MASTER THESIS BUSINESS ADMINISTRATION, SERVICE & CHANGE MANAGEMENT

ASSESSING THE STRATEGY OF A DUTCH RETAILER AMONG ITS STORES

A strategy map analysis of the relationship between quality and efficiency

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1. Introduction

This first chapter will clarify the scope of the research by providing information regarding the background of the research, research context, the research questions, the expected scientific and managerial relevance and a brief outline of the thesis. The problem statement as well will be presented in this chapter that forms the external basis for this study.

1.1 Background to the research

In these current times of fast paced capitalism in an ever increasing 24 hours economy, the issue of managing business performance becomes ever more relevant for both scientists and managers (Otley, 1999). Performance management has exerted a severe influence on the actions performed by companies, confirming the importance of properly assessing performance (Folan & Browne, 2005). While performance management was traditionally primarily used in manufacturing firms (Otley, 1999), recent changes have forced more service driven firms to also thoroughly assess their performance. Since the massive adaptation of the internet, customers can also quickly assess performance of businesses by looking up ratings from other customers, with potentially devastating results for bad performing firms. The key to successful performance management is choosing the right performance indicators that underline a chosen strategy (Kagioglou, Cooper, & Aouad, 2001). Throughout the twentieth century, traditional financial performance indicators (like ROI, sales per employee, etc.) dominated performance management (Kagioglou, et al., 2001). Together with the rise of service firms using performance management, non-financial performance indicators (customer satisfaction, supplier satisfaction, etc.) are seen as equally important in literature (Kagioglou, et al., 2001; Folan & Browne, 2005; Kaplan & Norton, 2001). The major criticism on financial indicators is their tendency to measure past performance, making them so called 'lagging metrics' (Ghalayini & Noble, 1996), centered around the idea that results from the past do not assure future performance.

In the retail sector, performance management research is heavily concentrated around retail banking, with research done by Bartel (2004) in HR performance of banks, Frei, Kalakota, & Leone (1999) studying process variation as a determinant for banking performance, and Wu (2012) constructing a strategy map for banking institutions. Performance related research of supermarkets revolves mainly around customer satisfaction and how this affects performance, with research done by Juhl, Kristensen, & Østergaard (2002) in Danish supermarkets, research in US supermarkets done by Gomez, McLaughlin, & Wittink (2004), and a study by Ruiz, Zarco, & Yusta (2010) that clarifies the key factors of customer satisfaction in Spanish grocery stores. These studies conclude that customer satisfaction is seen as an important driver for economic success, with satisfied customers that not only become more loyal themselves, but even bringing in new customers by communicating positive experiences. In order to improve customer satisfaction, service quality is seen as crucial in the retail industry (Mägi & Julander, 1996). The findings of Mägi & Julander (1996) in Swedish supermarkets suggest a positive relationship between service quality and customer loyalty. However, no direct link was found to profitability, with productivity (efficiency) having a negative effect on service quality. Less employees would mean an increase in efficiency due to having to pay

out less salaries, while a decrease in service quality arises due to the absence of qualified employees to help out customers.

The relations between the different drivers that steer performance therefore are thus not well understood in the retail sector, making room for additional research that could clarify the relationships. These findings indicate the delicate balance in which supermarkets find themselves with regard to giving enough quality to the customer, while remaining efficient in order to remain profitable.

1.2 Research context

The organization that is willing to provide a research problem for this study is PLUS Retail BV (hereafter Plus), a supermarket formula which is part of the larger Sperwer Groep organization, an organization with a cooperation structure. Plus has 254 supermarkets throughout the Netherlands, led by 217 entrepreneurs, employing 741 fte's and an accumulated consumer turnover of two billion Euro in 2013 (Plus.nl). This specific assignment was constructed by and takes place within the service bureau shop organization division (Servicebureau winkelorganisatie NL) part of the headquarters of Plus in Utrecht. The service bureau is the link between the shop floor operations and strategic policy of the formula, and it is split up in three parts: 1. The general helpdesk (the first point of contact for the entrepreneurs), 2. *the process specialists* (support in improving the quality of the basic processes of the stores), 3. *the product specialists* (support in realizing excellent execution on the various focus groups of the stores). The process and product specialists develop periodic analysis on a quarterly basis of the performance per store. Based upon the analysis, improvement programs can be developed in consultation with the cluster manager. The analysis of the specialists can be monitored by stakeholders with a digital tool, improving the transparency.

The strategy of Plus is centered around the ambition to become the best service supermarket by 2015 (Plus jaarverslag, 2013). This emphasis of focusing on customer service is in line with strategic literature by for example Bates, Bates & Johnston (2003), who conclude that strategies focusing on service are more profitable than strategies focusing on offering low prices. In order to reach this objective, a new formula concept is rapidly introduced that demands remodeling of the stores, in order to make daily groceries in all aspects an easy and pleasant experience for the customers. By the end of 2013, almost half of the stores was remodeled (45%), with positive feedback from both customers and entrepreneurs. On average, the remodeled stores generate 10 percent of growth in turnover the first year, and another 5 percent in the second year (Sperwer Groep jaarverslag, 2013). By the end of 2015, Plus therefore hopes to have remodeled every store. The reward for being the most customerfriendly organization of the Netherlands in 2013, therefore is seen as a sign leading to realizing the strategy. However, while the absolute turnover from 2013 has increased by 1,0 percent, there was a 2,8 percent decrease in volume in 2013. This means that the increase of prices compensated the decreasing volume. Plus states in its annual report over 2013 that this was mainly caused by the large scale remodeling of the stores, causing a loss of turnover for the weeks that the stores were closed.

The supermarket industry in the Netherlands is characterized by heavy competition of a few big players that causes a downward pressure on the consumer prices and therefore the margins. This negative development is countered by the earnings model of Plus, together with economies of scale and improvements of the efficiency (Sperwer Groep jaarverslag, 2013). The market share over 2013 regarding service supermarkets (with the biggest competition from Albert Heijn and Jumbo/C1000), has remained stable. However, the intensity of competition from discounters like Aldi and mainly Lidl have caused a shift in the food retail industry. Aldi has started selling well known quality brands like Coca Cola, while Lidl on its part has constructed a good reputation on the fruit and vegetables department. Lidl is offering customers a lower price than the service supermarkets, while maintaining a high quality of products, winning them 'best supermarket in fruit and vegetables' in the Netherlands for three years in a row. At the same time, this forces the more service driven supermarkets to offer better pricing to customers, which places both the discounters as well as the service supermarkets in a big middle segment as seen in figure 1. Other industry trends in food retail are: the adaptation of online groceries by customers and an increase in the demand of responsible products like Fair Trade fruits and vegetables.



Figure 1, Source: Grewal, Krishnan, Levy, & Munger (2006)

1.3 Problem statement

The research problem for this study is focused on the AGF (Fruit, vegetables and potatoes) departments of the Plus supermarkets. The AGF department is considered an important driver for the success of the company in the strategy of Plus, because of the relatively high margins and importance for the customer (most people tend to eat fruit and vegetables on a daily basis). Despite this stated importance, performance of the AGF departments in general is below expectations of the Plus headquarters. Plus divides shops in a performance matrix of

efficiency and quality, which is in line with research done by Mägi & Julander (1996), who conclude that the performance of supermarkets mainly relies on these two concepts. It should however be considered that the performance of a retail store or chain is much more complex than just a separation of efficiency and quality.

Efficiency is defined as: "a measure of output, divided by the inputs needed to produce the output, resulting in a ratio" (Boddy, 2008, p. 607). Essentially, efficiency comes down to doing things right, by using the least amount of resources relative to accomplishing the stated objective. The efficiency ratio can be calculated for a single input and output, or by aggregating various inputs/outputs at the same time. However, using multiple factors creates a problem of aggregation, making single production factors in efficiency calculation more common (Barros, 2005). Efficiency is broadly used in all types of businesses, since it can tell how productive a certain unit is. In retail, the efficiency of individual retail stores within a group is a vital issue in regard to the competitiveness of the firm, because the total profitability of every chain firm is dependent on the profitability of the constituent stores (Barros & Alves, 2003). While measuring efficiency in retail is considered important, it is also perceived to be a complex and difficult task, because of the multidimensional aspects influencing efficiency (Donthu & Yoo, 1998). Various input and output factors influence the efficiency of a retail store. Plus defines efficiency as: sales times the gross margin, minus the operational costs (product loss and labor costs). The output is sales times the gross margin, the input are the operational costs.

Quality as defined by Boddy (2008, p. 695) is: "The (often imprecise) perception of a customer regarding a product and/or service, that what has been provided is at least what was expected for the paid price". The concept of quality was first introduced in the manufacturing sector, with the theories and techniques not being applied in the service sector before the end of the twentieth century (Boddy, 2008). The retail sector is characterized by a balanced distribution between product quality and service quality, customers expect an acceptable product that is delivered with acceptable service (Krafft & Mantrala, 2006). Mägi & Julander (1996) however, claim a shift in interest towards service quality in the retail sector, since increased service quality is assumed to have a positive impact of the loyalty of customers and thus profitability. Augmenting products with services is used by retailers on a large scale in order to gain differentiation in the competitive market nowadays (Homburg, Hoyer & Fassnacht, 2002). In retail, services are used in order to add value to the core offering, meaning that services are not the core offering itself (Homburg et al., 2002). Providing customers quality based upon a service strategy is the predominant way for retailers to differentiate, leaving other factors like prices and assortments to be less important (Homburg et al., 2002). Quality is defined by Plus as: "all the different non-financial elements that shape the department, like for example: assortment, presentation, product quality and quality of the employees."

There are four types of shops within the matrix:

1. *Shops with a good performance on efficiency and quality*: These shops are the example of good performance for Plus with possible policies that can be used to improve other shops. The

biggest challenge with these shops lies with extracting the right factors that steer the performance.

2. *Shops with a good performance on efficiency but not on quality*: This type of shop presents a big challenge to the Plus headquarters since the entrepreneurs achieve financial performance despite delivering the desired quality. Being an organization that wants to provide excellent service to its customers as a Unique Selling Point this logically is undesirable for Plus. Motivation to invest in quality by entrepreneurs is possibly lacking due to satisfaction with the current financial results.

3. *Shops with a good performance on quality but not on efficiency*: While delivering on the quality component of performance, financial performance of these shops is lacking. Finding out the reasons causing the low efficiency and turning them around is the main challenge for these shops. These shops are interesting since they apparently align with the strategy of delivering quality, while not reaching desired total performance, thus challenging the followed strategy.

4. *Shops with a bad performance on both efficiency and quality*: Scoring low on both performance components these shops need the most work to turn them around in desirable departments. Logically, deriving from the strategy of Plus, these shops lack in delivering the necessary quality to achieve desirable efficiency.

The problem revolves around the conception that too few shops belong to the first category, which means too many shops fall in any of the other three categories. In order to improve the overall performance of the AGF department Plus wants to research the relationship between efficiency/quality and customer share of various shops (performance). Customer share is defined as the part of the total expenses that customers spend on AGF. By analyzing different variables (like presentation, occupation, etc.) Plus wishes to develop a customized approach for the different shop types in order to boost performance.

1.4 Research questions

This section will deal with the main research question of this thesis and the two constructed sub-questions that help answering the main research question. Only working with one research question would be to complex due to its large scope.

1.4.1 Main research question

There is scientific research which concludes that delivering good (service) quality as an organization ultimately leads to an improved performance, as stated in paragraph 1.1. Plus has build on this relationship by developing a strategy build around providing excellent service quality, as can be read in paragraph 1.2. Still, in practice there are quite a few stores that apparently provide sufficient quality while not being efficient, questioning the followed strategy. On the other hand are the stores that are being efficient without providing sufficient quality, challenging the strategy as well as the general conclusion in literature regarding service oriented firms. These apparent irregularities are brought forward in conclusions from different authors in literature that question the link between delivering (service) quality and the final results of a company. The ambiguity surrounding quality and performance form the

basis for the constructed main research question of this thesis:

- Does quality lead to better performance in the Dutch retail sector?

In order to answer the main research question, two sub-questions are developed to narrow down the scope. They are featured in the following paragraphs.

1.4.2 Sub-question 1

- What are the critical factors influencing performance in retail?

This first sub-question will initially treat all important factors that influence the performance in the retail environment that are researched in previous studies.

The found factors will be constructed in a balanced scorecard to accurately visualize all different factors. The balanced scorecard has a construction with four different perspectives (or dimensions) that allow for this accurate visualization. In the second part of this thesis balanced scorecards are created by store managers of the different categories that are used by Plus, with their distinction based upon quality and efficiency. The comparison will lead to the conclusions to this sub question and finally the main research question. To explain the balanced scorecard and its advantages and drawbacks, the following section will feature an explanation.

The balanced scorecard

Performance measurement is a subject that gathered a lot of attention in business literature throughout the years, arguably because of its practical use in business (Quezada et al., 2009). In a 1992 Harvard Business Review article Robert Kaplan and David Norton introduced the concept of the Balanced Scorecard (BSC). In this performance management system nonfinancial measures were incorporated since they are seen as the drivers to improve long term performance, performance that could be harmed by solely relying on financial indicators to assess (part of the) the business (Kaplan & Norton, 2001). Before the introduction of the BSC, company success was primarily motivated, measured, and evaluated based upon purely financial indicators (Kaplan, 2010). The BSC was constructed by combining literature that seemingly developed in isolation from each other: the financial economics literature that was focused around achieving financial measures, the literature on quality management that was focused around reducing waste and continuous improvement to build firm responsiveness, and the stakeholder theory that focused on satisfying the various needs of the different constituents of an organization (Kaplan, 2010). Worldwide adoption of the BSC system in different types of organizations, with different strategies, confirmed the acclaimed benefits of Balanced Scorecards (Kaplan, 2010; Wu, 2012). The four perspectives with different metrics for the BSC are: 1. Financial, which focuses on the strategy for growth, profitability, and risk viewed from shareholder perspective, 2. Customer, focusing on the strategy to create value and differentiate for the customers, 3. Internal Business Processes, focusing on the multiple business processes that generate customer and shareholder satisfaction, 4. Learning and Growth, focusing on the creation of a supporting culture of organizational change, innovation, and growth. These perspectives are aligned with the strategy and vision of the business rather

than control (Irwin, 2002; Kaplan, & Norton, 2001). Constructing a BSC provides insight into the strategy and performance of the business not only for managers, but also for employees and investors (Norton, 1999; Wu, 2012). In the following section, the four perspectives will be briefly explained.

Financial perspective

Within the financial perspective, for profit-seeking organization, increasing shareholder value is the primary interest. Firms basically increase shareholder value through two approaches: revenue growth and productivity. Revenue growth focuses on increasing sales to existing customers by deepening relations, and attracting new customers by offering new products/services in new or existing markets. A productivity strategy consists of improving the cost structure by lowering direct/indirect costs, and a decrease in working and fixed capital needed to support a certain organizational level (Kaplan & Norton, 2001).

Customer perspective

The second perspective is concerned with creating customer value, which is the unique mix of product, price, relationship, service, and image that an organization offers the customers. The importance of customer value comes from the linkage between internal processes and improved customer outcomes. There are three basic ways for firms to differentiate their customer value offering: 1. operational excellence, requiring a focus on competitive pricing, product quality/selection, and reductions of lead and delivery time; 2. customer intimacy, centered around improving relationships with customers, offering high quality service, and offering individual customers complete solutions; 3. product leadership, focusing on functionality, performance, and features of the different products/services offered. Firms need to excel in one way while maintaining sufficient standards in the other two ways (Kaplan & Norton, 2001).

