qualities for which The case study firm wants to be known among customers and in its industry?
3. What does The case study firm want to be?
   How can individuals and employees support the firm in achieving this?
4. What are the key strategic themes (or objectives) that the company formulated for the coming years?

Part 2: opportunities and threats

5. What are the main opportunities for the company?
6. What are the main threats for the long term success of the company?
7. What are the main strengths of the company?
8. What are the main weaknesses of the company?
9. What are the main competences or capabilities that (can) give the company a distinctive advantage?

Part 3: the positioning of The case study firm in its industry

10. On which market segment is The case study firm focusing its products and services?
11. How does the value chain (in terms of suppliers and customers) shaped? Is it different from competitors, or the same?
12. What are complementary companies, products, services, and networks that help the company in creating value for customers?
13. Do suppliers have a high bargaining power? What are potential strategies to lower or maintain this level of bargaining power?
14. Do buyers have a high bargaining power? What are potential strategies to lower or maintain this level of bargaining power?
15. How big is the threat of new entrants/competitors?
16. How big is the rivalry among existing competitors?
17. What is most important for the company in order to survive in the coming years?

Interview 3: The case study firm Strategy and Operations Interview

Objectives of this interview
The objective of this interview is to create an in-depth insight in how you perceive the company strategy and how you feel the company should measure performance.

Part 1: Company Strategy

1. How would you describe the company strategy of The case study firm?
2. What are according to you the most important processes in (or elements of) the company?
3. What do our customers value most?
4. What are according to you the most important stakeholders (employees, customers, suppliers, etc.) of the company?
5. What do all of these stakeholders (except customers) value most?
6. How do you see the future of The case study firm?
7. What determines the future success of the company?
8. What could limit or harm this future success of the company?

Part 2: Performance measurement

9. On what performance indicators do you currently report performance to top management?
10. If I would develop a company measurement system, what does it (at least) need to measure to make it useful?
11. In what elements of company performance would you like to get insight? How could you use such information?
12. Should the management system also evaluate intangibles, like service, innovation, employee relations, flexibility, website performance, website content, etc? If so, which ones?

Interview 4: Performance Measurement Interview

Questions:

1. What are according to you the most important stakeholders (employees, customers, suppliers, etc.) of the company?
2. What do all of these stakeholders value most?
3. How do you see the future of The case study firm?
4. On what performance indicators do you currently track performance of the company?
5. On what performance indicators do employees and managers currently report performance to you?
6. What are measures that show we are doing the right things?
7. What are measures that show we are doing things right?
8. If I would develop a company measurement system, what does it (at least) need to measure in order to make it useful?
9. In what elements of company performance would you like to get more insight? How could you use such information?
10. Should the management system also evaluate intangibles, like service, innovation, employee relations, flexibility, website performance, website content, etc? If so, which ones?
11. On a strategic level, what is the maximum number of performance indicators you would like to use?
12. What time horizon should the system ideally use (short term or long term)?
13. Can you rank the following performance measurement functions from most important to least important? Can you elaborate on your ranking?
    a. Coordination (set attention to the business objectives)
    b. Monitoring (measure & report performance)
    c. Diagnosis (promotes understanding of how daily activities affect organizational learning and organizational performance).

Annex 2: Performance measurement model comparison

The table on this and the next page provides the detailed evaluation of the six marketing performance evaluation models discussed in chapter 4, based on performance dimensions that explicitly are incorporated in (or follow from) the discussed frameworks.

Model / *Performance dimension*	Marketing actions	Relationship marketing	Marketing productivity chain	Shareholder value	Normative marketing performance assessment	Subsidiary marketing performance assessment
Marketing Performance						
marketing efficiency					√	
marketing effectiveness	√	√	√	√	√	
firm performance impact	√	√	√	√	√	√
Total:	**+/-**	**+/-**	**+/-**	**+/-**	**++**	**-**
Marketing Inputs						
resources/capabilities					√	√
marketing activities	√	√	√			
marketing strategy			√			
external factors						√
Total:	**-**	**-**	**+/-**	**- -**	**-**	**+/-**
Marketing Outputs						
customer perceptions	√	√	√		√	
customer behavior	√		√		√	
subsidiary performance						√
market performance			√	√	√	√
market position			√		√	
market assets			√	√		√
Total:	**-**	**- -**	**++**	**-**	**+**	**+/-**

Performance dimension / *Model*	Marketing actions	Relationship marketing	Marketing productivity chain	Shareholder value	Normative marketing performance assessment	Subsidiary marketing performance assessment
Marketing Perspectives						
transactional marketing			√	√	√	√
service marketing		√	√		√	
management of relationships		√	√	√		
industrial relationships						√
brand marketing			√	√	√	√
customer value concept						
Total:	**- -**	**-**	**+/-**	**+/-**	**+/-**	**+/-**
Overall impression	**-**	**-**	**+**	**+/-**	**+**	**+/-**

Annex 3: Effects of e-business and internet technologies

The table below provides an overview of the most important differences of e-business and the internet technologies on marketplaces.