Internal process perspective

The third perspective consists of the critical firm activities that support the shareholder and customer value propositions. There are four critical processes: 1. Build the franchise, motivating innovation by developing new products/services and penetrating new customer segments and/or new markets; 2. increase customer value, broadening and deepening relationships with current clients, 3. achieve operational excellence, improving supply chain management, using assets more efficient, and managing resources and capacities; 4. become a good corporate citizen, constructing effective relations with external stakeholders. The most common mistake made by companies is disconnection between the chosen strategy and how they measure that strategy (Kaplan & Norton, 2001).

Learning and Growth perspective

The last perspective deals with the foundation of every strategy, aligning human capital, information capital, and organizational capital with the internal processes and shareholder/customer perspective. It builds on the employee capabilities, technology, and corporate climate that are needed for strategy support.

There has been some criticism in literature concerning the balanced scorecard by for example Lipe & Salterio (2000), who claim that upper management rely primarily on common

measures in evaluating business unit performance, ignoring specific measures that are unique to the strategy of the business unit. These findings would undermine the acclaimed main benefit of the BSC to capture the strategy of the business. Lacking a categorization of strategic linkages however, the results of Lipe & Salterio (2000) do not tell if upper management would rely on unique measures that are aligned with the strategy of the business unit. Banker, Chang & Pizzini (2004) found out that the availability of strategic information significantly influences evaluation by top management. Provided with additional information regarding the strategy of the business unit, strategically linked measures have a significantly greater influence than common measures. These findings suggest that upper management should be properly informed before evaluating a certain business unit to effectively implement a BSC (Banker et al., 2004). Other limitations of the BSC/strategy map according to Dror (2008) are: solely focusing on learning as the only source of causality, a lack of basic guidelines for the choosing of performance measures, no method for setting targets to measures, a complex feedback loop between the financial perspective and the customer and internal processes perspective, and lastly, no consideration of time lag between cause and effect. Despite the limitations, the BSC still is considered the primary strategic framework for performance management, due to its apparent advantages. The balanced scorecard has the capability for supporting long-term changes, sequential objectives, the potential to choose relevant performance measures extracted from real time data, and multiple levels of feedback.

1.4.3 Sub question 2

- How are these critical factors influencing performance in retail interrelated?

The second sub-question focuses upon the relations between the different factors that lead to retail performance. Some factors might positively influence each other, other factors negatively influence each other, while some factors do not influence each other at all. In order to give a clear overview of all the different relations, a strategy map will be composed that builds upon the logic of the previously constructed balanced scorecard. In line with the strategy of Plus and the research of Mägi & Julander (1996), performance will be split up in *efficiency* and *quality*, in the same logic as the balanced scorecards from sub-question 1.

The literature review will feature a strategy map based upon the balanced scorecard that followed out of the literature based part of sub-question 1. The same four perspectives that form the balanced scorecard will be used. The second part of this thesis will feature the strategy maps that are based upon the balanced scorecards that are created together with the store managers from practice. This again will allow us to compare theory with practice, leading to an answer to the second sub-question and finally the main research question. The following section will briefly explain the logic of the strategy map.

The strategy map

Deriving from the balanced scorecard system is the concept of strategy maps in which the objectives of the four different perspectives of the BSC are linked trough cause-and-effect relationships of performance drivers in a sequence (Kaplan 2010). In short, the strategy map displays how an organization intends to achieve its desired outcomes/vision, forming the

interface between strategy and the BSC (Perdicoulis, 2012; Irwin, 2002). A strategy map translates the strategy into operational terms, allowing communication with and between employees on how their activities relate to the objectives of the organization, making it possible to see how different parts of the business contribute to the overall performance (Buytendijk, Hatch, & Micheli, 2010).

An example of such a causal link between relationships leading to company performance in the service sector would be the following (Kaplan, & Norton, 2001): Investments in customer orientation training leads to better service quality, improved service quality leads to an increase in customer satisfaction, the increase in customer satisfaction causes improved customer loyalty, more customer loyalty translates into an increase in revenues and profits. In appendix B an example of a yet to be filled strategy map is presented.

In order to develop successful strategy maps, the critical factors (Key Performance Indicators) that lead to performance should be selected by experienced managers or scholars (Wu, 2012). The flexibility and ease of use has led to the successful adoption of strategy maps in all types of organizations with different cultures and sizes all over the world (Wu, 2012). Criticism on the concept of strategy maps comes in the form of claiming it is too inward and backwards looking, a problem that could possibly be evaded by the use of scenario analysis so firms are better prepared for future developments (Buytendijk et al., 2010). The learning and growth perspective was considered the weakest link in the strategy map by literature, since few metrics of this perspective actually linked to strategy, mainly relying on common measures (Kaplan, 2010). In reaction to this latter criticism, Kaplan & Norton (2004) developed three essential categories of intangible assets in the learning and growth perspective: human capital, focusing on the competencies and knowledge of employees; *information capital*, focusing on the support of the IT system and infrastructure; *organization capital*, focusing on the organizational culture and how aligned the employees are to the stated strategic goals. In order to gain the most value out of the intangible assets, human capital should be concentrated in the area of critical strategic processes. Information capital has the most value when it supports the human capital by providing the relevant infrastructure, while organizational capital is of high value when there is a culture of corresponding values and sharing of knowledge, led by an exceptional leader (Kaplan & Norton, 2004).

Quezada et al. (2009) found out that the most common objectives in strategy maps for different organizations are: cost reductions (67%), increase in sales (57%), increase ROI and current asset usage (50%), operations management process (100%), human capital, and organizational capital. It should be noted that the companies used for the research of Quezada et al. (2009) are mainly manufacturing firms. In constructing a strategy map for a retail bank, Wu (2012) concluded that customer satisfaction was the main effect factor, confirming the importance of customer satisfaction in the retail sector.

1.5 Expected theoretical and practical contributions

From a theoretic perspective, while there has been ample research into customer satisfaction and how this affects performance in supermarkets, little research is done into actually constructing a performance management framework like a strategy map for supermarkets. As stated before in paragraph 1.1, these more structured performance management approaches are concentrated primarily in retail banking. This focus on banks might possibly be because of the emphasis of banks on a structured organization, already building on solid financial indicators for performance management. This gap in research regarding service driven supermarkets can possibly be fulfilled in this study. Additionally, the relationships between the different aspects of efficiency and quality are not very well understood and thus ambiguous. These relations are researched in this thesis in order to acquire more knowledge from a practical point-of-view, next to the already available knowledge gained from literature.

Practically, with the information possibly gathered from this study, Plus can test their strategy of providing excellent service on the AGF departments. By finding out the critical factors that actually shape the performance, and processing them into a structured performance management tool like a strategy map, Plus can potentially improve the performance of the stores that lack in either quality or efficiency (or both). The dataset that will be created in this study in order to categorize the different stores will also be of practical interest to Plus, since it gives immediate insight in the performance of the different departments in stores.

1.6 Outline of the study

This study is build upon the general structure for a Business Administration master thesis with specified chapters. This first chapter was the introduction into the theoretic and practical background to the study that lead to the research questions which were explained thoroughly. The second chapter will be focused on the relevant literature that help gain an understanding of the research questions in order to give us a theoretical answer to the sub-questions. The third chapter features a description of the chosen research methodology to gain the necessary insights from practice. In the fourth chapter, the results of the research from practice will be presented and compared to the literature. The fifth chapter revolves around the conclusions that can be extracted from the results, limitations of the study are discussed, suggestions for further research are given and practical implications for the management are stated.

In order to give insight into the outline of this study, a visualization is presented in figure 2. The main research question leads to the two sub-questions. The sub-questions lead to a balanced scorecard and strategy map based upon the literature review. The critical factors from literature then are used together with in-house data to create a database in order to rank different stores within the efficiency/quality matrix. From this constructed database, various stores are selected from the different categories within the matrix to create a practical balanced scorecard and strategy map. By using an unaided/aided method, store managers first mention the most important factors and relations unaided, while the second phase presents the store managers with factors from literature that could potentially be added to their strategy map. This gives us both a theoretical and practical balanced scorecards/strategy maps on which the conclusion will be build by comparison.



Figure 2: Thesis overview

2. Literature study

In order to construct a theoretical basis for the research, it is necessary to formulate a review of the academic literature, making the study academically justifiable. In-depth information from literature is gathered regarding the subjects of: critical factors steering efficiency and quality in the retail sector for the first and second sub-question, followed by the balanced scorecard/strategy maps for the third sub-question. Based upon the found information from the literature, a theoretic framework is constructed that classifies the different critical factors into the distinctive perspectives of the strategy map. This way, the practical findings from the research can be compared to the literature, which ultimately gives us a conclusion on the main question. Before proceeding with the presentation of the found literature, the methodology for the literature study is presented in the first paragraph of this chapter.

2.1 Literature study methodology

To come up with sufficient relevant scientific literature in the form of articles and books, a systematic process of literature searching was followed, around the subjects of this study. Using various sources, keywords derived from the subjects were used as input to generate a list of literature. The following literary databases were consulted:

- Web of Science
- Science Direct
- Google Scholar

Following the information from the background, context and problem statement of the previous chapter and the logic of rational thinking, keywords were constructed around the following subjects: *performance management, critical factors, balanced scorecard, and strategy map.* The constructed list of keywords derived from these subjects is given below. Based upon these keywords, 114 scientific articles/books were found. In order to narrow down the list of literature to only the relevant works, the titles and abstracts were judged by the researcher. To assure the quality of the literature reviewed, a second phase of judgment was created based upon the criteria that the source needs at least 25 citations, or a peer review to be in the final list of literature, leaving 50 scientific articles/books.

Keywords:

- ✓ Performance
- ✓ Critical factors
- ✓ Balanced scorecard
- ✓ Strategy map
- ✓ Retail
- ✓ Drivers
- ✓ Quality
- ✓ Efficiency

2.2 Critical factors influencing performance in retail

Early literature regarding retail performance from primarily the 1980's is focused around specific aspects of performance, such as labour productivity (Ratchford & Brown, 1985) and different aspects relevant in the retail environment, focusing on: the assortment (Mahajan et al., 1988) and more recently (Mantrala et al., 2009), location (Mahajan et al., 1985) and pricing, (Mahajan, 1991) with more recently (Nijs, Srinivasan & Pauwels, 2007). Somewhat more recently are studies that compare the performance of individual retail stores within a chain, which is the objective of this study (Barros, 2004; Barros, 2005; Barros & Alves, 2003; Korhonen & Syrjänen, 2004). Vaz, Camanho & Guimarães (2010) compare the performance of different commercial sections within a supermarket chain.

In order to effectively use performance measures by management for practical evaluative purposes, a couple of considerations arise. First of all, performance is a relative concept, which means that the performance of a specific store cannot be fully appreciated unless compared to similar stores (Donthu & Yoo, 1998). Second, efficient practices of top performing stores could be identified and described, in order to potentially boost the efficiency of less performing stores (Thomas, Barr, Cron & Slocum, 1998). Third, upper management should make a distinction between resources under the control of store management versus uncontrollable factors (national imposed wages for example) or factors the local store has little influence on (Thomas et al., 1998). Often, uncontrollable factors are neglected by upper management, while they could very well influence the overall performance (Donthu & Yoo, 1998). Fourth, often it is necessary to assess more than one financial factor, since local stores are responsible for conflicting outcomes. Sales and profits primarily do not always go hand in hand, which calls for an appropriate balance (Thomas et al., 1998). Lastly, not all factors can be labeled 'critical'. Critical success factors (CSFs) are the factors that should receive priority attention, since these factors significantly drive the performance of an organization, creating the distinction between successful and less successful stores (Thomas et al., 1998).

There are many factors that potentially affect performance in retail, and assessing them all one by one would be chaotic. Therefore, the multiple factors found in literature are divided into groups of factors based upon the classification of the balanced scorecard and strategy map by Kaplan & Norton (2001). The classification of Kaplan & Norton (2001) consists of the four perspectives that were noted earlier on in this study, being: financial perspective, customer perspective, internal perspective, and learning and growth perspective. An extensive overview of all the performance factors in retail can be found in Appendix C.

2.2.1 The financial perspective

To build the first piece of the balanced scorecard, the factors of the first perspective will be studied. This first perspective revolves around the financial factors that form the top of the scorecard and is the most directly linked to the eventual performance. The financial perspective reflects outputs at the corporate level, relating to external reporting issues (Thomas et al., 1999). External factors that are related to the market are also categorized under financial factors in the creation of the balanced scorecard for retailers by Thomas et al. 1999. All factors from literature regarding finance will be reviewed in the following section.

Sales

From practical experience, sales are considered to be of the utmost importance in supermarkets. Sales therefore is the main output factor used in performance measurement for retail, and included in all the found literature for this study size (Thomas et al., 1998; Barros & Alves, 2003; Barros, 2005; Korhonen & Syrjänen, 2004; Vaz et al., 2010; Donthu & Yoo, 1998). The research of Kamakura et al. (1996) differs from the other studies, using the financial factors of: volume of cash deposits, volume of other deposits, volume of funds in transit, and volume of service fees charged to customers. The research context of Kamakura et al. (1996) shapes these outcome factors, since retail banks were studied, causing the differences. Sales in retail is the outcome that primarily defines company success (Krafft & Mantrala, 2006). Retailers are ranked externally with competitors based upon sales, and ranked internally within the chain to other stores, and over a time period for the same store. The importance of sales as a financial factor for performance in retail is caused by the simple fact that in all profit sectors the ultimate goal eventually is to make a profit, which is reached by selling products and/or services. Managers in the study of Thomas et al. (1998) quickly agreed upon using sales as a financial factor.

Profit

Sales alone however, do not sketch the entire picture of a successful company, since costs need to be deducted to eventually reach a profit. Firms with high sales may have even higher costs, causing them to be unsuccessful in terms of actual performance. Profit therefore also is a popular financial factor in literature regarding retail performance (Thomas et al., 1998; Barros & Alves, 2003; Barros, 2005; Korhonen & Syrjänen, 2004). Just like the output factor sales, managers in the study of Thomas et al. (1998) quickly agreed upon using profit as an outcome factor. Donthu & Yoo (1998) however, question the applicability of using profit as a financial variable for performance. They state that problems arise because profit includes both inputs as well as outputs, making it a compromised variable. Profit includes both sales, which is price times the quantity of output, and costs, which are factor prices time the quantity of input. Overall, profit can be seen as a significant financial factor.

Location costs

Location costs is a financial factor put forward by practice in the study of Thomas et al. (1998) and Thomas et al. (1999). Location costs are fixed costs directly related to the location of a store, primarily store rent and power costs. Managers endorse the importance of this variable, making it a key decision criterion for investments. Location costs reflect long-term financial commitments, certainly in the Netherlands, where building space is relatively expensive due to the population density. Building ground on average is 50.000 euro per hectare in the Netherlands vs. 17.500 euro per hectare in Germany (Silvis & Voskuilen, 2014).

Operating costs

Operating costs is another financial factor put forward by Thomas et al. (1998), and Thomas et al. (1999). Operating costs are variable costs directly related to operational practices, including but not limited to: product loss and labor costs. Operating costs are under the direct influence and responsibility of store management and reflect short-term financial commitments (Thomas et al., 1999).