Difference	Description
Cost Reduction	Reduction on search costs (for prices and information about products of alternative suppliers), even though this increases the risk for information overload. Also reduction of advertising price and costs for showing product information to additional customers (Bakos, 1991; Papazoglou & Ribbers, 2006; Song & Zahedi, 2006).
Reach	Online a company is able to start a relationship with more customers, while they can also offer a larger assortment to them (Evans & Wurster, 1999). The geographical reach is also extended because products do not have to be traded anymore at a specific location (Song & Zahedi, 2006). This extended reach should not be overestimated or oversimplified, because local adaption (to e.g. languages and cultures) might still be required (Guillén, 2002).
Richness	Companies can offer online more information to customers and visitors, while at the same time they can also collect more information about customers and visitors (Evans & Wurster, 1999). Information about customers and users can also be used to effectively target niche markets, personalize offerings, messages, services, and relationships (Kotler, 2003).
Interactivity	Previous marketing channels are based on a one-to-many communication model with the consumer being a passive receiver. In contrast, the internet is a many-to-many medium (Godin, 2007). This interactivity influences the consumer buying process, especially in relation to information searching, product evaluation, and online transactions (Li & Chang, 2004).
Connectivity and network externalities	Benefits for individual participants can increase when more users/customers join an electronic market (Bakos, 1991). Companies with a larger customer base usually attract new customers at a faster rate (Katz & Shapiro, 1985), whereby a large customer base can be a sign of trustworthiness in online markets. Next to this can the interactivity component of the internet be amplified by a large fan base.
Disintermediation and reintermediation	Marketplace channel structures are influenced by disintermediation and reintermediation (Chaffey, 2007; Kotler, 2003; Benjamin & Weigand, 1995). Disintermediation occurs when intermediaries that previously linked a company to its customers are circumvented, while reintermediation occurs when intermediaries start linking customers to a business (Chaffey, 2007). Online firms can bypass traditional retailers and offer products directly to customers, while using new types of intermediaries like search engines and comparative shopping websites to link with customers.

Difference	Description
Switching costs	Switching costs for customers can be lower due to reduced search and transaction costs, as well as a wider reach of websites (Fernández & Nieto, 2006; Reichheld, Markey & Hopton, 2000). For firms switching costs can be higher, because e-business might require investments in system integration with suppliers and in technology investments for websites and social media applications (Bakos, 1991; Papazoglou & Ribbers, 2006; Song & Zahedi, 2006).
Economies of scale and scope	Even though developing a website might require large initial investments, the incremental costs of adding information of additional products, serving more users/visitors, and conducting additional transactions are low until capacity is reached (Bakos, 1991; Papazoglou & Ribbers, 2006; Anderson, 2006). This way companies can serve more customers while also providing them with both a larger assortment and more (technical) product and service information (Bakos, 1997).
Technological uncertainty	In electronic markets there are large uncertainties regarding the actual benefits and the durability of networks and technologies, sometimes even after investments are made (Bakos, 1991). This makes influences the valuation of assets related to websites and online technologies/networks, while it also affects the opportunity costs of investments.

Annex 4: Value Proposition Survey

Instructions

Objective and introduction
To design an marketing performance measurement system, a deep understanding of the organizational strategy is required. Mintzberg (1994) pointed out that strategy can relate to four things:

- a plan (roadmap for the future),
- a pattern (consistency in the past and current behavior),
- a position (within supply chains, industries and markets), and
- a perspective (a vision about the future and the company‘s role in this).

In this questionnaire, which is based on Van der Marck (2005) and Jeston and Nelis (2006) I will try to create a deeper understanding of your vision towards The case study firm their strategy, especially from a pattern point of view. This questionnaire aims at fulfilling the following objectives:

- Trying to improve my understanding of how you see the strategy of The case study firm, from the viewpoint of actions and decisions made in practice.
- Trying to understand if you experience the value proposition and our systems as working as being consistent and coherent. A value proposition is the unique mix of (1) product, (2) price, (3) service, (4) relationship, and (5) image by which an organization attempts to create benefit for its customers
- Trying to understand if this (in)consistency is experienced structural among different persons working at managing / coordinating positions within The case study firm.

I am aware that this questionnaire contains some limitations, of which the most important are:

- It is originally designed with production firms that operate in a Dutch context in mind – therefore it might only be partially applicable to service organizations that operate in a Dutch context.
- The elements of online business are not yet explicit taken into account in the design.
- Findings are a preliminary indication, but by no means absolute. The questionnaire is based on theoretical ideal cases of strategy – which might not work in practice in anyways. On the other hand, the general pattern of answers can give a good impression of your viewpoints.

Instructions
The survey consist of a table that covers five strategic topics:

- Value proposition
- Process
- Structure
- System
- Culture

For each topic you will find a number of questions/propositions with each a number of statements. The first topic discusses the organizational value proposition. For this topic you can allocate at maximum 20 points among the three statements based on the relative relevancy of each statement. For example; it is possible to give the first statement 20 points, or to give 10 points to the first and to the second statement. In case you consider all three statements (together) not fully relevant for The case study firm, you may also consider dividing less than 20 points.

The topics two till five concern the model of working applied by the organization. For each topic five subjects are selected with each three statements; you can fully agree or disagree with these statements. For each subject you can allocate at maximum 4 points among the three statements. It is possible to for example assign all four points to statement one (when the other two are not relevant), or to divide the points among the three statements. Also here it is not necessary to always divide all 4 points among all three statements; if something is not or only partially relevant for the organization you can also divide less than four points among all options.

Current versus desired situation
In the questionnaire you have the possibility to answer the questions both concerning the current and the future situation. Please divide the total of 20 or 4 points first among the current situations, and then divide again 20 or 4 points over the future situation.

Please fill out this questionnaire individually and please do not share your answers before all respondents have completed their questionnaire.

All answers will be treated confidential – findings are reported in such a way that they cannot be traced back to individuals or their answers

The survey starts on the next page!

Survey

Value Proposition	Current Situation	Desired Situation
*Allocate points among the 3 statements. In each situation, the points should add up to a maximum of **20** points.*		
1 Your organization provides customers an unusual good combination of price, variety, and convenience. In other words, the firms keeps costs for customers low (in time, money and efforts) while giving customers the highest possible level of benefits (in terms of quality and experience).		
2 Your organization provides customers an unusual high service level. We continuously surprise our customers by pushing the limits of our performance and by making our promises come true (our products and services are 'top-of-the-bill').		
3 Your organization provides customers an unusual positive feeling by offering a total solution that exactly meets the needs of individual customers. The provided service is personal, always friendly and competent. Depending on the needs and desires of individual customers our offering is adjusted and our services are customized and expanded.		

Process

*Allocate points among the 3 statements. In each situation, the points should add up to a maximum of **4** points.*

	Statement	Current Situation	Desired Situation
1	a) The cycle and delivery times are reduced to the absolute possible minimum b) Product innovation is the most important aspect of our process c) We focus on delivering a customized solution for each individual customer		
2	a) Our total process is organized and managed in a centralized way b) Market research plays an important role in our developments and innovations c) Our processes are continuously adjusted based on customer needs and desires		
3	a) Further costs reductions in our process are almost impossible b) Fast development cycles for new products and concepts are part of our basic work c) Customer satisfaction is an important benchmark for the way we execute our processes		
4	a) Errors and mistakes can theoretically not be prevented any further b) Developing new products and concepts in parallel is an important element of our business model c) Our customer has a clear idea what we are doing and how we fulfill his needs		
5	a) We are specialized in optimizing processes b) Our marketing process focuses on continuously exploiting our product potential c) Our primary process is based on customer relationship management		

Structure

*Allocate points among the 3 statements. In each situation, the points should add up to a maximum of **4** points.*

1	a) Our activities are to a large extent standardized b) Product innovation is conducted in a separate department that has a big budget c) Our activities are varied, and depend on needs and desires of individual customers		
2	a) Our planning is centralized and 'top-down' b) Product innovation is controlled by top management c) Our planning is 'bottom-up' and varies per customer		
3	a) Responsibilities are clearly recorded and we regularly create and update manuals for working b) There exists a large amount of freedom in daily work and boundaries are unclear c) Employees that are in touch with customers on a daily basis are authorized to make decisions		
4	a) In our processes we regularly check and control b) We continuously adjust our organization based on new products, projects, concepts and services c) Customer relationship management is anchored in our organization		
5	a) Our organizational chart is very easy to draw (rake shape) b) Our organizational chart looks more on the universe than a rake; we operate with flexible teams that are composed on a project basis c) Our organizational chart is an inverse pyramid with the customer on top		

System

*Allocate points among the 3 statements. In each situation, the points should add up to a maximum of **4** points.*

1	a) Our total process is to a large extent standardized and embedded in systems b) Our systems change according to our products on a daily basis c) Our systems mainly focus on being able to select (the best/most profitable) customers		
2	a) All our transactions are processed automatically b) When developing new systems most attention is paid to 'development tools' c) We can easily and fast create insights in our customers		
3	a) invoicing is conducted automatically b) Our systems are developed is such a way that they can change continuously along with new projects c) Our final customers can login to our systems		

4 a) The systems of our suppliers are integrated into our systems
b) Our system forces us to frequently develop new products and concepts
c) Our systems mainly focus on customer retention and repeat purchases

5 a) Our customer services is supported by 'state of the art' applications and technologies to process answers quick and efficient
b) Customer service is continuously trained about our new products, because our concepts and products change so often
c) We keep track of and in touch with customers, even when we did not retain them

Culture

Allocate points among the 3 statements. In each situation, the points should add up to a maximum of ***4*** *points.*

1 a) Our employees know much about their tasks in our processes
b) Our employees know much about our products
c) Our employees know much about our customers

2 a) Our rewarding system rewards efficiency
b) Our rewarding system rewards creativity
c) Our rewarding system rewards customer satisfaction

3 a) Our recruitment processes are focused on selecting persons that work efficient
b) Our recruitment processes are focused on selecting innovative/creative persons
c) Our recruitment processes are focused on selecting customer driven persons

4 a) Everyone is aware of the need to reduce costs
b) Everyone is aware of the need to continuously improve products and concepts
c) Everyone is aware of the need of customer satisfaction

5 a) Our management is a model of efficiency
b) Our management is a model of creativity
c) Our management is a model of customer drivenness

Annex 5: Strategies, Resources and Capabilities Audit

This Annex presents the audit questions and findings of the strategies, resources, and capabilities audit. In the composition of this audit theories are used from: Kotler (1977), Kotler et al. (1977), Wilson (1993), Brownlie (1993), Piercy (1997), Alba et al. (1997); Adams et al., (2001), Constantinides (2002, 2004), Weitz (2006), Murdough (2009), and Lovett et al. (2010).

The audit can be found from the next page on.

Strategy	
Is there an agreed upon and communicated formal product and service strategy?	
Is there an agreed upon and communicated formal e-marking organization strategy?	
Is there an agreed upon and communicated formal website strategy?	
Is there an agreed upon and communicated formal social media strategy?	
Is there an agreed upon and communicated formal market strategy?	
Is there an agreed upon and communicated formal promotion strategy?	
Is there an agreed upon and communicated formal supply chain strategy?	
Is there an agreed upon and communicated formal innovation strategy?	
Is the marketing strategy reviewed on at least a yearly basis (Wilson, 1993)?	
Do the plans have agreed qualitative and quantitative objectives for the short, medium, and long term (Wilson, 1993)?	
Is there a contingency plan for dealing with threats (Wilson, 1993)?	
Are market segments distinguished within marketing plans and activities (Piercy, 1997)?	
Are the most important marketing mix elements per segment analyzed (Piercy, 1997)?	
Are direct and indirect competitors, enterers and leavers, and major competitor characteristics analyzed on a regular basis (Piercy, 1997)?	
Are across markets and market segments the market share, sales projection, success chances, and priorities regularly evaluated (Piercy, 1997)?	
Are likely competitive responses to the most visible strategies evaluated (Piercy, 1997)?	
Are analyses conducted to assess how well our product service combinations meet customer needs in comparison to the competition (Piercy, 1997)?	
Are analyses conducted for critical product or customer needs to assess how well we perform against the competition on the most important product and service dimensions (Piercy, 1997)?	
Are the perceived quality, price position, and market shares of our company regularly compared to that of competitors (Piercy, 1997)?	