Store size

A relatively popular performance factor found in literature is the store area in square meters (or feet), emphasizing the importance of store size (Thomas et al., 1998; Barros & Alves, 2003; Korhonen & Syrjänen, 2004; Vaz et al., 2010; Donthu & Yoo, 1998; Kamakura et al., 1996). The input factor of investing in equipment (freezing equipment, cutting machines) is found to be proportional to the size of the department (Vaz et al., 2010). A larger store generally gives an entrepreneur more abilities to create value.

Market attractiveness

The concept of market attractiveness reflects external economic-demographic factors in the direct surroundings of a store, and is highlighted in the study by Thomas et al. (1999). The two main factors of market attractiveness are: nearby population, and purchasing power. Population or households living within five minutes of the store is a financial variable considered by Thomas et al. (1998), Thomas et al. (1999), and Barros (2005). The nearby population tells something about the potential customer base that leads to potential sales, a relatively large population on the other hand also attracts competitors. The purchasing power or average household income is factor also used by both Thomas et al. (1998) and Barros (2005). While the income distribution in the Netherlands is relatively even, there are areas in primarily cities that are largely inhabited by people with lower income, having less purchasing power.

Nearby competition

Both Thomas et al. (1999) and Barros (2005) agree on the notion of nearby competition being an essential external factor for performance. Cannibalization of sales occur when stores of the same retail chain or direct competitors are relatively close to each other, everything else being equal (Thomas et al., 1999). Donthu & Yoo (1998) study the difference in performance between free-standing stores, versus stores that are part of a shopping mall, finding no significant difference.

Financial perspective scorecard

These seven factors together form the financial perspective of the balanced scorecard, summarized and projected in the following table 1.

Financial perspective	
Factors	Definition
Sales	Monetary value of sold goods/services
Profit	Sales - costs
Location costs	Fixed costs directly related to location
Operating costs	Variable costs directly related to operations
Store (department) size	Size of the store or department in square meters
Market attractiveness	Nearby population within 5 minutes, purchasing
	power customers
Nearby competition	Direct competitors within 5 minutes
Table 1 Financial perspective BSC from literature	

2.2.2 Customer perspective

The customer perspective focuses on how a store is performing through the eyes of the customer. Because of the direct interaction with the end-customers, the customer perspective is of great importance to retailers. The customer is the stakeholder that actually appraises the delivered quality, arguably making it the predominant stakeholder in the retail industry.

The model of Oh (1999) that can be found in Appendix A, highlights the main customer factors in the retail industry. It includes customer repurchase intention, customer satisfaction, and customer value. These three factors are described in more detail in the following sections, with notable contributions from literature emphasizing the importance of customer repurchase intention, customer satisfaction, and customer value in the retail sector by: Keiningham et al. (2007), Hellier et al. (2003), Noyan & Simsek (2012). Additionally, based upon the standardized strategy map of Kaplan & Norton (2001) and work by Grönroos (2007), and Bloemer & de Ruyter (1997), store image is assessed as a critical customer factor influencing store performance.

Customer repurchase intention

To accurately describe the concept of customer repurchase intention, a definition from literature is necessary. Repurchase intention is defined as: "The individual's judgment about buying again a designated service from the same company, taking into account his/her current situation and likely circumstances" (Hellier et al., 2003, p. 1764). This definition suggests a dimension of choice between multiple suppliers for the needs of customers, an important notion in the retail industry. In the Netherlands supermarkets are often heavily concentrated, creating competition that not seldom escalates into so called 'pricewars'. Another important aspect in the retail industry (and certainly in the supermarket niche) is the high amount of yearly transactions between customer and supplier, people generally tend to visit a supermarket at least on a weekly basis.

It is widely used by managers and researchers in retail to adequately forecast future customer purchasing behavior. Managers often acquire data concerning customer repurchase intention by customer feedback programs, containing measures of repurchase intentions and other behavioral measures. These measures are considered important as leading indicators for the future success of a firm (Keiningham et al. (2007). Noyan & Simsek (2012) conclude that

customer repurchase intention is one of the most important factors for making a firm profitable, underlining the significance of repurchase intentions.

Customer satisfaction

By far the most popular concept in retail literature and retail management regarding customer behavior is customer satisfaction, arguably because of its inherent simplicity to all types of respondents inside and outside of an organization (Keiningham et al., 2007). Customer satisfaction is defined by Hellier et al. (2007, p. 1764) as: "The degree of overall pleasure/contentment felt by the customer, resulting from the ability of the service to fulfill the customer's desires, expectations and needs in relation to the service." A flexible definition perhaps, since the desires, expectations, and needs of customers constantly change. Without a strict definition however, customer satisfaction still is understood by most people, certainly including the customers themselves (Keiningham et al., 2007).

Customer value

The second important factor of the customer perspective regarding quality is customer value. The used definition for customer value for this study is: "The customer's overall appraisal of the net worth of the service, based on the customer's assessment of what is received, and what is given" (Hellier et al., 2003, p. 1764). In determining a value of a service, a customer thus weighs on the advantages of using the service versus the costs of acquiring the service. If the benefits outweigh the costs, a service has value for a customer (Hellier et al., 2003). In short, the main question for a customer considering customer value is: "Is the acquired service/product worth what I paid for?" (Keiningham et al., 2007).

Customers are very much aware of value throughout the complete process of acquiring a product or service, stating the importance of customer value in retail (Oh, 1999). In research among multiple retail industries, Cronin et al. (2000) unexpectedly discovered that customers place significantly greater importance to the quality of a service, as opposed to the costs associated with acquiring the service. This limits the role in practice of costs like for example prices, and places an importance on the benefits like the delivered quality. The only industry that is an exception on the findings of Cronin et al. (2000) is the fast food retail industry, where costs are more important, suggested to be a direct influence of the industry emphasis on valuable meals.

Store image

Image represents the values customers (current, potential, and lost) connect with an organization. While the image of a firm may very well vary between individuals, there is some common perception of the. Image exists on multiple levels, in retail, a customer has an overall image of a retail chain, and a specific image of a store (Grönroos, 2007). For this study only store image will be assessed, since local stores can hardly change the perception the customer has of the overall retail chain, which is managed by headquarters. Store image is defined by Bloemer & de Ruyter (1997, p.501) as: "the complex of a consumer's perceptions of a store on different attributes." These attributes are different across multiple studies, including service, store atmosphere, merchandise, price, and many others. For this study, the attributes are all assessed in the next perspective of the balanced scorecard, the internal

processes perspective. From an organizational point-of-view, a distinct store image might be tolerated within its limits. If too many stores develop a unique image, corporate strategy is possibly undermined. When store image is largely diversified between stores, it becomes difficult for an organization to uphold a clear overall company image (Grönroos, 2007).

Image is important to stores because it has an impact on the perceptions of customers regarding communication and operations of the organization in many respects. Therefore, a favorable image is an asset to any store (Grönroos, 2007). Image communicates expectations, a positive image makes it easier for a firm to communicate effectively through marketing channels. Additionally, image can work as a filter influencing the perception of performance by the customer. Minor incidents and problems can be overlooked when a firm has a positive image, giving image a sheltering function (Grönroos, 2007).

Customer perspective scorecard

In table 2 below, the second perspective of the customer is presented in the balanced scorecard from literature.

Customer perspective	
Factors	Definition
Customer repurchase intention	Percentage of customers that would revisit
Customer satisfaction	Degree of overall contentment of the store by
	the customer
Customer value	Overall appraisal by the customer of the net
	worth of a store (benefits - price)
Store image	Customer perception of a store

Table 2 Customer perspective BSC from literature

2.2.3 Internal perspective

The internal perspective deals with business processes within a store over which management holds some form of control or responsibility. Following the logic of Kaplan & Norton (2001), the internal perspective is split up in four distinctive processes: 1. operations management process, 2. customer management process, 3. innovation process, 4. social and regulatory process. Internal processes potentially influence performance. Often these internal processes are under direct influence from local retail management, more so than for example customer factors. The various processes will be assessed in the following sections

2.2.3.1 Operations management process

The operations management process is centered around achieving operational excellence by improving supply-chain management, internal processes, asset utilization, resource-capacity management, and other processes (Kaplan & Norton, 2001). Operations management is defined as: "the activity of managing the resources which are devoted to the production and delivery of products and services (Slack, Chambers, & Johnston, 2007, p. 4)." Managing the operational processes in an efficient way results in short-term benefits regarding performance (Kaplan & Norton, 2001). Based upon the study by Thomas et al. (1999) there are three main

factors that form the operations management process in the retail industry: 1. inventory, 2. labor, and 3. transaction.

Inventory

The costs of inventory is an input factor studied by Thomas et al. (1998), Thomas et al. (1999), Barros & Alves (2003), Vaz et al. (2010). Keeping too much stock can result in product loss, certainly in the perishable departments. Not enough stock however might decrease revenues because of out-of-stocks. Spoiled products as a stand-alone input variable is added by Vaz et al. (2010). Barros & Alves (2003) and Vaz et al. (2010) both acknowledge the importance of the cost of inventory. From the research of Thomas et al. (1998) however, the inventory costs are not seen as critical success factors for store performance, with insignificant differences between high and low efficiency performers. Curiously enough, in their later study, Thomas et al. (1999) included inventory costs as a critical factor in their balanced scorecard construction.

Labor

Labor efficiency is of great importance in the retail sector since it is a relatively labor intensive business with little work done by machines. This means that the management of retail stores must carefully administer the cost of labor, since it is a substantial part of the total costs. Perhaps the first input factors regarding labor that would come to mind are the total amount of labor hours, suggested by Kamakura, Lenartowicz & Ratchford (1996) and Korhonen & Syrjänen (2004), or the total number of employees (Barros, 2004). Both the factors however, while giving us an idea of the total number of (potential) hours worked, do not give any information regarding the division of these hours/employees into full or part time employees. The ratio of full-time to part-time employees as an operational factor can tell us more about the division (Thomas et al., 1998; Barros, 2005; Barros & Alves, 2003). Part-time employees are more flexible and usually cheaper by the hour compared to fulltime employees. Fulltime employees on the other hand are usually better trained in the various processes, which sketches the tradeoff for store managers to make considering the fulltime/part-time ratio. Absenteeism is an operational factor considered by Barros & Alves (2003) and Barros (2005). Absent employees logically cost money, certainly when they have fixed contracts. Wage rate is an input factor provided by both Thomas et al. (1998) and Donthu & Yoo (1998). However, since local retail management in general has little influence over the offered wages, it could be considered an uncontrollable factor. In supermarkets, employees generally work minimum-wage in the Netherlands, differing only by age. Employees from age 15 - 23 gradually earn some more money per hour each year, reaching a limit at the age of 23. Employee turnover and dollar shrinkage as input factors were also concluded to not be significant enough by Thomas et al. (1998).

Transaction

The average dollar size of transactions per customer (or transaction efficiency), is found to be significant in the study of Thomas et al. (1998). This transaction efficiency is mostly under control of the store management, creating employees that are able to engage effectively in selling the products (Thomas et al., 1999). Another input factor regarding internal processes is the amount of dollars spend on promotions/give-away transactions, brought up by retail

management in the research of Donthu & Yoo (1998). It could attract customers to improve sales, while on the other hand too much promotion could be expensive, increasing costs. This factor however might be specific to the fast-food restaurant sector in which this study is conducted, in which giving out (digital) coupons is quite imminent.

2.2.3.2 Customer management process

The customer management process revolves around increasing customer value by expanding and deepening relationships (Kaplan & Norton, 2001). There are many internal factors that potentially influence the perception of the customer in literature. In order to not lose overview of all the different factors regarding the internal processes perspective that can be classified under customer management, the classification from Grewal et al. (2006) is used. The classification of Grewal et al. (2006) consists of six critical strategic levers from the internal perspective that influence customers, being: store factors, service factors, merchandise, price, supply chain, and technology. While local retail management has (some) influence on the first four groups, managers have very limited influence on the total supply chain, which is often fairly complex in retail and managed by headquarters. Technology will be assessed in the innovation process and learning and growth perspective. Therefore, only the first four factors are regarded as customer management factors. Another modification for this study is the expansion of the price strategic lever to price and promotion, for the sake of clarification that promotional factors also fall under the price group. The four strategic levers will each be separately assessed below.

Store factors

The first customer management factor group revolves around the right combination of format and retail environment factors. Literature supports a classification of store factors into utilitarian and hedonic aspects (Jones, Reynolds & Arnold, 2006). Utilitarian aspects revolve around the efficient acquisition of products and/or information, which is the primary goal of shopping. These functional aspects are regarded as more task-oriented and less emotional (Jones et al., 2006). Hedonic aspects however reflect the value for a customer found in the shopping experience, regardless from the primary task, being aspects that are more emotionally perceived (Jones et al., 2006).

An important utilitarian aspect of a store is the merchandise, the merchandise factors however will be assessed separately. Store convenience is a concept that summarizes utilitarian factors and that is used multiple times in retail literature regarding quality (Vazquez et al., 2001; Pan & Zinkhan, 2006). Opening hours, location, and parking space are utilitarian factors under the convenience concept of Pan & Zinkhan (2006). However, location (and parking space) is not a controllable factor for local management. Opening hours are controllable for entrepreneurs, up to a certain height since the municipality/city council can determine the maximum time and days in the Netherlands. Competitors can rather easily adapt to broadening opening hours however. Clear communication of where to find the different shelves and other areas of the store is another important utilitarian store factor (Vazquez et al., 2001). Another critical factor suggested by Vazquez et al. (2001) is the ability for customers to move around with ease through the shop. Vazquez et al. (2001) conclude in their study that store convenience is of high importance for retailers.

Beyond the functional aspect of a physical store, customers more and more turn their view towards the hedonic experience a store has to offer (Grewal et al., 2006). Stores with an unusual and exciting atmosphere can distinguish themselves from competitors, Starbucks is a prime example. Various factors, sometimes very subtle, can enhance the perceived quality of customers, causing them to spend more time in the store, and eventually spend more money (Grewal et al., 2006). The right combination of music and lighting in a store is found to significantly increase the willingness to buy in customers (Baker, Grewal & Dhruv, 1992). Calm and positive music/lightning in general stimulates buying behavior, local stores in a chain often however have limited control over these factors if music and lightning is managed by headquarters. A specific factor for the fruit and vegetables department are point-of-purchase displays (POP), which are displays that provide customers with additional information regarding the properties of the different products and potential recipes. Ruiz et al. (2010) as well as Pan & Zinkhan (2006) and Vazquez (2001) emphasize the significance of store atmospherics, and it is concluded by Jones et al. (2006) that hedonic factors are quality-enhancing factors, allowing firms to differentiate from competition.

Service factors

The second category of customer management factors is centered around the provided service to customers. Grewal et al. (2006) state that there a five critical drivers in which retail personnel needs to be trained for providing service to customers: 1. *decision convenience*, centered around the ability to provide consumers with relevant information so that informed purchasing decisions can be made; 2. *access convenience*, being able to locate specific merchandise and helping customers to find it; 3. *transaction convenience*, skilled to facilitate smooth check-outs and handle returns properly; 4. *benefits convenience*, aiding consumers to ascertain the benefits of specific products for improved enjoyment; 5. *post-benefit convenience*, being able to successfully rectify post-purchase problems.