Is the perceived convenience of ordering products at our company regularly compared to that of competitors?	
Are historically and current achievements per segment/market tracked and is a prediction made about the future if the company continues to operate this way (Piercy, 1997)?	
Is the marketing strategy clearly communicated to everyone involved (Wilson, 1993)?	
Are all department involved in the formulation of marketing plans (Brownlie, 1993)?	
Financial	
Have financial records a form that permits important and regular sales analysis (Wilson, 1993)?	
Is performance and/or competitor data used for budgets setting (Kotler et al., 1977; Wilson, 1993)?	
Are all marketing activities formally evaluated in terms of effectiveness, costs, and performance versus plan (Wilson, 1993)?	
Is the cost-effectiveness of promotional activities evaluated on a regular basis (Kotler, 1977; Wilson, 1993)?	
Is there a recognized and enforced monitoring procedure to determine marketing costs related to marketing campaigns (Wilson, 1993)?	
Does financial data provide sufficient, reliable, and timely information on customer profitability to enable our targeting and budgeting to be decided with accuracy (Wilson, 1993)?	
Are individual product groups costs, sales, and margins reported regularly (Wilson, 1993)?	
Are the costs of all marketing activities planned and related to sales objectives (Wilson, 1993)?	
Have any true product/service price analysis been conducted (Wilson, 1993)?	
Are prices regularly compared country to country (Wilson, 1993)?	
Do we regularly compare our product prices to key competitors and our pricing position in each segment and the market (Wilson, 1993)?	
Do we regularly examine price trends in the market, both when it comes to	

competitor pricing as well as customer spending (Piercy, 1997)?	
Are credits/returns checked and detailed on sales and margin reports (Wilson, 1993)?	
Are detailed, accurate, and up-to-date inventory reports available at customer service and logistics (Wilson, 1993)?	
Reputational	
Are the company and/or its brands visible in the market (Wilson, 1993)?	
Is there are formal image objective and development policy (Wilson, 1993)?	
Is the degree of image sensitivity assessed throughout the company, particular for those who have customer contact (Wilson, 1993)?	
Is image development an important part of the job activity (Wilson, 1993)?	
Is the marketing message in line with company operations, strengths, and weaknesses?	
Are for each market segment key influencers, the different roles played by people, and the relevant messages and media regularly identified and analyzed (Piercy, 1997)?	
Are within each market segment the major influence sources regularly identified and is the performance compared to competitors (Piercy, 1997)?	
Is within each market and segment the availability of communication media identified and compared (Piercy, 1997)?	
Is the media performance assessed by comparing the expenditure and effectiveness in using each medium with key competitors (Piercy, 1997)?	
Does the company actively engage in social media, thereby referring back to the website, products, or brand (at some point in time)?	
Are online discussions about the company, its brands or products monitored?	
Does the company engage in discussion about its brands or products?	
Does the company track and respond to online reviews and feedback about their operations or products?	
Is the information gathered from social media saved and used to improve the offer or processes?	
Relational	

Does the company have a positive attitude to the provision of services (Wilson, 1993)?	
Are analyses conducted based on customer data to determine why customers buy from the company (Wilson, 1993)?	
Are customer complaints analyzed to determine if a repetitive patterns exists (Wilson, 1993)?	
Are customer complaints analyzed to determine how well and quickly complaints are resolved (Wilson, 1993)?	
Are customer complaints analyzed to determine the post-complaint customer satisfaction (Wilson, 1993)?	
Are customer complaints analyzed to determine the cost of warranty and guarantee claims (Wilson, 1993)?	
Are customer complaints analyzed to determine the cost of complaint rectification outside guarantee (Wilson, 1993)?	
Does customer service have access to sufficient order and customer information to service the customers?	
Does customer service representatives have enough time to service each customer properly?	
Do suppliers compete for customers with us (Wilson, 1993)?	
Are suppliers often visited by management or logistical staff (Wilson, 1993)?	
Are customer service policies benchmarked against competitors (Wilson, 1993)?	
Are guarantee and warranty policies benchmarked against competitors (Wilson, 1993)?	
Are website functionality and usability benchmarked against competitors (Wilson, 1993)?	
Is there access to the most important trade and professional associations (Wilson, 1993)?	
Is the company fully informed about conferences, symposia, seminars, and meetings relevant for the business (Wilson, 1993)?	
Are analyses made about the proportion of business going through each channel for key competitors (Piercy, 1997)?	
Are products checked on their quality and conformance to requirements	

before shipment (Brownlie, 1993)?	
Does the company have insight in and track trends that are occurring among suppliers in their pattern of stock and brand availability (Kotler et al., 1977)?	
Does the company usually meet the screening requirements of suppliers and third party marketing partners?	
Are websites, services, and policies adapted to local languages, standards, and habits?	
Are offerings, messages, and services customized based on customer data or behavior?	
Is the company actively engaged in creating a good presence on online channels with a large, relevant user base?	
Are there strong relations with information intermediaries like search engines and comparison shopping websites?	
Physical	
Is high quality staff for marketing, customer service, IT and the logistical department easy to attract at the locations where the firm operates?	
Are employees easy to retain?	
Is new staff qualified and easy to train?	
Does the company benefit from tax benefits on the locations from which they operate?	
Does the company benefit from human resource advantages on the locations from which they operate?	
Does the company benefit from distribution advantages on the locations from which they operate?	
Is there a significance difference between the stock levels we keep and that competitors hold (Wilson, 1993)?	
Is the distribution performance benchmarked against competitors?	
Does the company posses valuable domain names?	
Are product offerings adjusted based on sales figures and traffic analysis?	
Is the presentation of products and brands adjusted based on popularity in product search, product page stickiness, or sales figures?	

Human Resources	
Does the company have a strict and sophisticated recruitment policy?	
Is the IT staff adequate in number and skills (Wilson, 1993)?	
Is the (online) marketing staff adequate in number and skills (Wilson, 1993)?	
Is the customer service staff adequate in number and skills (Wilson, 1993)?	
Is the logistics staff adequate in number and skills (Wilson, 1993)?	
Is the customer service staff motivated to up-sell and cross-sell products to customers (Wilson, 1993)?	
Do all employees that have customer contact understand the customer-care element in their work (Wilson, 1993)?	
Does each person in the organization appreciate the importance of customer care (Wilson, 1993)?	
Are customer service representatives analyzed on how their persona standards in terms of voice tone, language skills, tact, attentiveness, guidance, and problem solving match up to required standards (Wilson, 1993)?	
Is customer care and sensitivity part of performance appraisal (Wilson, 1993)?	
Is employee performance measured against agreed objectives (Brownlie, 1993)?	
Are customer complaints analyzed to indentify underperformance of staff (Wilson, 1993; Brownlie, 1993)?	
Is there a formal training program appropriate to each job function (Wilson, 1993; Brownlie, 1993)?	
Does a method exists to encourage customers to comment on the cooperation and service of support staff (Wilson, 1993)?	
Are there formal procedures for complaint resolution and dealing with dissatisfied customers (Wilson, 1993; Brownlie, 1993)?	
Are there strict interpretations and solutions for customer complaints (Wilson, 1993)?	
Are there in the customer service processes enough capacity buffers built in for peak times (in terms of answering questions, and handling complaints, etc.) (Wilson, 1993)?	

Legal Resources	
Has the company full knowledge of the local trading and retailing legislation in our exporting countries (Wilson, 1993)?	
Has the company full knowledge of various government schemes and organizations giving financial aid and/or advice and information to assist market research or entry (Wilson, 1993)?	
Is the company multiple times or regularly charged for legal non-compliance in one or more of its markets (Adams et al., 2001)?	
Do procedures exists to protect privacy, customer data and information (Brownlie, 1993)?	
Are any legally protected technologies, applications, or products possessed that can support customer acquisition or retention?	
Organization	
Is there a strong liaison and cooperation between customer service and marketing staff (Wilson, 1993)?	
Is there a strong liaison and cooperation between customer service and the logistics department?	
Are information processing standards relevant to each staff function been set out clearly in job specifications?	
Are there good working relations inside and between departments (Kotler et al., 1977)?	
Are customer-care standards relevant to each staff function been set out clearly in job specifications?	
Is good internal communication possible due to proficiency in English of all employees?	
Is each person aware of how their job relates to others – the internal supply chain (Wilson, 1993)?	
Is there high-level marketing integration and control of the major marketing functions (Kotler, 1977)?	
Does marketing work well with management in research, purchasing, logistics, and finance (Kotler, 1977)?	
Are the marketing responsibilities optimally structured along functional,	

product, end-user, and territorial lines (Kotler et al., 1977)?	
Is the company well organized to gather, generate, and screen new online application or product ideas (Kotler et al., 1977)?	
Does management show a good capacity to react quickly and effectively to on-the-spot developments (Kotler, 1977).	
Information	
Are there systems or procedures for monitoring customer complaints (Wilson, 1993)?	
Does customer service provide information on market trends and sales opportunities (Wilson, 1993)?	
Are there recent inter-firm comparison studies that evaluate our performance against competitors (Wilson, 1993)?	
Is there access to in-depth trend information (Wilson, 1993)?	
Is trend information saved, analyzed, and used (Wilson, 1993)?	
Is sales and customer service variance information tracked, analyzed, and used (Wilson, 1993)?	
Is all necessary information available to make effective decisions in the choice of non-personal marketing activities (Wilson, 1993)?	
Are their mechanisms in place to monitor the average convenience experienced by customers?	
Are their mechanisms in place to identify lost business (Wilson, 1993)?	
Are reasons for the loss of customer orders tracked (Wilson, 1993)?	
Are complaints analyzed on a regular basis (Wilson, 1993)?	
Is competitor information gathered, saved, analyzed, and used (Wilson, 1993)?	
Is data collected about the customer satisfaction of delivery methods, process, and time (Wilson, 1993; Brownlie, 1993)?	
Is data tracked about delays in deliveries (Wilson, 1993)?	
Is information about how the firm image is perceived by consumers actively collected and benchmarked (Wilson, 1993)?	
Is research conducted into the consumer/customer search process for products?	

Is the quality of website content analyzed?	
Is research conducted into the consumer buying process of our products (Wilson, 1993)?	
Is there systematically information gathered about consumer priorities in their needs to be met through purchase (Piercy, 1997)?	
Is market and marketing information saved on a central source in the company (Wilson, 1993)?	
Are market opportunities for future market changes or new product/service opportunities tracked (Wilson, 1993)?	
Does the company posses information on the market for indentifying new products and services, especially in relation to segmentation and user attributes (Wilson, 1993)?	
Does the company do adequate concept research and business analysis before investing heavily in a new idea (Kotler et al., 1977)?	
Does the company do adequate research before setting launching new websites in new markets?	
Does the company have a library or knowledge database that can be used by employees or managers to maintain or update their knowledge?	
Is the website performance benchmarked against competitors?	
Technological	
Does the company have a customer database that is organized around key measures of relational activity (Brownlie, 1993)?	
Is there a market intelligence system in the company?	
Is the marketing intelligence system producing accurate, sufficient, and timely information about developments in the marketplace (Kotler et al, 1977)?	
Are there internal and external market and marketing surveillance systems (outside of web analytics) (Wilson, 1993)?	
Are there systems used to detect substandard performance (Wilson, 1993)?	
Are there monitoring systems in place to identify changes in customer purchasing patterns, circumstances, and markets (Wilson, 1993)?	
Does the company make use of automated information systems that support customer service?	