Friendliness of the personnel is a specific factor that is widely deemed to be critical in literature (Pan & Zinkhan, 2006; Cronin et al., 2000; Vazquez, 2001; Gomez et al., 2004). Pan & Zinkhan (2006) claim that some customers enjoy the socializing in stores, with both peers and personnel. Gomez et al. (2004) found out that the friendliness of cashiers is even more important compared to sales personnel (0.90 vs. 0.85, where 0.5 is neutral). An aspect that falls under transaction convenience that is specifically highlighted in literature is the speed of checkout (Pan & Zinkhan, 2006; Gomez et al., 2004). Customers in retail often list the waiting time for check out as their primary annoyance when shopping (Pan & Zinkhan, 2006). The importance of checkout speed to customers is relatively high in the study of Gomez et al. (2004), with a factor of 0.84, where 0.5 is neutral..

Merchandise

The third customer management factor group revolves around the merchandise/assortment. Retailers in general spend large amounts of time on managing the merchandise, in the dynamic environment of retail the merchandise can change rapidly (Grewal et al., 2006). According to Grewal et al. (2006) there are two ways for retailers to excel in merchandising in order to create a competitive advantage. First, retailers could focus on acquiring and supply unique products that are interesting for their target customers. The second way, is to provide sufficient assortment to customers where and when they would like it. Retailers that are capable of doing both can provide superior quality to their customers.

Variety of the assortment is an internal factor that is frequently noted in retail studies (Grewal et al., 2006; Vazquez et al., 2001; Pan & Zinkhan, 2006; Ruiz et al., 2010; Gomez et al., 2004; Bauer, Kotouc & Rudolph, 2012; Mantrala et al., 2009; Broniarczyk & Hoyer, 2006). Assortment can vary in price, size, quality, brands, and flavors. In a study by Bauer et al. (2012), 41,6 percent of customers found variety to be the most critical factor for a good assortment. In the same study, quality variety (0.79) and brand variety (0.76) were seen as the most important aspects of variety, followed by: size variety (0.69) and flavor variety (0.59). According to Broniarczyk & Hoyer (2006) having more assortment is not always better, certainly with categories that are relatively large and dominated by a few products. When customers do not have well formed preferences beforehand, a wide variety might frustrate them, because of an inability to compare and thus choose a product (Broniarczyk & Hoyer, 2006). Some retailers creatively solve the variety problem by removing slower moving products out of their store assortment, still making the products available to customers over the internet to order.

Certainly in the departments of perishables (fresh meat, fruit and vegetables), product quality itself is of significant importance (Vazquez, 2001). In the study of Bauer et al. (2012), 22.1 percent of the customers found product quality to be the most critical factor constituting a good assortment, second to variety. The same study concludes the most important aspects of quality are: availability of ample organic products (0.72), well known brands (0.68), and a freshness guarantee (0.67).

Presentation of the merchandise is another critical factor according to customers in the research of Bauer et al. (2012), with 18.2 % stating that presentation was the most critical factor in evaluating the assortment. Logical arrangement of the products was seen by customers as the most important aspect of presentation with a factor of 0.82, followed by an appealing presentation (0.77), in the study of Bauer et al. (2012). Key considerations in presentation according to Broniarczyk & Hoyer (2006) are: 1. organizing by brand encourages brand sales, while organizing by model stimulates the use of other attributes like price, 2. organized displays are better suited for a large assortment, with a small merchandise the lack of choice however becomes more apparent, 3. asymmetrical organized displays improves the perception of variety for customers, 4. presentation should be in line with internal knowledge of the customers (a logical presentation).

Price and promotions

The fourth group of customer management deals with pricing and promoting of the assortment, the only factor that directly generates revenue. Pricing is a critical factor of the customer management process in retail, since customers consider if the benefits of the delivered quality are on par with the price that is paid (determining customer value). It should be noted that price not only consists of the monetary value paid, time and effort are also part of the total costs for a customer (Grewal et al., 2006).

Perhaps surprisingly, only 18.2 percent of customers in the study of Bauer et al. (2012) claim that price is the most important factor of the assortment in retail. In the same study, Bauer et al. (2012) found out that various price ranges to choose from (0.74) is the most important aspect of pricing, followed by: offering many private labels (0.72) and lastly, offering good value for money (0.63). Vazquez et al. (2001) also concluded that prices were not as important to customers as was expected beforehand, raising the question if expectations were too high or that customers are really willing to pay for extra quality. Gomez et al. (2004) in their research into supermarkets, conclude in contrast with the other studies, that overall prices compared to the competition is the most important factor (0.91). Other important factors are the prices of loyalty card specials (0.83), and the availability of those loyalty cards (0.74).

Prices across direct competition are in most cases quite similar in retail, making it a difficult factor to truly develop a competitive advantage, unless very well managed by creating a 'cheap' or perhaps even 'expensive' image (Homburg et al., 2002). An additional factor is that of effective promotion. Effective promotion consists of: additional shelf space, major exposure in (local) media, a weekly folder, in-store demonstrations and tasting (McLoughlin, 2004).

2.2.3.3 The innovation process

The innovation process focuses on 'building the franchise' through stimulating innovation in order to develop new products/services and penetrating new markets and customer segments (Kaplan & Norton, 2001). Innovation is defined by Chen, Tsou, & Huang (2009) as the generation, acceptance, and implementation of new processes, products, or services for the first time within a company. Retail is acknowledged by professionals as a flexible business sector, and since innovation process on first sight would seem highly important. In mature markets like the Netherlands, infrastructure for physical distribution and purchasing power of customers are already in place. This places the focus of innovation on replacing current goods and services with new and innovative goods and services, going beyond basic needs (Reinartz et al., 2011). In the retail sector however, innovations are largely spurred by the company headquarters, leaving only the execution to the store level. Supermarkets generally do not have R&D departments, which somewhat limits the factors of the innovation process for this study. There is however one factor that is considered of key importance in the retail industry nowadays: service delivery innovation (Chen et al., 2009).

Service delivery innovation

Service delivery is seen as the actual delivery of services and products to the customer, considering where, when, and how a service product is delivered to the consumer (Chen et al., 2009). It is argued by Chen et al. (2009) that service delivery is the process of applying human and information capital to provide service to the customer. Based upon this logic, service delivery innovation fits perfectly in the internal process perspective of the balanced scorecard. Combined with the definition of innovation, service delivery innovation can be defined as new mechanisms of delivery that offer consumers greater convenience, improving the competitive position of an organization (Chen et al., 2009). Creative implementation of

delivery modes is increasingly becoming a new way for companies to distinguish themselves from competition (Chen et al., 2009). The use of information technology (primarily internet applications) has drastically transformed service delivery in the retail environment that traditionally was focused upon direct personal contact with customers (Reinartz et al., 2011). The two most striking practical examples of service delivery innovation in the supermarket sector are online ordering and self-scanning products.

With online ordering (or e-commerce), customers order their products at the website of a supermarket, the products get assembled by personnel, and the customer picks up his or her products at an agreed time at the supermarket or a distribution centre. This innovation replaces the traditional physical visit to a supermarket, limiting personal interaction and giving the option to quickly select products for a customer. Employees take up the work of assembling the products, increasing the workload. Self scanning is essentially scanning all the assembled products by the customer himself, as opposed to the scanning done by the cashier. When done, the customer puts all his scanned products in a bagging area where the items are controlled by alignment with store information. Payment usually occurs electronically. Self scanning improves checkout time for the customer and reduces lines at the traditional checkout line.

2.2.3.4 The regulatory and social process

The fourth and final process of the internal process perspective is centered around the thought of developing effective relations with external stakeholders (not only customers) in order to become a good corporate citizen (Kaplan & Norton, 2001). Recently, there has been an increased pressure for organizations to acknowledge their responsibility to society, acting in ways that benefit the welfare of the society overall (Piacentini, Macfayden, & Eadie, 2000). Supermarkets in the Netherlands often are located right in the middle of a town or district, automatically making them a centre of society. This central role emphasizes the importance of the regulatory and social process in retail. By far the most popular factor regarding regulatory and social processes in business literature (Piacentini et al. 2000) is the concept of corporate social responsibility (CSR).

Corporate social responsibility

CSR is defined as the moral, ethical, and social obligations of an organization beyond its own economic interests (Ailawadi, Luan, Neslin, & Taylor, 2011). While traditionally, companies were solely focused on maximizing the wealth of shareholders, stakeholder theory dictates that legitimate interests of all stakeholders should be taken into consideration. The interests of these different stakeholders are concretized in regulations (Piacentini et al. 2000). This broader focus is line with the central idea of the balanced scorecard that looks beyond mere financial results to acquire firm performance. Companies nowadays are engaged in all sorts of costly CSR programs to implement their strategies (Ailawadi et al. 2011). Martinuzzi, Kudlak, Faber, & Wiman (2011) categorize CSR in retail into three dimensions of responsibility: 1. human responsibility, 2. product responsibility, and 3. environmental responsibility. While the first two dimensions refer to intrinsic CSR that comes from the direct interaction of the customer with the firm, environmental responsibility is seen as extrinsic CSR which is concerned with the broader social good (Ailawadi et al. 2011).

Human responsibility refers to dealing with suppliers that adhere to principles of natural and good breeding, treating their livestock with respect, and having positive working conditions and environment for their employees. These same working conditions and stimulating environment should be reflected in the retail store (Martinuzzi et al., 2011). Often, human responsibility comes with trademarks that assure a fair company climate, the most notable example in the Dutch retail sector is the SSK (Super supermarkt keurmerk).

Product responsibility refers to products that come with a full and complete list of contents, country of origin is stated, and that the organization assumes liability for the quality of its products and will uphold the intended declarations regarding the products (Martinuzzi et al., 2011). Regulations in the Netherlands recently have become fairly strict concerning product information, emphasizing the importance of product responsibility.

The environmental responsibility category refers to the perception of being an organization that produces environmental-friendly, ecological, and non-harmful products that include recyclable packaging. Environmentally responsible companies apply a clear regiment of environmental policies, that stimulates responsible behavior regarding the environment.

Internal perspective scorecard

In the following table the internal processes perspective is presented in the literature balanced scorecard.

Internal processes perspective	
Factors	Definition
Operational management process	
Inventory	Inventory costs
Labor	Total amount of labor hours, Total number of
	employees, Full time/part time ratio,
	Absenteeism
Transaction	Average monetary size per transaction
Customer management process	
Store factors	Store convenience (location, parking spots,
	opening hours, store communication, ease of
	movement), Store atmosphere (music, lighting,
	resting areas, cleanliness, temperature), POP
	displays
Service factors	Decision convenience, access convenience,
	transaction convenience, benefit convenience,
	post-benefit convenience, personnel
	friendliness, speed of checkout
Merchandise	Product variety (quality, brand, size, flavor),
	Product quality (organic products, well known
	brands, freshness guarantee), Presentation
	(logical arrangement, appealing)
Price and promotion	Price variety, offering private labels, loyalty
	cards price, loyalty cards availability
Innovation process	
Service delivery innovation	New mechanisms of delivery (E-commerce and

	self-scanning)
Regulatory and social process	
Corporate social responsibility	Human responsibility (responsible suppliers, fair company climate), Product responsibility (product information, liability for product quality), Environmental responsibility (clear environmental policies)
Table 0. Istanual	and the DCO from literature

Table 3: Internal perspective BSC from literature

2.2.4 Learning & growth perspective

The learning and growth perspective revolves around the three capitals that form the base of the strategy map: human capital, information capital, and organizational capital.

2.2.4.1 Human capital

According to Brush & Chiganti (1998), human resources are critical for success in delivering quality in the service and retail sector, caused by the direct influence of interactions with the customer. They conclude that human and organizational resources in the retail sector are relatively more important than strategy is for financial success of a firm. Glaveli & Karassavidou (2011) distinguish three major factors in the human capital category of the learning and development perspective, being: employee loyalty, employee satisfaction, and employee training. Thomas et al. (1999) add two additional factors that can be categorized under human capital in their constructed balanced scorecard: employee experience, and management experience. These five critical factors that fall under human capital will be assessed below in the following sections.

Employee loyalty

The definition of employee loyalty for the purpose of this study is: "Active behaviors that demonstrate pride in and support for the organization" (Niehoff, Moorman, Blakely, & Fuller, 2001). Defending a company against criticism, shine a light on the good aspects of an organization, and refraining from irrational complaints are prime examples of such behaviors according to Niehoff et al. (2001). This definition excludes passive loyalty that can be interpreted as a lack of behavior (purposely as well as not purposely) in times when action is required of an employee. Loyal employees are of great value to a company, putting extra efforts in their job, serving as representatives of positive PR in a micro and macro environment, and 'going the extra mile' in little things regarding the organization that helps develop the firm in a positive way. Employee loyalty is of great significance to employers due to two important and fairly recent developments (Roehling, Roehling, & Moen, 2001). Firstly, increased competition over talented employees and an increase in costs for the development of employees have caused a significant growth in costs allocated to personnel, prioritizing the retention of employees in order to keep these costs at a desirable level. Secondly, the general transition from hierarchical organizations to an organization structure that is build on the empowerment of employees causes for a loss of control structures in companies. Management needs to rely more on the abilities of employees to accurately perform their jobs in the best interest of the organization, which means employee loyalty is desirable, since loyal employees actively behave in supporting the organization. Employers are constantly searching for ways to increase loyalty for their employees, traditional approaches to promote loyalty like increased pay and job security however are becoming scarce in the business environment nowadays (Roehling et al., 2001).

Employee satisfaction

Employee or job satisfaction as a concept is defined as: "An attitude that comprehends evaluative judgment that can either be positive or negative regarding the job of an employee" (Weiss, 2002, p.175). Job satisfaction became significant in the second half of the twentieth century, most notably by the famous work of Locke who introduced the concept in business literature (1969). Up to the second half of the twentieth century, job satisfaction was deemed uninteresting for employers in the highly industrialized western world at that time. Backed up by the classic theory of scientific management that is better known as Taylorism, jobs were efficiently split up in parts that in theory could be performed by anyone. This lack of employee power combined with the lack of interaction with customers made job satisfaction an insignificant concept. With the uprising of more service driven organizations backed up by new theories from literature this insignificance was lifted (Weiss, 2002).

Employee satisfaction is critical in the service industry because of the inherent nature of the industry, where customers have direct interaction with employees. In the retail industry employees get involved with, and interact with customers, shaping the quality perception of these customers (Chi & Gursoy, 2009). The major intangible assets of a firm in the service industry lie within the knowledge and competences of their employees, and since the success of such a firm is highly dependent on the interactions between employees and customers, organizations have spend a vast amount of resources into satisfying their personnel (Chi & Gursoy, 2009). While retail organizations are not purely service firms, companies that follow a strategy of providing excellent service to their customers (like Plus) are still highly dependable of a successful interaction between employee and customer, underlining the significance of employee satisfaction.

Employee training

Employee training is defined by Anis et al. (2011, p. 2681) as: "The planned intervention that is designed to enhance the determinants of individual job performance." Basically, employee training boils down to practical education that improves knowledge and competence so that experience is gained and current inefficiencies are overcome. Employee training comes in the form of (correspondence) courses, workshops, on-the-job training, private lessons, and apprenticeship training (Kapsalis, 1997). In order to be successful and competitive, training is considered to be critical for individuals in the flexible economy of nowadays where people move between jobs more than ever (Kapsalis, 1997).