Does the company make use of automated information systems that support procurement?	
Does the company make use of automated information systems that support warehousing and logistics?	
Does the company make use of automated information systems that support marketing?	
Is the usability of internal applications tested among and optimized in consultation with staff?	
Does management feel that the IT team has good knowledge and skills regarding current and future internet technologies?	
Does the company monitor technological innovations that might be relevant for the business (Day, 1994)?	
Does the company have sufficient technology skills to integrate their products and website in third party or mirror sites?	
Are referrers used to measure the performance of company products on third party or mirror websites?	
Is the usability of the website tested by and optimized in consultation with experts and/or consumers (Constantinides, 2002, 2004)?	
Is the functionality of the website compared to websites of competitors (Constantinides, 2002)?	
Are website content factors (aesthetics, design, lay-out, presentation quality, style, and atmosphere) reviewed by and optimized with experts and/or consumers (Constantinides, 2002, 2004)?	
Does the company make use of a system for website content management (Constantinides, 2002)?	
Does the company make use of a database that supports the automated presentation of product information on the website?	
Does the company offer convenient payment methods (Constantinides, 2004)?	
Are website and transaction security monitored and improved where necessary (Constantinides, 2004)?	
Is the findability of the website regularly reviewed (Constantinides, 2004)?	

Annex 6: Website and Online Promotion Performance Metrics

The table on the remain part of this annex discusses general metrics that can be used to measure website performance, as well as the performance of individual promotional activities like search engine optimization, search engine advertisement, comparison shopping, affiliate marketing, and link building. After the overview with general metrics, activity specific metrics are proposed. This annex is based on theories of: Lee et al., (2000a, 2000b), Farris et al. (2006), Hasan et al. (2009), Waisberg and Kaushik (2009), Kaushik (2010).

Metric	Description	Insight
General metrics		
Unique number of visitors (Farris et al., 2006; Waisberg & Kaushik, 2009; Kaushik, 2010).	The number of unique persons that interacted with the website after entering it from this source.	This indicates the reach of traffic source under the current company/product presentation
Visits	The number of times a person entered the website	Provides insight in the amount of traffic generated with this source.
Bounce rate (Waisberg & Kaushik, 2009; Kaushik, 2010)	The percentage of visits in which only one page is visited, and where the visitor left the website within a short period of time.	A high bounce rate might result from a poor targeting, suggesting that the source is not referring traffic from the target audience.
Share of visitors	This is the percentage of unique visitors referred by this traffic source in comparison to the total amount of search traffic.	This signals the relative importance of this source in terms of the proportion of unique visitors it generates.
% of new visits (Waisberg & Kaushik, 2009)	This is the percentage of new unique visitors from this source divided by the total number of unique visitors referred.	This ratio points to how well the source is able to attract a new, unique audience, and to which extend it overlaps with the existing audience (or traffic referred through other sources).
Change in visits	On a monthly or yearly basis: the new traffic volume minus the old volume, of which the sum is divided by the old search volume.	It is indicates changes in attracted search volume; when used on a yearly basis it filters out seasonal effects. If possible, this metric is most insightful if also the share of traffic from the source can be calculating, to determine if the relative position in the source is improving.
Average time on site (Waisberg & Kaushik, 2009; Kaushik, 2010)	The total time spend on the website by visitors that entered from this source, divided by the total number of unique visitors (bounces excluded).	This is an indicator about the persuasiveness of the content for the visitors, which relates to both the quality of the traffic as well as the content.
Pages per visit (Waisberg & Kaushik, 2009)	This indicates the average number of pages visited by the traffic generated by this source.	This is an indicator about the persuasiveness of the website for the visitors, which relates to both the quality of the traffic as well as the content.
Visitor loyalty (Kaushik, 2010)	This shows the average number of website visits per unique visitor.	This indicated if the display on the referral site mainly resulted in one visit, or resulted in loyal visitors that continue visiting the website, and is an indication of the

Metric	Description	Insight
		quality of branding of the promotion activity.
Number of sales	The number of orders placed after visitors entered the website through this medium in the last 30 days.	The total number of orders placed, which is an indication on how well the firms is achieving its business objectives (from a transactional marketing perspective).
Share of Sales	The number of orders generated by this activity divided by the total number of orders placed at the website.	A high share of sales indicates a relative high importance and dependence on this activity in terms of order volume.
Visits to sales conversion rate (Kaushik, 2010)	The number of orders in a period divided by the number of unique visitors over the same period.	This ratio shows how well the website is able to convert visitors into customers.
Revenue generated	Total revenue	This signals how well the website is contributing to business objectives.
Average order value (Kaushik, 2010)	Total revenue divided by the total number of orders	Here an indication can be found on the average customer spend per order.
Share of website revenue	The total revenue generated by this promotion activity divided by the total website revenue	This signals the relative importance of this source in terms of overall contribution to revenue.
Revenue per visit	The total revenue from SEO divided by total amount of search queries that generated traffic to the website.	Provides insight in the average revenue per visit that is attracted by this medium, which indicates it relative effectiveness. This insight can be used for budget setting.
Cart start rate	The total number of times a customer adds a product to the cart divided by the total number of unique visitors	The cart start rate is an indication about the customer interest in the company their products, as well as their progress in the buying cycle (a need is recognized and alternatives are considered, or the customer is even willing to make a purchase).
Cart abandonment (Kaushik, 2010)	The percentage of times products are added to the shop cart by visitors from this source, while the order is not completed.	This provide an indication to the readiness of the customer in the purchasing process. On a website level a high abandonment rate can also reflect problems with hidden order costs, payment problems, or an inconvenient purchasing process.
Average number of days to purchase (Kaushik, 2010)	The total number of days between all first visits and order date, divided by the number of orders.	This is an indication of the customer longevity of visitors from this channel, which indicates their progress