For organizations, training is considered a key activity in order to create a competitive advantage by developing the intangible human resources. Organizations that are largely committed to training and developing their employees, and successfully integrate such an approach in the company culture, tend to be more competitive and acquire higher productivity as well as financial results (Glaveli & Karassavidou, 2011). Together with the rise of strategic

human resource management (SHRM) in the 1990s the role of training in companies in order to gain a competitive advantage changed drastically. Traditionally, training was perceived a reactive activity in order to overcome specific problems within the organization. SHRM reshaped training as a critical aspect, making it a strategic activity that develops the knowledge and competences of employees as an anticipatory action to tackle future endeavors. By linking the training to organizational missions and strategic goals this SHRM approach becomes apparent, its main activity revolving around creating employees that are qualified, flexible, highly motivated, and well prepared for future challenges (Glaveli & Karassavidou, 2011). In retail, the direct interaction with the customer forms the perception of quality by the customer, thus requiring capable employees. Employee training in its SHRM form therefore is critical to execute the company strategy of delivering excellent service to the customer.

Employee experience

Employee experience in retail can be considered an important human capital factor, because of the practical and dynamic aspect of the industry. More experienced personnel can more easily respond to sudden changes based upon previous experience. The average experience in years of the personnel is a factor considered by Thomas et al. (1998) and Thomas et al. (1999). Personnel with a relatively long tenure are deemed to be more satisfied with their jobs, better at providing the right information to clients and suppliers, better accustomed to store routines, and are seen to be more involved with the performance of the store than employees with a relatively short tenure. Employees with more experience are considered to be more motivated to see the firm succeed (Thomas et al., 1999). In the study of constructing a balanced scorecard for the retail industry, Thomas et al., 1999 found out that the average tenure of employees was 1.53 years, quite low in comparison to other industries. However, the average experience of personnel was not found to be significantly related to store performance, not making it a critical factor (Thomas et al., 1998).

Management experience

The average experience of store management is somewhat more popular in literature, considered an input variable by Thomas et al. (1998), Thomas et al. (1999), as well as Donthu & Yoo (1998). It is argued that more experienced managers are better able to understand the needs of customers and the market, and possess superior skills regarding operational processes and human resources. These skills should reflect on the learning and growth within a firm, since management can better steer inexperienced subordinates (Thomas et al., 1999). In the same study, Thomas et al., 1999 found out that the average experience of management in retail was 5.92 years. All the studies recognizing management experience emphasize the importance of management experience, so it can be considered a critical factor with regard to human capital.

2.2.4.2 Information capital

The information capital consists of all the computer-based information systems (Powell & Dent-Micallef, 1997). In his much cited article, Bharadwaj (2000) argues that information capital is of critical importance for the survival and growth of a company, by leveraging or exploiting preexisting, complementary organizational and human resources. In literature there

has been some heated debate about the effects of information capital on firm performance. While some authors recognize the payoff of investments in information capital, other authors claim that they found no discernible relationship between IT investments and financial results (Bharadwaj, 2000). In the retail industry, sophisticated information capital firms not necessarily outperformed firms with less developed information capital, unless the information capital was linked to critical complementary factors in the business (Powell & Dent-Micallef, 1997). This last conclusion seems to confirm the logic of the strategy map that builds on indirect causal links to eventual performance. Bharadwaj (2000) provides a classification of three critical factors that form the information capital: 1. IT infrastructure, 2. human IT resources, and 3. intangible IT-enabled resources.

IT infrastructure

The IT infrastructure are the physical assets of the information capital, consisting the computer/communication technologies, shareable technical platforms, and databases (Bharadwaj, 2000). All hardware and software (apps) available to an organization fall under the category of IT infrastructure. The IT infrastructure is the basis of shared information throughout the company, of which the functionality can be defined in terms of reach and range. The reach determines the amount of different locations that can access the infrastructure, while the range determines what amount of information can be shared seamlessly and automatically across the infrastructure (Bharadwaj, 2000).

Human IT resources

The human IT resources contains the two critical factors of: 1. technical IT skills, and 2. managerial IT skills (Bharadwaj, 2000). Technical IT skills revolves around the abilities of the personnel to adequately use the various aspects of the IT infrastructure relevant for their jobs. These skills could be relatively complex like for example: programming, and systems analysis/design, or quite straightforward with examples of: using the order system, creating an invoice, and counting inventories. Managerial skills includes abilities such as: managing IS functions, coordination/interaction with the user community, project management, and leadership skills. The communication with the user community (customers) has taken a flight with the rise of social media. It is possible to freely communicate in a direct way to (potential) customers, even getting/receiving 360 feedback.

Intangible IT-enabled resources

Intangible resources are resources that lack physical substance, making it difficult to accurately distinguish and evaluate them. Bharadwaj (2000) constructed three intangible resources that are enabled by IT. The first resource is customer orientation, in which IT plays a pivotal role. By rapidly reacting on changing customer preferences in the market trough tracking these customers, IT enables management to gain potentially crucial information about their customers so that forecasts are made more reliable. Secondly, there are knowledge assets, also known as intellectual capital. The intellectual capital is captured in the experience and skills of employees, processes, and policies. These knowledge assets are widely recognized as being unique for a certain firm, making it difficult for competitors to copy. By storing these knowledge assets in databases trough technologies like groupware and

multimedia systems, IT plays a critical role in making the intangible resources more tangible, so that future employees can easily adapt to the firm. Lastly, there is the factor of synergy which refers to the sharing of resources and capabilities across organizational divisions. IT can remove the physical, spatial, and temporal limitation to communication required for acquiring resources. However, knowledge assets and open communication are covered in organizational capital, only customer orientation will be considered a critical factor under intangible IT-enabled resources.

2.2.4.3 Organizational capital

Organizational capital, sometimes called social capital in literature, revolves around the corporate climate within an organization. Bozkura & Beskese (2007, p. 126) define organizational capital as: "the sum of all assets that make the creative ability of organization possible." Examples of these assets are: mission, vision, working systems, values, culture, and leadership style. It is further argued that organizational capital is one of the critical foundations for making a learning organization. Without adequate organizational capital that provides structure, human capital cannot be turned into value, despite the possibly high employee capabilities (Bozkura & Beskese, 2007). Merlo, Bell, Mengüç, & Whitwell (2006) argue that there are three critical components of organizational capital in retail: 1. open communication, 2. shared vision, and 3. trusting culture. Thomas et al. (1999) additionally qualifies 4. store age as a critical factor in the learning and growth perspective that can be classified under organizational capital. These four critical factors will be assessed in the following sections.

Open communication

Open communication is defined as the sharing of information and learning between employees from a store (Merlo et al., 2006). By tapping into external knowledge of colleagues employees are made aware of new options to perform their jobs, and are able to question current routines. Open communication should be encouraged by firms since it provides the opportunity for personnel to tap into knowledge to solve particular problems (Merlo et al., 2006). Additionally, employees that currently are able of performing certain behavior but are hesitant to actually perform this behavior, are more likely to perform through communication of examples and information. This facilitation of role modeling fosters the development of desired collective behaviors (Merlo et al., 2006).

Shared vision

Shared vision is the cognitive aspect of organizational capital, it is understood as the degree to which employees are united by a common sense of purpose and the existence of an esprit de corps (Merlo et al., 2006). A shared vision consists of a set of common values that is represented in all employees that are not necessarily identical persons in the sense of believes. This shared vision could bond people together, leading to group cohesiveness and teamwork. A strong shared vision leads to employees releasing their individual views, in favor of cooperating in order to achieve stated store objectives in a commonality of purpose (Merlo et al., 2006). Something as simple as wearing the same clothing for work is a practical aspect of a shared vision.

Trusting culture

The third critical factor that falls under organizational capital is a trusting culture. As the relational aspect of organizational capital, a trusting culture is a culture in which a high degree of trust exists among employees of a store (Merlo et al., 2006). A high degree of trust improves joint efforts, improved cooperation, and improved positive attitudes towards the organization and its employees. Personnel that trust each other are likely to actively and passively support each other, creating a pleasant work environment. Additionally, in a trusting culture, people are less focused on improving their own position vis-à-vis their colleagues, exhibiting less selfish and competitive behaviors, and steered more towards cooperative objectives. A low degree of trust raises defensive barriers between employees, prioritizing personal objectives. In a trusting culture, organizations rely less on external sanctions to achieve goals, and more on the intrinsic motivation of employees and management. Since intrinsic motivation is proven to be much more effective to reach goals, a trusting culture is of particular value to a company (Merlo et al., 2006).

Store age

The average age of the store is the last critical factor from literature regarding organizational capital, with mentions by Thomas et al., 1998, Thomas et al., 1999, and Barros & Alves, 2003. Stores with a relatively high age are expected to be more established within the community, with a reputation and awareness that are positively affected by word-of-mouth. A good reputation is certainly valuable in areas where competition is intense. The average store age also potentially influences the internal operations through an experience curve, making them more efficient. Older stores would be more efficient, since certain internal routines have been perfected over the course of time (Thomas et al., 1999). Older stores on the downside could appear to be out of date to customers, potentially affecting the value for a customer.

Learning & growth perspective scorecard

In the table below, the learning and development perspective extracted from literature is presented.

Learning & growth perspective	
Factors	Definition
Human capital	
Employee loyalty	Active behaviors that demonstrate pride in and
	support for the organization
Employee satisfaction	An attitude that comprehends evaluative
	judgment of the job
Employee training	Practical education that improves knowledge
	and competences of employees
Management experience	Years of experience in management
Information capital	
IT infrastructure	Physical assets of the information capital (like
	computers, databases, apps, etc.)
Human IT resources	Abilities of the personnel to adequately use the
	various aspects of the IT infrastructure

IT-enabled intangible resources	Non-physical assets of the information capital (customer orientation)
Organizational capital	
Open communication	Sharing of information and learning between employees from a store
Shared vision	The degree to which employees are united by a common sense of purpose (values in the company)
Trusting culture	A culture in which a high degree of trust exists among employees of a store
Store age	The age of the store in years

Table 4: Learning & growth perspective BSC from literature

2.3 Relations between the critical factors influencing performance in retail

The second sub-question treats the causal relations between the critical factors, forming a strategy map that is derived from literature. In the same way as the first sub-question, all four perspectives of the balanced scorecard will be analyzed. In the strategy map the different routes towards performance will be visualized, following the same logic from the constructed balanced scorecard. Step by step the strategy map will be formed, starting with the financial perspective.

2.3.1 Financial perspective

The first perspective will focus on the causal relations between the seven critical factors that can be considered financial. They are: 1. Sales, 2. Profit and 3. Location costs, 4. Operating costs, 5. Store size, 6. Market attractiveness, and 7. Nearby competition. Since the factors at this point are still rather limited in number, the relationships are relatively non-complex.

Sales and profit

The first relationship is perhaps the most logical in the whole strategy map because of the inherent relationship that comes from the definition of the factor profit. Since profit is defined as the surplus of sales over costs, a direct relationship from sales to profit is evident. Larger sales generally leads to a larger profit, indicating a causal positive relationship. Costs directly related to sales (like buying products from a supplier) grow as well, which would indicate that profit would not necessarily rise, fixed costs however (rent on the building) remain at the same level, so profit grows. Exceptions might arise when for example additional space needs to be rented in order to house all the products. This stated logic also explains why a higher profit does not necessarily mean an increase in sales. Costs might have been reduced, causing the profits to grow while sales might remain static (or even decline).

Location costs

Occupancy costs per square foot of selling area (or location costs) were found significantly influencing performance, logically concluding that stores with relatively low costs are more efficient (Thomas, 1998). Location costs are a large part of the fixed costs a retailer makes. Location costs directly affect the profits of a retailer. In conclusion, location costs has a direct negative relationship with profit.

Operational costs

Operational costs have a direct effect on profit, since profit is defined as the surplus of sales over costs. The higher the operational costs of a store, the lower the profit, so the effect is negative. Together with the previously assessed occupational costs, the operational costs form the cost aspect of profit. To be briefly, occupational costs can be seen as fixed costs, whereas the operational costs are variable costs. Both factors have a negative relationship with profit.

Store size

The size of the store has a direct influence upon the total sales, influencing performance. Larger stores are relatively better able to sell the products due to the size advantages, Vaz et al. (2010) in their research conclude that the hypermarkets all are more efficient than regular supermarkets. The store size however, is primarily used as an uncontrollable factor, since local retail managers can rarely influence the total area. On the other hand, management can potentially influence the division of the department sizes, improving the efficiency of certain departments that are currently lacking. Conclusively, store size has a direct positive influence on sales.

Market attractiveness

Market attractiveness consists of population density and the average income of the population. Barros (2005) concludes that operational costs decrease with an increase in the density of population, improving performance. Thomas et al. (1998) on the other hand conclude that moderately populated areas are related to better performance, since densely populated areas are often victim to high leasing costs due to the popularity, and competition is also attracted to densely populated areas. Contextual differences (Portugal vs. the US) could possibly cause the differences, both studies employ the same research method (DEA). This double effect can perfectly be sketched in the strategy map. In general, densely populated areas increase sales, so market attractiveness directly influences sales in a positive way. Indirectly however, sales are negatively influenced through increased competition by the positive relationship between market attractiveness and nearby competition. The direct relation between market attractiveness on profit.

A relatively high income should in theory improve sales, simply because the average customer has more money to spend. Barros (2005) confirms this assumption, claiming that in areas with a relatively high purchasing power, stores are more efficient. Thomas et al. (1998) somewhat disagree, claiming that the most efficient stores were situated in areas with a moderate household income (US\$ 40.000). Since Barros (2005) uses an index of Portugal in contrast to an absolute number, combined with the difference in time span, this makes comparison somewhat difficult. For this study the conclusion of Barros (2005) is followed, since the study is more recent and geographically closer situated to the Netherlands. A higher purchasing power thus leads to improved sales, confirming the positive direct relationship between market attractiveness and sales.
Nearby competition

Direct competitors (including those from the same chain) within close distance (10 minutes), significantly decrease efficiency because of a decrease in sales (Thomas et al., 1998; Barros, 2005). Competition forces customers to choose between the different stores, and since customers can only spend their money once, its apparent effect on sales is quite clear. Thus, a negative causal relationship exists between nearby competition and sales.

In the following figure, the first perspective of the strategy map is presented.



Figure 3: Strategy map with financial perspective

2.3.2 Customer perspective

The second perspective revolves around the causal relationships of the critical factors originating from the customers point of view. The critical factors are: 1. Customer repurchase intention, 2. Customer satisfaction, 3. Customer value, and 4. Store image.

Customer repurchase intention

An increase in the customer repurchase intention leads to improved sales, with customers that are both willing to return to the store themselves, and recommending others to visit the store through positive word-of-mouth (WOM) (Oh, 1999; Hellier et al., 2003; Noyan & Simsek, 2012). Returning and new customers obviously enlarge the current customer pool and thus the sales. Repurchase intention is the direct causal outcome of customer satisfaction and customer value, as accepted by the majority of researchers (Oh, 1999; Hellier et al., 2003). One however should be wary of the complex decisions making processes of customers that lead to repurchase intentions, unaccounted for by customer satisfaction and customer value (Hellier et al., 2003). For this reason, store image was included in the customer perspective. Conclusively, customer repurchase directly influences sales.

Customer satisfaction

Some studies (Gomez et al., 2004; Ruiz et al., 2010) claim a direct relationship between customer satisfaction and sales, with better satisfied customer directly leading to improved sales. The general consensus in retail literature however, is centered around the thought of an indirect relationship between customer satisfaction and sales, mediated by customer repurchase intention (Oh, 1999; Keiningham et al., 2007; Hellier et al., 2007; Noyan & Simsek, 2010; Bloemer & de Ruyter 1997). A result of this indirect relationship is that economic returns from the improvement of customer satisfaction are not immediately

realized. It takes time for customers to adapt their future shopping behavior, emphasizing the importance of a long-term perspective for evaluating the improvements of customer satisfaction (Anderson et al., 1994). A direct positive relationship between customer satisfaction and customer repurchase intention in retail is supported by a wide variety of studies (Hellier et al., 2007). Customer satisfaction thus has a positive relationship with customer repurchase intention, the more satisfied a customer, the more likely he will visit the store again.