Metric	Description	Insight
		in the buying process at the moment of the first visit. This number can also used to optimize sales promotions to channels from this channel.
Average number of visits to purchase (Kaushik, 2010)	The total number of visits made before an order was placed, divided by the total number of first time purchases by customers from this channel.	This indicates how many interactions there usually occur between the website and the customer before (s)he is ready to make a purchase. In case the longevity of the visitors is high, possibilities exists that customers use this traffic source in combination with other referrals. Besides this, this may provide an indication in difference in customer segments and purchasing readiness of the audience.
# of keyword (combinations) important in traffic creation	The total number of keyword combinations who's use on the medium resulted in fifty visits or more.	This shows the most important keywords to the firm and their relative dependence of the website on a few keyword or keyword combinations.
SEO and SEA Metrics		
Share of relevant searches attracted	Total number of unique visitors attracted on keyword combination divided by the total search volume for the company its products.	This provides a suggestion about share of relevant searching traffic the company is attracting to its website.
Share of top entrance pages	The ratio between the total traffic entered in the top entrance pages, divided by the total amount of traffic entered the website using this source.	Indicates the relative dependence on top entering pages, which indicates if efforts can be concentrated to further optimize these pages.
Keyword engagement in time for top keywords	For top keywords: the average time spend on website during the first visit.	Provides an insight of the quality of traffic generated by these keywords.
Keyword engagement in depth for top keywords	For top keywords: the average number of pages visited during the first visit.	Provides an insight of the quality of traffic generated by these keywords.
Additional SEO metrics		

Metric	Description	Insight
Keyword combination dependency	Number of different keyword combinations attracting more than 10 unique visitors a month	The relative dependency on a few keyword combinations.
Long tail / short tail ratio	The number of keyword combinations attracting more than 25 visitors a month, divided by the number of keyword combinations that attract less than 25 visitors a month (but more than one).	The relative importance of long tail keywords in traffic generation.
Number of website pages indexed in Google	Number of website pages indexed in Google	The number of pages that are considered relevant enough by Google for indexation.
Percentage of keywords on position 1 (in Google)	From a sample, the number of keyword combinations for which the website has position 1, divided by the total sample size.	The relevancy of the website for this keyword in relation to competing sites (from the judgment of Google).
Percentage of keywords in top 3	From a sample, the number of keyword combinations for which the website has a position in the top 3, divided by the total sample size.	The relevancy of the website for this keyword in relation to competing sites (from the judgment of Google).
Percentage of keywords top 10	From a sample, the number of keyword combinations for which the website has a position in the top 10, divided by the total sample size.	The relevancy of the website for this keyword in relation to competing sites (from the judgment of Google). This also indicates SEO improvement opportunities in case the keyword combinations have a high search volume.
Percentage of keywords top 20	From a sample, the number of keyword combinations for which the website has a position in the top 20, divided by the total sample size.	The relevancy of the website for this keyword in relation to competing sites (from the judgment of Google). This also indicates SEO improvement opportunities in case the keyword combinations have a high search volume.
SEA metrics		
Number of impressions	The number of time the advertisement is displayed in the search engine	Indicates the reach of the advertisement under the current conditions.
Click through rate	The percentage of the total clicks on all campaigns divided by the total number of impressions	Indicates the relevancy and persuasiveness of the advertisement copy, as well as the relevancy of the

Metric	Description	Insight
		keywords for this campaign.
Average cost per click	Total costs divided by the number of clicks	Indicates the average costs of attracting a visitor to the website.
Average position	The average position the advertisement is displayed among competing adds.	Refers to how well the costs and position are optimized. Ranking an add on a higher position costs more, but also is likely to receive more clicks. Even though in a high position a smaller share of the traffic might be relevant, people ready to purchase might not consider a lower ranked add.
Comparison Shopping (per partner website)		
Number of competitors	Total number of competitors present on the comparison shopping website.	Provides an indication of the chances that users of this comparison shopping can directly compare offers from multiple merchants.
Average page of first product display	The sum of page numbers where the first product of the company is displayed, divided by the total number of keyword combinations in the sample	It provides insight in the visibility/findability of the products on the website.
Average position on first page of relevant product displays	The average position of the first company product in the search results, for all keyword combinations in the sample that have a company product on the first page.	It provides insight in the visibility/findability of the products on the website.
Product dominance	The average number of company products on the first result page on relevant keyword combinations	Shows the relative dominance of company products compared to that of competitors.
Affiliate marketing (not relevant for the analysis)		
Total number of affiliates	Total number of publishers that gained access to the campaign	Provides an indication of the attractiveness of the campaign on first sight.
Percentage of affiliates referring more than 30	Total number of affiliates that referred at least 30 unique	Shows the adoption level of the campaign among the

Metric	Description	Insight
visitors/month	visitors in a month.	affiliates that have access.
Percentage of affiliates referring sales	Total number of affiliates that referred a sale in the last month	Shows the adoption among affiliates where the target audience is present.
Percentage of change in sales referring affiliates	On a monthly or yearly basis: the new amount of affiliates minus the old amount, of which the sum is divided by the old amount.	This indicates the extent to which the amount of affiliates that is referring sales is changing.
Number of good affiliates	Number of affiliates referring more than 15 sales/month	Number of affiliates that make a strong contribution to the company their sales, and where potentially a further relationship can be developed with (customized datafeeds, creative, and etc.).
Percentage of good affiliates	The number of good affiliates divided by the total number of affiliates referring sales.	Relative importance of each good affiliate.
Percentage of change in good affiliates	On a monthly or yearly basis: the new amount of good affiliates minus the old amount, of which the sum is divided by the old amount.	This indicates the extent to which the amount of good affiliates is changing.
Total commission paid	Total commission paid to the affiliate network and affiliates as compensation for approved sales.	This indicates the total variable costs related to the affiliate sales.
Percentage of approved sales	The total number of approved sales, divided by the total number of sales claimed by affiliates in the network.	This shows the combination between how well the company is able to follow up and fulfill orders generated by affiliates, as well as the reliability by which orders are claimed by the network.
Number of potential dodgy affiliates identified	The total number of affiliates that are suspected to have claimed visits or sales through the affiliate in an inappropriate or illegal way.	This number suggest the expected network reliability, as well as the quality processes in place at the network to filter dodgy looking sales.
Number of affiliates abandoned from the campaign	The total number of affiliates that are abandoned from the campaign because either the network or the company identified inappropriate or illegal activities.	This number suggest the expected network reliability, as well as the quality processes in place at the network and the company to detect and filter dodgy looking sales.
Linkbuilding		
Total number of inward links	The total number of non-paid and non-affiliate inward links	This suggest the link popularity, in terms of the amount of websites that refer to the company.