Customer value

Oh (1999), argues that customer value is a significant and direct antecedent of a (re)purchase intention, and a direct consequence of the perceived service quality. In the same research Oh (1999) found out that customer value has a direct influence on customer satisfaction. Thus, the more value a customer perceives, the more likely it will be that he intends to revisit the store for future purchases. Plus better perceived value results in more customer satisfaction, creating a double positive effect on customer repurchase intention, directly as well as indirectly via customer satisfaction. A direct positive relationship exists from customer value to customer repurchase intention, as well as a direct positive relationship between customer value and customer satisfaction.

Oh (1999), in his study in a hotel chain found out that customer satisfaction has a greater influence on repurchase intention (.62) than customer value (.22). Both satisfaction and value however are significant indicators of customer repurchase intention. Hellier et al. (2003) on the contrary, found out in their study of the car insurance sector that customer value (.56) has a greater influence on customer repurchase intention than customer satisfaction (.26). Both value and satisfaction were as well deemed significant antecedents of customer repurchase intention. Differences between the conclusions of the studies might arise from the contextual situation (different industries) or different metrics (not the same set of questions). While there remains confusion around the relative importance of customer satisfaction and customer value, it can be concluded from literature that both satisfaction and value are significant and direct antecedents of customer repurchase intention, a conclusion in line with the findings of Cronin et al. (2000) in multiple service industries.

Store image

In their 1997 study, Bloemer & de Ruyter research the effect of store image on customer repurchase intention. They researched whether store image directly affected repurchase intention or that store image indirectly affected repurchase intention trough customer satisfaction. Store image does not have a direct effect on customer repurchase intention, no significant relation was found. On the other hand, the indirect relationship between store image and customer repurchase intention trough customer satisfaction was statistically confirmed (Bloemer & de Ruyter, 1997). These findings emphasize the importance of customer satisfaction, which acts as a transforming factor for the store image. The intuitively appealing direct relationship between store image and repurchase intentions thus is nuanced. A positive image does not necessarily mean returning customers, apparently other factors affecting customer satisfaction are also considered when deciding to revisit a store. Summarizing, store image has a direct positive effect on customer satisfaction.



In the following figure the customer perspective is added to the strategy map.

Figure 4: Strategy map with financial/customer perspective

2.3.3 Internal perspective

In this third perspective, the relationships originating from the internal factors are discussed. Since the internal perspective by far holds the most critical factors, it could be considered the most complex perspective. It is however also the perspective on which local management has the most influence. In order to refresh the memory, the critical factors of the internal process are divided in four distinctive processes: 1. Operational management process, 2. Customer management process, 3. Innovation process, and 4. Regulation and social process.

Operational management process

The operational management was split up in three separate key factors: 1. Inventory, 2. Labor, and 3. Transaction.

The costs of inventory are directly linked to the operational costs, the more inventory a store keeps, the higher the operational costs. A large inventory could result in the perishing of products, asks more time of personnel, and takes up valuable storage space in the store (Chron.com). It can thus be concluded that the costs of inventory are positively related to operational costs.

Logically, an increase in labor hours or total number of employees leads to an increase of operational costs, lowering the performance because of a lower profit (Barros, 2004). According to Barros (2005), an adequate number of part-time employees contributes to the performance since they are paid relatively lower salaries, lowering the operational costs which increases efficiency. However, while full-time employees are more expensive, they are more capable of building long-term relationships with customers, potentially increasing sales/profits and thereby performance (Thomas et al., 1998). In their research for identifying critical success factors, Thomas et al. (1998) found that adequate staffing of the stores with full-time employees is of significant importance, conflicting with the idea of Barros (2005).

Highly efficient shops, according to Thomas et al. (1998), tend to have a *larger* number of full-time employees per 10.000 square feet (5.85 versus 4.67), as well as a higher ratio of full-time to part-time employees (0.99 versus 0.63). So, while the labor factor has a positive direct relationship to operational costs, labor also positively affects the service factors of the customer management process that will be assessed in the next section. This double effect accounts for the tradeoff between employing mainly part time or full time employees. Stores with lower absenteeism are considered more efficient, since absent personnel with permanent contracts need to be paid out, regardless of actual working. This causes for an increase in operational costs, lowering profit.

Logically, a higher average dollar size per transaction results in improved sales and thus performance. Stores that have low average transactions point out that customers most likely only partially do their groceries at that specific store, and for example get their fruits and vegetables at another store. Stores that manage to boost the average dollar size per transaction will sell more products, so the operational management factor of transaction has a direct positive influence upon the financial factor sales.

Customer management process

The customer management process is split up in: store factors, service factors, merchandise, and price and promotion.

The store factors are split up in store convenience, store atmospherics, and POP displays. The first store factor is store convenience, consisting of opening hours and store communication. Opening hours are important for customer satisfaction according to Ruiz et al. (2010), with the notion that competition can easily adapt. Clear communication improves the efficiency of customers, arguably making them more satisfied (Jones et at al., 2006). Broad paths assure convenience for customers, making them more satisfied (Vaz et al., 2010). Jones et al. (2006) conclude that store convenience factors have a significant impact on revisiting stores by customers through customer satisfaction. Conclusively, store convenience has a positive causal relationship to customer satisfaction. Ruiz et al. (2010) as well as Pan & Zinkhan (2006) and Vazquez (2001) emphasize the significance of the second store factor, store atmospherics on customer satisfaction and repurchasing decisions, with specific factors of: resting areas in the store, cleanliness of the store, and store temperature, next to the music and lighting. It is concluded by Jones et al. (2006) that these store atmospherics factors are quality-enhancing factors, that affect customer satisfaction and customer value, allowing firms to differentiate from competition. Store atmospherics thus have a direct positive influence on customer satisfaction and customer value. The third store factor are POP displays. Store image is proven to be positively impacted by POP according to Glanz & Yaroch (2004). However, customer satisfaction and customer value are not directly affected by POP displays. Summarizing, store factors positively affect customer satisfaction, customer value, and store image.

The service factors are split up in service convenience and employee friendliness. Service convenience consists of The study of Pan & Zinkhan (2006) concludes that there is a link from providing service convenience to repurchase decisions with customers, via customer

satisfaction, confirming the importance of service convenience. A specific factor that is worth mentioning is the speed of checkout, reduced waiting times are being recognized by customers, affecting their store of choice (Pan & Zinkhan, 2006). Service convenience thus has a positive causal effect on customer satisfaction. The second service factor regards personnel friendliness. Customers that are treated with respect, trust, and politeness, are driven to choose for the store with friendly personnel that is approachable and easy to contact. By establishing personal relationships with customers that revisit the store, customer value is positively affected by personnel friendliness (Cronin et al., 2000). Lastly, Grönroos (2007) argues that the quality of service (service factors) has a significant positive impact on (store) image. Consistently delivering convenient and friendly service results in a improved image. Conclusively, service factors positively affect customer satisfaction, customer value, and store image.

The merchandise factors consist of: product variety, product quality, and presentation. Pan & Zinkhan (2006) claim that a wide variety of merchandise increases the value for customers, by granting the ability for customers to compare products and reduce costs (travel time, effort). Product variety is seen as the most important factor by customers for store choice (Pan & Zinkhan, 2006). In the research of Gomez et al. (2004) product variety comes second as the most important customer satisfaction factor with a score of 0.88 (0.5 is neutral). In the same research however, the variety of products for the fresh meat section is significantly lower (0.69), suggesting that product variety in the perishables sections might be less important. Product variety thus has a direct positive impact on both customer value and customer satisfaction. Product quality is the second factor falling under merchandise. The conception of product quality by customers affects store revisiting via customer value (Pan & Zinkhan, 2006). The higher the quality of the products, the higher the value for a customer. Additionally, a guarantee of fresh products, making it possible for customers to easily return products that do not live up to the quality level, improves customer satisfaction (Vazquez, 2001). Presentation has a positive influence on customer satisfaction, an adequate presentation results in more satisfied customers that can easily find the products they desire (Pan & Zinkhan, 2006). In conclusion, the merchandise factors positively affect customer value and customer satisfaction.

Price and promotions factors are separated in: price variety, the offering of private labels, availability of loyalty cards, and effective promotion. In the study of Pan & Zinkhan (2006), low prices were the fifth ranking factor for store choice. First of all, Ruiz et al. (2010) found a positive relationship between prices and product/service quality, meaning that higher prices are seen as an indicator of quality. Especially consumers with a low knowledge level of the product tend to use price as an important indicator of quality. Price as a factor itself has per definition a negative effect on customer value, it is part of the costs for a customer to shop at a specific store (Hellier et al., 2003). Defined as price perception however, the effect on customer value is positive, in line with Bauer et al. (2012). The better the price perception of a customer, the higher the customer value. Customers shape their knowledge and perception regarding prices based upon an internal judging system based upon experience, per product

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category (Bauer et al., 2012). A customer thus has a perception about the price regarding for example the fruits and vegetables category of a store. This customer can find the fruits and vegetables at store A expensive relative to store B, while the meat category might favor store A. This does not automatically mean that the customer will buy their apples and cucumbers at store B, since store A might be: closer in proximity (lowering the costs), and/or better in providing the benefits that form the plus side of customer value.

In order to accurately visualize the effects of the price and promotions category, a division of price and price perception is constructed. The category will be renamed price perception and promotions, and price will be a standalone factor in this category. Logically, price has a negative effect on price perception: the lower the price, the better the perception. At the same time, price has a positive effect on the average dollar size per transaction. Higher prices logically increases the total size of a transaction. A double effect thus becomes apparent in the strategy map. On the short term, a significant price increase causes a higher average dollar size per transaction, and thus higher sales (and profit). The long term effect however of a significant price increase causes for a decrease in sales (and profit), trough a lowered price perception, decrease in customer value, and lastly a decrease in customer repurchase intention that lowers the sales. This makes it impossible to boost prices up in the sky for retail stores.

Price variety improves price according to Bauer et al. (2012). Customers that are able to choose from different price ranges (for example: premium, value, and budget) have a better price perception of a store. The customers can choose the appropriate products or services that are in line with their current monetary situation by providing price variety. The offering of private labels is associated with lower prices by customers. Private labels thus are an informational cue to customers that prices of a product category are valuable to them. Conclusively, offering private labels has a positive effect on the price perception. The findings of Gomez et al. (2004), conclude that certainly loyal customers appreciate loyalty programs, making it an important factor for store choice. Well developed loyalty programs thus have a direct positive effect on customer value.

Innovation process

The innovation process in retail was found to be focused around one critical factor: service delivery innovation.

It is argued in literature that service delivery innovation has a positive impact on customer value (Chen et al., 2009). By providing customers with innovative delivery service delivery systems like e-commerce and self-scanning, companies add potential benefits to shopping at their store, hereby increasing customer value. The buyer process becomes easier for customers, communication of deliverables and outcomes becomes clearer, and specific customer needs are addressed by successful implementation of service delivery innovation. The more innovative delivery systems, the more contribution to customer value (Chen et al., 2009). By engaging in service delivery innovation, Chen et al. (2009) additionally argue that store image is directly positively affected. Customer recognize the service delivery systems as innovative, linking innovative values to a store that improve the image. In their research, Chen et al. (2009) found statistically relevant positive relationships between both service

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delivery innovation and customer value, and service delivery innovation with store image. Conclusively, service delivery innovation has a direct positive relationship with both customer value and store image of the customer perspective.

Regulatory and social process

The regulatory and social process in retail is centered around the key factor of corporate social responsibility (CSR).

CSR is divided in three key factors: human responsibility, product responsibility, and environmental responsibility. It is argued by Martinuzzi et al. (2011) that the complete CSR factor generally improves store image. By living up to responsible standards as a firm, customer acknowledge the responsibility by associating the store with a better store image. The relationship was found statistically acceptable, confirming CSR has a positive effect on store image. While an effect on store image is apparent, actual financial benefits of CSR can be questioned. Store image only indirectly influences customer repurchase intention in the strategy map of this study, trough customer satisfaction. Actual financial effects of CSR thus are watered down by quite a degree of other factors influencing performance. However, success in retail by focusing on CSR is achieved by the Body Shop. The direct effect of CSR on customer repurchase intention was studied, by the likes of Ailawadi et al. (2011). They conclude that direct CSR that focuses on the immediate customers (human responsibility and product responsibility) leads to a somewhat higher customer repurchase intention in retail stores. Indirect CSR that has a more external focus (environmental responsibility) however is found to be of a small negative influence on customer repurchase intention. This suggests that the average customer fears that valuable company resources are being wasted at the cost of their own value. Based upon these findings there is not enough evidence that CSR directly supports customer repurchase intention.

In the following figure the internal processes perspective is added to the strategy map.



Figure 5: Strategy map with financial/customer/internal perspective

2.4.5. Learning & growth perspective

The fourth and last perspective is the learning and growth perspective, which is the foundation of the strategy map. The causal relations originating from the learning and growth perspective will be treated in this paragraph. The learning and growth perspective consists of three major factors: 1. human capital, 2.information capital, and 3. organizational capital.

Human capital

Glaveli & Karassavidou (2011) find a direct link between employee loyalty and service quality, where more loyal employees are better able to provide service to the customers through the learned experience. Employees that are loyal to the company have a better understanding of the various internal processes, using the processes in a more effective way to serve customer and company needs. For example, loyal employees develop valuable personal relationships with customers through the customer management process, creating value for customers. Employee loyalty thus has a direct positive influence on the customer management process.

The link between employee satisfaction and employee loyalty is intuitively appealing, more satisfied employees would logically be more loyal to the company. This claim is widely supported throughout literature according to Glaveli & Karassavidou (2011). Employee satisfaction is confirmed as the main driver for employee loyalty (Matzler & Rentzl, 2006). So, employee satisfaction has a positive effect on employee loyalty. The direct link between employee satisfaction and customer satisfaction however is questioned. Silvestro & Cross (2000) in their research conducted in 18 supermarkets in the UK concluded, that there is no significant relationship between employee satisfaction and customer satisfaction and store profit, implicating that stores with dissatisfied personnel are more

profitable. Store size was found to be accountable for the found inverse correlation, with larger stores being more profitable while having significantly lower employee satisfaction. The absence of a link between employee satisfaction and customer satisfaction is based upon the thought that in UK supermarkets, customers are primarily concerned with prices and product availability, none of which are directly influenced by interaction with employees. Larger stores are more able to satisfy those customer needs (increasing customer satisfaction), due to having access to more resources, which leads to better profits. The validity of the results in the Silvestro & Cross (2000) study however, could be questioned. While researching supermarkets, it remains unclear if the studied stores were discounters (focusing on price) or service supermarkets (focusing on service). Their results appear to be in conflict with conclusions about price importance by customers that were found in the more recent studies of Bauer et al. (2012), Vazquez et al. (2001), and Zinkhan & Pan (2006). For this study we uphold the direct positive link between employee loyalty and the customer management process.

Employee training would supposedly positively affect job satisfaction. By receiving training, employees develop additional skills that allows them more autonomy and makes them more flexible. Additionally, perception of job security is improved, since the employee knows that his or hers employer is actively investing in their personal future. Jones et al. (2006) as well as Glaveli & Karassavidou (2011) statistically confirm the positive relationship between employee training and employee satisfaction. The quantity of training is less important than the pre and post support of training, concluding that more training is not necessary better. A systematic, career-oriented approach delivered by management, accompanied by a motivation to participate, and a support of transformation to the workplace, is significantly important to fully benefit from training (Glaveli & Karassavidou, 2011).