Metric	Description	Insight
Total traffic from referral websites	The total number of monthly unique visitors generated by non-paid and non-affiliate inward links.	This is an indication of the combined importance of these websites from a traffic perspective.
Share of visitors	This is the percentage of unique visitors referred by this traffic source in comparison to the total amount of search traffic.	This signals the relative importance of this source in terms of the proportion of unique visitors it generates.
Number of different anchor texts	Anchor text are the link text names used by the referring website. This metric indicates the total number of different anchor texts used	The variance in anchor texts is an import factor that influences the variance of keyword combinations on which the website potentially can be found in Google (so it is important for SEO purposes).
Percentage of “no-follow” links	The number of links with a “no-follow” tag divided by the total number of inward links	No-follow links transfer less/little SEO value, but a healthy percentage is also required to have a healthy incoming link structure.
Percentage of “good links”	The number of links that are included on the website from a SEO optimal way, divided by the total number of inward links.	This percentage indicates the proportion of links that are optimized in the way they are integrated on the website.
Homepage PageRank	The PageRank of the homepage. PageRank is a measure used by Google to indicate a website its relative popularity on the internet (in terms of inward and outward links), and is visualized on a ten point scale.	This measure indicates how the website is valued by Google regarding the strength and relevancy of the inward and outward link structure. The higher the number, the better.
Total number of inward links with PR 1 of higher	The total number of links that according to Google at least have some inward link popularity	This indicates the number of websites that in theory have the possibility to transfer (some) SEO value to the company website.
Total share of inward links with PR 5 or higher	This measure shows the percentage of inward links with a high PageRank, being 5 or higher.	This indicates share of relative popular websites that link to the company, and have a strong possibility to transfer SEO value to the website.
Total share of inward links with PR 3 or 4	This measure shows the percentage of inward links with a medium, but not high, online popularity.	This indicates share of relative medium popular websites that link to the company.
Total share of inward links with PR 1 or 2	This measure shows the percentage of inward links with some but a low online popularity.	This indicates share of relative low popular websites that link to the company.
Total number of inward links with PR 1 of higher	The total number of links that according to Google at least have some inward link popularity	This indicates the number of websites that in theory have the possibility to transfer (some) SEO value to the company website.

Metric	Description	Insight
Total link strength	An estimation of the total SEO value points transferred by all inward links to the company website.	This is an alternative to the PageRank measure, and indicates the strength of the inward links without considering relevancy and outward links.

Annex 7: Website Functionality Checklist

A simple way to check the website functionality is by functionality checklist. This annex presents a checklist for online retailing websites based on theories of: Hasan and Tibbits (2000), Straub et al. (2002), Travis (2003), Wu, Mahajan and Balasubramanian (2003), Constantinides (2004), and DeLone and McLean (2004).

The checklist is presented in the table on this and the next page. Under Y/N can be found if the criterion is present at the The case study firm website. Since all websites of The case study firm are based on the same design, lay-out, and functionality, the checklist is relevant for all websites.

Functionality Factor	Y/N	Functionality Factor	Y/N
Navigation & search function:		**Payment & safety:**	
Consistent navigation	Yes	Convenient payment methods	Not in NL
Navigation clearly visible	Yes	Transaction secured with SSL	Yes
Are there navigational aids at the top and bottom of each page?	Yes	Customer information secured with SSL	No
Do links have a clear intent and destination?	Yes	Server hacker proof analysis & certificate	Yes
Is there a convenient and obvious way to manoeuvre among related pages and between different sections?	Yes	Information about customer privacy	Yes
Does the site make effective use of hyperlinks to tie related items together?	Yes		
On-site search function for information	No	**Terms & shipment information:**	
On-site search function for products	Yes		
		Information page with shipping information	Yes
Buying help & customer service:		Information page with cooling off, return, and refund policies	Yes
Buying guide / Help	Yes	Terms	Yes
Customer service contact information	Yes	Information page with guarantee information	Yes
Customer support chat function	Yes		
Virtual try-on of products	Yes		
FAQ section	No		
Conflict resolution information	Yes		
Feedback option	Yes		

Assortment presentation:		**Content:**	
Product pictures	Often	Does the homepage make clear what one can do on the website?	Yes
Product information availability (size, colors)	Yes	Does each page indicate what one can expect to find or do?	Yes
Clear indication of value added services	Yes	Is the content clearly written for an intended audience?	Yes
Product comparison option	Yes	Does the site use a familiar and comfortable language?	Yes
Real-time marketing offers	Yes	Relevant content	Yes
Clear division of products in categories	Yes	Varity of information about products and background information	Yes
		Response (download time) under 2 sec.	Often
Consistency:		Dynamic content	No
Does the site have a clear and recognizable 'look & feel'?	Yes	Customization interactivity	No
Does the site make use of repeating visual theses to unify the site?	Yes	Varity of information about products and background information	Yes
Is the website visual consistent, even without graphics?	Yes	Is page length appropriate to site content?	Yes
Is the retailer name shown at top of each page?	Yes	Does the website contain a sitemap?	Yes
		Other:	
		Subscription to newsletter option	Yes
		Online order status tracking	Yes
		Online games	No

Annex 8: Website Usability Analysis Description

Deleted because of confidentiality.