Brush & Chiganti (1998) found out that managerial experience and commitment in the retail industry was positively related to delivering quality to the customers, based upon the thought that experienced managers have intimate knowledge of customer perceptions. Managers with more experience are perceived to be better suited to deal with customers, the market, human resources and internal processes in order to boost store performance, relative to managers with less experience in the chain. The average experience of managers is significantly related to the operational management process, with highly efficient stores having an average of seven years of experience in management, while less efficient stores barely had an average of five years of experience (Thomas et al., 1998; Donthu & Yoo, 1998).

Information capital

In literature, the relationship that is most popular is the link between information capital and the operational management process. While early studies did not find a significant relationship between information capital and the operational process, more recent studies advocate for a positive relationship. Well developed IT infrastructure that is handled by skilled employees contributes to significantly improved management of inventory and labor costs (Brynjolfsson & Hitt, 2000). Prasad & Harker (1997) emphasize the importance of human IT resources. Without skilled employees, information capital can have a negative effect on the operation management process. While the infrastructure might be considered of

high quality, poor implementation still causes for a negative effect on the operational process. Regarding the information capital, focus on retail mainly lies with managing the inventory. Large retailers in the US successfully implemented sophisticated inventory management technologies in order to increase operational efficiencies, and improving service quality (Bharadwaj, 2000). While practically, information capital might have an effect on the customer management process, little theoretical evidence is available. Information capital does have an effect on service delivery innovation. Information capital is the key driver for service delivery innovation (Brynjolfsson & Saunders, 2010). Logically, without well developed IT systems the service delivery innovations would not work properly. A customer that wants to buy his products online via e-commerce needs a working website in order to fulfill his needs. This means a direct positive relationship between information capital and the innovation process.

Organizational capital

In their 2006 study, Merlo et al. researched the relationship between three factors of organizational capital (open communication, shared vision, and a trusting culture) and the customer management process. Open communication builds an understanding of serving customers effectively trough the help of colleagues. A shared vision among employees in a store results in better customer service orientation. Stores with personnel that have widely divergent values and behavioral norms have great difficulty to establish a common commitment of serving customers. Interpersonal support and assistance among store employees in a trusting culture results in accurate serving of customers. All three organizational factors were found to be significantly related to the customer management process (Merlo et al., 2006). Matzler & Renzl (2006) additionally found out that trust among peers (0.42) is significantly more important than trust in management (0.28).

Hatch & Schultz (1997) argue that organizational capital has a positive influence on store image. A strong unified organizational culture presents a clear image to different stakeholders. Strong external influences by various stakeholders can influence the organizational capital. Employees mirror themselves to comments made by customers, which leads to synergy among employees or cynicism. Organizational thus has a direct positive influence on store image.

The age of a store affects the operational process according to Thomas et al. (1998). Efficient routines in working, developed over the years improves the operational management process. This relationship holds, provided that the stores are kept up-to-date, are of ample size to generate sales, and located in a sufficient trade area, all of which are factors already in the strategy map. Conclusively, organizational capital has a direct positive effect on: the customer management process, the regulatory and social process, and the operational management process.

In the following figure the learning and growth perspective is added to the strategy map, making it complete.

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Figure 6: Strategy map with financial/customer/internal/learning & growth perspective

2.5 Theoretical framework and summary

On the following page, the theoretical framework extracted from the literature review is presented in the form of a strategy map for retail performance in figure 7. By building on the various factors that influence performance in retail, a balanced scorecard and a strategy map was constructed that clarifies the links to achieve eventual financial performance. The literature review resulted in the discovery of plenty factors influencing retail performance, not all of them significant and/or controllable for local management. A complete list can be found in appendix C. The full strategy map is presented in the following figure. In the strategy map the strategy of Plus that focuses on offering quality to the customer is highlighted in green. Clearly, there are multiple routes towards performance in retail based upon the found literature.



Figure 7: Full Strategy map with general Plus strategy

3. Research methodology

In this chapter, the scientific methodology for this research will be presented. The data collection techniques are clarified that form the application of the literature study, eventually forming the results.

3.1 Research approach

For this research, a qualitative research approach is chosen. Qualitative analysis is: "The nonnumeric examination and interpretation of observations, for the purpose of discovering underlying meanings and patterns of relationships" (Babbie, 2010, p. 394). These patterns of relationships are particularly relevant in this study, focusing on the causal links within the strategy map. There are various qualitative research approaches, one of them is classical content analysis.

Classical content analysis is a frequently used method in qualitative research, in which the researcher creates and counts codes. A code is a descriptive title for a chunk of similar data, for example: a critical factor of performance. After developing the codes, the researcher counts the number of times a code is mentioned in different interviews, to assess the importance of such a code (Leech & Onwuegbuzie, 2007). Since the focus of this thesis lies on assessing the importance of performance factors and their relationships, classical content analysis is particularly fitting.

Prior to the gathering of data trough the classical content analysis, a database is needed of all Plus stores and their efficiency/quality ranking regarding the AGF departments. By categorizing the stores into the efficiency/quality matrix, stores that are potentially interesting for gathering data can be identified. The eventual gathering of data is split up in two phases, an unaided round, followed by an aided round. The first phase will be focused on brainstorming for the critical factors from practice by conducting semi-structured interviews with store managers. In this phase an initial 'concept' strategy map is made for each store. The second phase of gathering data will be focused upon determining the importance of all the critical factors that were found in literature in a more structured way, giving the store managers a chance to adapt their strategy map with factors they did not initially consider. Subjects can reassess their initial factors and consider the additions made by literature, eventually coming up with one consistent strategy map. The procedure and data analysis of both phases will be assessed in the following paragraphs.

3.2 Database & store selection

In order to find relevant stores to visit for creating the strategy maps, a database is necessary for categorizing the stores. Since the AGF department is the focus of this research, data of the AGF departments are used to judge stores on quality and efficiency.

3.2.1 Quality categorization

The first step of categorizing the various stores is a division based upon quality. Of the 255 Plus stores, 246 stores were analyzed for the quality categorization, ensuring almost maximal coverage. The quality categorization is based upon data gathered by the six product

specialists. Stores are divided between specialists based upon geographical rayons. These specialists gather data by doing a periodical analysis or PA, which comprehends criteria that together form the total quality of a department. These quality criteria comprehend all non-financial factors The quality criteria are divided in four groups: 1. Store perception of the AGF department (Winkelbeeld AGF-afdeling), 2. Commercial strength (Commercieel winkelspel), 3. Hygiene and food safety (Hygiëne en voedselveiligheid), and 4. General criteria for the AGF department (Algemeen AGF-afdeling). All criteria are assessed by the product specialists in dichotomous fashion. So a criteria is either good or bad according to the specialists. However, not all criteria are equally important in determining the total quality of a store (department). Therefore, the different criteria are ranked by the head of the product specialists based upon a Likert scale. Criteria can have a score of 1, 3, or 5. With 1 being mildly important, 3 being relatively important, and 5 being critically important. A complete list of all criteria and their ranks (in Dutch) can be found in Appendix D.

Based upon the ranking, stores can maximally reach a score of 47 points. The separation between qualitative and non-qualitative is set by the head of product specialists at 39 points. Stores that reach a score of 39 points can still be considered qualitative, stores that score 38 points will be considered non-qualitative. The logic behind the separation is that stores at this limit cannot have two negative scores on criteria of critical importance. A sensitivity analysis of this decision is addressed later in this paragraph. This categorization leads to the data in the following figure. The division is almost perfectly 50/50, with 122 (49,6%) qualitative stores and 124 (50,4%) non-qualitative stores. The average score of the qualitative stores is 44 points, with a standard deviation of 2,8 as opposed to a score of 30,9 for non-qualitative stores with a standard deviation of 5,5. This difference in standard deviation appears logical since the bandwidth of non-qualitative stores is a lot larger (ranging from 0 to 38) as opposed to the bandwidth of qualitative stores (39 to 47). The quality categorization is summarized in the following table.

Quality categorization	Non-qualitative	Qualitative		
Total: 246 stores (100%)	124 stores (50,4%)	122 stores (49,6%)		
Average quality score in PA by	Average quality score in PA by	Average quality score in PA by		
specialists: 37,3	specialists: 30,9	specialists: 44,0		
Standard deviation quality	Standard deviation quality	Standard deviation quality		
score in PA by specialists: 8,1	score in PA by specialists: 5,5	score in PA by specialists: 2,8		

Table 5: Quality categorization

In order to check if 39 points is a fair separation point for the quality categorization, a quick sensitivity analysis can be done. The following table shows us the effects if we would change the separation point to a less strict separation (the - numbers), and a stricter separation. The maximum boundary is if we would add 8 points, since the maximum score of 47 points is reached in this situation. Therefore, the sensitivity analysis has boundaries of -8 and +8.

Sensitivity analysis	-8	-6	-4	-2	0	2	4	6	8
# of qualitative stores	194	177	161	142	122	108	86	54	32
# of non-qualitative stores	52	69	85	104	124	138	160	192	214

 Table 6: Sensitivity analysis quality categorization

Immediately clear from table 6, is that changing the separation point with two or four points creates a very comparable distribution. Adding four points makes the amount of qualitative stores go from 122 to 86, while subtracting two points makes the amount of non-qualitative stores go from 124 to 85. When adding/subtracting six or eight points the differences become somewhat larger, which is logical, since adding eight points makes the maximum quality score the separation point, while one could subtract up to 39 points. Conclusively, the separation point of 39 points is a valid boundary.

3.2.2 Efficiency categorization

The second step is categorizing the stores based upon efficiency. Of the 246 stores that were initially categorized based upon quality, there are 183 stores that can be categorized based upon efficiency standards. The data on efficiency is somewhat more limited due to the recent introduction of gathering this data. As stated before in chapter 1, efficiency is defined by Plus as sales times the gross margin, minus the operational costs (product loss and labor costs). However, it is impossible to compare stores based upon operational costs. There is no general target concerning operational costs, this is individually determined per store (department). It is possible to compare store departments on shelf size in square meters and sales. Stores within a sales segment (for example between 12.000 and 15.000 Euros) have a general target of sales per shelf size in square meters (for example 170 Euro per square meter). Stores that score above this target can be considered efficient, while stores that score under the target can be considered inefficient. In the end, it boils down to how well the department is used to generate sales. This is in line with the definition from literature that states efficiency to be a measure of output, divided by the inputs needed to produce the output. The output in this case is department sales per week, the input the shelf size in square meters. The product specialists have gathered data on the shelf size in square meters for 183 stores, and the average weekly sales of the AGF department is known. By comparing the sales per square meter to the targets the efficiency categorization was made.

The results are presented in table 7. As was the case with the previous categorization based upon quality, the stores in the efficiency categorization are almost perfectly divided 50/50. Of the 183 stores, 92 are deemed efficient, while 91 can be seen as non-efficient. There is however a noteworthy difference in the average surplus (for efficient stores) or shortage (non-efficient stores) compared to the target sales per square meters. The average surplus of the efficient stores is significantly greater (53,99) than the average shortage of non-efficient stores (-21,03). The same goes for the standard deviation of the difference with the target sales per square meter (25,28 vs. 14,36). This means that for stores that outperform their efficiency, this generally happens with a greater difference to the target than the negative difference that comes from the non-efficient stores. Over-performing thus generally happens on a larger scale than under-performing. The spread of the efficient stores however is also larger, looking at

the standard deviation, leading to the conclusion that efficient performers are more spread around the 53,99 average surplus.

Efficiency categorization	Total: 183 stores (100%) Average efficiency surplus: € 16,69 Standard deviation efficiency surplus: 173,46
Efficient	92 stores (50,3%) Average surplus: € 53,99 Standard deviation shortage: 25,28
Non-efficient	91 stores (49,7%) Average shortage: €-21,03 Standard deviation shortage: 14,36

Table 7: Efficiency categorization

In order to account for the economies of scale effect, a categorization is made between the different sales groups. The general assumption in literature is that larger stores are more capable of being efficient, due to economies of scale effects. Fixed costs can be spread over more units of output, and processes in larger firms are generally more streamlined to generate sales (Vaz et al., 2010). The efficiency categorization per sales group can be found in appendix E. Based upon this categorization per sales group the economies of scale effect becomes apparent. Of the three largest sales groups, only 4 stores of the 31 stores can be considered non-efficient (12,9%). This is well below the total average of 50 percent. Of the three smallest sales groups, there are 24 of the 53 stores non-efficient, which is 45,3%. Interestingly, this percentage still lies below the total average of 50%. Looking at only the two smallest groups the percentage of non-efficient stores is 54,5 percent, which is somewhat above the average. Excluding even the second smallest group, the percentage of non-efficient spectacularly rises to 77,8%. Conclusively, the economies of scale mainly affect the larger stores in sales. Larger stores are indeed found to be more efficient due to possible size advantages which is in line with found literature. The reverse effect is somewhat more limited to only the smallest sales group. However, one could also argue that the sales targets of the larger stores at Plus are not strict enough. For large stores it is significantly easier to outperform the target than it is for smaller stores based upon these findings.

3.2.3 Store selection

The previously discussed categorization based upon quality and efficiency leads to a complete categorization of the 183 stores that have relevant data, which is 72% of the total amount of stores. In figure 5, the results of the total categorization are presented. The distribution among the four quadrants of the quality/efficiency matrix is rather evenly spread. 27 Percent of the stores is both qualitative and efficient, 23 percent is non-qualitative but efficient. This means that roughly half of the stores are qualitative, and half of the stores are efficient. The quality ratings from the specialists (via the PA) differs only slightly, qualitative stores that are also efficient score somewhat higher (43,78) than qualitative stores that are non-efficient (43,34). Of the non-qualitative stores. The largest numerical difference between the groups is on sales. Stores that are both qualitative and efficient have significantly bigger sales per week

than the rest of the matrix groups. This confirms the economies of scale effect from the previous paragraph. Additionally, it also seems that larger stores are better able to provide quality, with a difference of \in 8065 between qualitative stores that are efficient, and non-qualitative stores that are efficient (in favor of the qualitative stores). A larger budget possibly allows stores to invest more in qualitative aspects of the store, leading to more sales, which leads to a better efficiency, implying a virtuous circle to success. All the data per quadrant of the efficiency/quality matrix can be found in table 8.

Efficiency/quality matrix	Non-qualitative (91 stores/50%)	Qualitative (92 stores/50%)		
Efficient	42 stores (23%)	50 stores (27%)		
	Average quality score in PA by	Average quality score in PA by		
	specialists: 32,05	specialists: 43,78		
	Average sales: € 17.125	Average sales: € 25.207		
Non-efficient	49 stores (27%)	42 stores (23%)		
	Average quality score in PA by	Average quality score in PA by		
	specialists: 31,24	specialists: 43,34		
	Average sales: € 14.733	Average sales: € 14.615		

Table 8: Quality/efficiency categorization

A scatter plot that presents the distribution of all the 183 stores in the efficiency/quality matrix can be found in figure 8. The stores are rather evenly distributed throughout the matrix, with the majority placed within: $- \in 30$ and $\in 30$ on efficiency, and - 8 and 8 on quality. The largest spread can be found in the efficient/qualitative group, which has the most outliers, particularly on efficiency. An explanation would be that this group includes the larger stores, with larger financial options. The differences with the efficiency standard can be quite large for these bigger stores.



Figure 8: Efficiency/quality matrix distribution

Due to limitations in time and scope, eight stores will be visited to create various strategy maps. Of all four categories in the developed efficiency/quality matrix, two stores are visited that are interesting based upon the data or specific factors. All eight stores will be briefly discussed in the results section and are picked based upon quantitative aspects. In the efficient/non-qualitative category, stores are picked with significantly bad quality scores while having a large surplus on efficiency. Particularly, smaller stores are interesting because of the economies-of-scale effect. It would be interesting to find out in what way these stores are managed to achieve good financial results despite not following the high quality strategy of Plus. For the qualitative/efficient category, stores are picked with an excellent score on both quality and efficiency. As the best performers, these stores should be representative for the success of the Plus strategy. Concerning the non-efficient/non-qualitative group, stores with a bad score on both quality and efficiency are selected. These stores should be the opposites of the efficient/qualitative stores. The non-efficient/qualitative stores are selected based upon a very high score on quality, despite having a shortage on efficiency. Particularly, larger stores are interesting because of the economies-of-scale effect. It would be worth finding out why these stores lack financially, despite following the quality strategy and being of ample size to be efficient.

3.2 Phase 1 (Unaided phase)

As mentioned above, the first phase will consist of extracting the critical performance factors from practice and forming causal relationships between these drivers to build an initial

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strategy map solely based upon practical experience.

3.2.1 Procedure and respondents

Following the structure of the classical content analysis, qualitative interviews with the store managers of different stores (from each of the four store segments) is chosen as the technique to extract data. A qualitative interview is focused around a set of predetermined topics to be discussed in depth, instead of using standardized questions (Babbie, 2010). A qualitative interview is an interaction between researcher and respondent, where the interviewer establishes a general direction by providing specific topics, and letting the respondent do the talking. Qualitative interviewing can give in depth knowledge regarding a subject, proof however is difficult to give without numbers, and one should be aware of possible biases (Babbie, 2010). The focus in this research is not to generate statistically acceptable results, but on gaining an in depth knowledge of the followed strategy in an organization by constructing a strategy map. The goal of this research therefore fits the implementation of qualitative interviews.

Conducting interviews in one of the most popular techniques to acquire qualitative data (Crabtree & DiCicco-Bloom, 2006). There are three approaches to qualitative interviewing according to Crabtree & DiCicco-Bloom (2006), which will be listed below in table 9.

Type of qualitative interview	Explanation
Unstructured	Interview based on observations, questions and respondents determined over time
Semi-structured	Usually scheduled to specific time and place, predetermined open-end questions with room for emerging questions during the interview
Structured	Scheduled on specific time and place, predetermined closed questions, little leeway for emerging questions, mainly focused on quantitative data

 Table 9, Source: Crabtree & DiCicco-Bloom (2006)

For this first phase, a semi-structured interview is deemed to fit best with the structure of constructing a strategy map. Just observing would not render sufficient results since it would be time consuming to observe a store's strategy in practice, and a semi-structured interview would constrain the information provided by the store managers. A semi-structured interview is the most popular technique to gain qualitative data, and can be done with individuals as well as in groups. In time, semi-structured interviews can take up from 30 minutes to several hours (Crabtree & DiCicco-Bloom, 2006). While it is possible to set up questions in a wide range of variety, it is necessary to sufficiently focus on one subject. Within a developed

framework of relevant questions, respondents should be encouraged to add additional information to extract knowledge that perhaps was not foreseen by the researcher. At the same time the interviewer must be aware that the added information should be relevant, and focused upon the chosen subject, indicating a delicate balance that makes semi-structured interviews complex (Crabtree & DiCicco-Bloom, 2006).

As for the respondents, to extract the critical factors of performance in order to construct a strategy map, the respondent should have sufficient knowledge about the strategy of the store. The store manager, being responsible for the strategy, would be the logical respondent for the interviews. At least 2 stores from segments 1, 2, 3, and 4 of the efficiency/quality matrix are visited. In the first phase of the interview the focus lies on brainstorming for important factors that drive the local store, based upon a set of topics derived from the found literature. Based upon the list of topics (that are directly derived from the four perspectives of the balanced scorecard/strategy map), the store managers come up with factors they think affect both financial and non-financial performance, from practical experience. Apart from the topics, no details are given so that the store managers are not in any way influenced in their answers. This first phase is thus unaided. Listing the various factors is a relatively easy exercise since managers mostly have difficulty in reducing the measures to a manageable number, coming up with measures on the other hand in general is relatively easy (Quezada et al., 2009). By deriving the factors and in what way they influence each other (causality) a strategy map is composed together with the store manager. By clarifying the concept of a strategy map beforehand this exercise can be done.

3.2.2 Data analysis phase 1

In order to analyze the interviews, blank strategy maps are given to the store managers that only state the four different perspectives of the BSC/strategy map. Prior to the interview, only the general logic behind the BSC/strategy map is explained, along with its perspectives. The codes for the classical content analysis are created automatically through the factors mentioned by the store managers. The more often a factor is mentioned by the store managers, the more important it can be considered. The summaries are presented in the same format as the conducted interview, so comparison between stores is possible. After extracting all the different practical factors, causal relationships between the factors are constructed, forming the initial strategy map for that specific store.

3.3 Phase 2 (Aided phase)

In the second phase of the research design, the importance of the suggested factors from the literature is determined. Respondents can reassess their own findings based upon the findings from literature. It gives the respondents a second chance to include or exclude factors in the strategy map.

3.3.1 Procedure and respondents

In order to give respondents a second chance to over think the suggested critical factors, all critical factors found in literature are assessed. Store managers can add (or discard) factors to the strategy map based upon the factors found in literature. Unlike the first phase, this phase is aided. It would therefore qualify as being a more structured part of the interview. By ranking the different factors, the most crucial links can be found that shape the final strategy map. The ranking is proposed to be based upon a 5-point Likert scale that ranges from: 1. very unimportant, 2. unimportant, 3. neutral, 4. important, 5. very important. The Likert scale is a popular measurement scale developed to determine the relative intensity of various items (Babbie, 2010). The standardized response categories of the Likert scale (Babbie, 2010). The factors are ranked separately from each other, there is no rank in or between the various perspectives of the BSC/strategy map. Theoretically, a store manager could thus deem all factors of great importance and reward a score of 5 to all of them. By ranking the factors from literature, additional qualitative data is gathered to support the quantitative data.

3.3.2 Data analysis phase 2

To analyze the data, the most important factors are discussed with the store manager. The store managers are asked if they missed factors in their initial strategy map, and how they would implement them in the revised strategy map. Added or discarded factors are directly implemented in the strategy map constructed in phase 1. After receiving all the data, averages for all factors can be constructed per quartile of the efficiency/quality matrix, giving some insight into the similarities and differences among the stores.

4. Analysis of data

4.1 Introduction to analysis of data

Chapter 4 presents the results on the two sub-questions from the practical point-of-view, based upon the methodology described in chapter 3. The first sub-question is centered around the importance of the various factors that influence performance in retail, while the second sub-question gives an insight into the various relations that exist between these factors. The strategy maps that are the end result of the interviews with the store managers are presented in the appendix for clarity. Firstly however, the subjects of research are presented.

4.2 Sample

All eight stores that were visited for this thesis are objectively sketched in this paragraph. The stores are distributed into the four groups of the efficiency/quality matrix. All of the created strategy maps can be found in appendix F.

Group 1 (Qualitative + efficient)

Store 1: This small store is located in the middle of a district in a rather large city in the urban part of the Netherlands. The interior and design is regarded as very old, with the store not being in the new 'Briljant' formula that is based upon the strategy of Plus. In short time the store will relocate to a nearby location with more space and adopt the 'Briljant' formula. However, the current performance of the store can be regarded as outstanding. On quality the store scores almost the maximum amount of points in the PA by the specialist, combined with a surplus of 74,38 Euros on the efficiency standard. So while the store does not follow the formula of Plus based upon the strategy, quality is very good, combined with a very high positive margin on efficiency despite the small size of the store. Earlier on we concluded that it is much harder for smaller stores to be efficient as opposed to larger stores. All these preliminary data makes store 1 worth a visit.

Store 2: This middle-sized store is located very close to the Belgium border in a small village, more than half of the customers is Belgian. The store has a maximum score on quality and a large surplus on efficiency (\notin 51,77). Based upon the data, this store should be a representative part of the Plus philosophy, making it interesting for a visit.

Group 2: Non-qualitative + efficient

Store 3: This small to average sized store is located on the Dutch coast. It is a popular destination for the summer holidays, which means a large part of the customer base is season based and thus temporary. Quality wise, the store is far below par (-16) according to the specialist. Looking at efficiency however, the store has a large surplus of \notin 43,63. It would be interesting to see how this is accomplished by the entrepreneur.

Store 4: This medium sized store is located in a newly build district of a medium sized city in a rural part of the Netherlands. Contrary to store 3, this store has a relatively stable customer base throughout the year. The data for this store is a little less extreme compared to store 3. However, the quality score still is low (-12), while the efficiency surplus is somewhat smaller ($\in 28,24$). The different setting compared to store 3 makes this store interesting to visit.

Group 3: Qualitative + non-efficient

Store 5: This large store is located in the district of a rather large city in the urban area of the Netherlands. The store is a yearly contender for best Plus of the year award, praised by both Plus management and customer reviews. The quality score in the PA by the specialist confirms this image, with a maximum score of 47 points. Looking at efficiency however, the store has quite a shortage of \notin 27,31 below the standard, despite the high quality scores and store size. It should be relatively more easy for large stores to be efficient, combined with the delivered quality it seems somewhat strange that the store is not located in the first group of the matrix, making it an interesting store to visit.

Store 6: This rather small store is located in a small town in very close proximity to the German border. The customer-base is fairly stable, few customers are season-based. This store is relatively comparable to store 2, despite the fact that store 2 is somewhat larger. Quality-wise, the store almost achieves the maximum score in the analysis by the specialist. Looking at efficiency, the store fractionally misses the mark with a shortage of €2,76. Small changes could thus improve the position of the store to the first quadrant.

Group 4: Non-qualitative + non-efficient

Store 7: This store is a medium sized store in a medium sized town and has recently been transformed in line with the current Plus formula. Prior to the transformation the store lacked both in quality (-6) and efficiency (-39,90). It is located in the same area as store 6, but is outscored by store 6 despite the size advantages. The combination of the recent transformation and the differences with store 6 makes this store an interesting one to visit.

Store 8: The last store is a small to medium sized store located in a small village. The store is part of a conglomerate of four stores run by an entrepreneurial family. The different stores are led by different members of the family. One store is led by the highest ranking employees of the most important departments, that split up the tasks that are normally performed by the store manager. The store underperforms on quality based upon the score of the specialist (-14), while scoring very high in customer reviews (ranked number 8 in total). Efficiency wise, there is a rather large shortage of \notin 50,60. It will be interesting to see how the store functions in a conglomerate, which makes a visit interesting, certainly combined with the contradicting scores in the data.

4.3 Results

In the following sections, the results to both the sub-questions will be presented.

4.3.1 Critical factors influencing performance in retail

In congruency with the methodology of the interviews, first the importance will be assessed of the factors that come from the first phase of the interview. This first phase was unaided, so store managers could freely name any factor in the four perspectives of the balanced scorecard/strategy map that they deem important for running a successful store. The more a factor is named in the different interviews, the more important it arguably is for running a store. Some factors were recalled in most interviews, most factors were recalled in only some interviews. If a factor is named in multiple interviews, it can be considered relatively

important. The second phase of the interview was aided based upon the critical factors in literature that were found to be influencing performance. Store managers gave points on a Likert scale from 1 to 5 to all the found factors per perspective (with 1 being very unimportant to 5 being very important). The factors that scored a 4 or higher can be considered critical factors to retail performance. The importance of the factors will be assessed per perspective of the balanced scorecard/strategy map, combining the two phases of the interview.

The financial perspective

The first perspective is the top perspective of the strategy map, including all financial factors that influence retail performance. The results of the first, unaided phase are presented in table 10 per store, and ranked based upon importance (the amount of times the factor was included in the strategy map). Congruent with the retail literature, gross profit (7 of 8) and sales (6 of 8) are the mostly cited factors in designing the strategy maps in the first phase. Store managers were almost unanimously united concerning these two factors being the financial drivers of company success. The manager of store 3 was the only entrepreneur that did not name gross profit or net profit. Considering the fact that the entrepreneur is largely financially independent might explain this deviation. Profit is arguably considered less important because the motivation to make a profit is lacking. Congruent with this line of reasoning is the fact that the store manager did cite financial independence as a critical factor. Furthermore, operational costs can be considered a critical factor, since it is mentioned four times. Logically, store managers that cited net profit also cited operational costs. Financial independence and continuity both barely make it as critical factors with both two mentions.

Factor/Store	Store 1	Store 2	Store 3	Store 4	Store 5	Store 6	Store 7	Store 8	#
Financial									
Gross profit	х	х		х	х	х	х	х	7
Sales		х	х		х	х	х	х	6
Operational costs	х				х	х		х	4
Net profit					х	х			2
Financial			х				х		2
independence									
Continuity				х		х			2
Financially healthy							х		1
Investing							х		1
Department share					х				1
Cost control		х							1
Supply amount	x								1
Procurement	x								1

Table 10: Unaided financial factors

In the second, aided phase, store managers provided a score of importance to all the found critical factors from literature. In line with the unaided phase and literature, sales and profit are both seen as crucial financial factors, with sales scoring an unanimous 5 (profit 4,38). Additionally, market attractiveness is seen as very important by most stores, scoring an average of 4,38. However, since it is an external factor that can hardly be controlled, none of the stores added market attractiveness in their actual strategy map. All financial factors scored above 3,50, confirming the importance of the factors found in literature. Coming back on store 3, interestingly enough, profit scored a maximum score of 5, while it was the only store that did not include profit in the strategy map. However, after the second phase, the store manager was still not tempted to include profit in the strategy map.

Factor /Store	Store 1	Store 2	Store 3	Store 4	Store 5	Store 6	Store 7	Store 8	Average
Financial	3,43	3,86	4,43	4,71	3,71	4,14	4,14	3,86	4,04
Sales	5	5	5	5	5	5	5	5	5,00
Profit	5	3	5	5	4	3	5	5	4,38
Location costs	2	4	4	5	3	5	4	3	3,75
Operatio nal costs	2	3	4	5	3	5	3	4	3,63
Size of store/de partment	4	3	4	3	4	3	3	4	3,50
Market attractiv eness	3	5	5	5	4	5	5	3	4,38
Nearby competiti on	3	4	4	5	3	3	4	3	3,63

Table 11: Aided financial factors

The customer perspective

The second perspective includes all the customer factors that influence retail performance. The results of the first, unaided phase are presented in table 12 per store, and ranked based upon importance (the amount of times the factor was included in the strategy map). Immediately notable is the variation in customer factors among the different stores. While six out of eight stores list customer satisfaction as a critical factor, no other factor is mentioned more than twice, and only three factors (product quality, availability, and hygiene) get two mentions. This means that the number of critical factors is limited to just four factors, with customer satisfaction clearly as the most apparent factor concerning customers. Store 1 left out customer satisfaction, focusing the customer perspective on perhaps a more objective measure of customer spending. Store 5 centered the customer perspective around the factor attention, in line with a pillar of the Plus general strategy.

Factor/Store	Store 1	Store 2	Store 3	Store 4	Store 5	Store 6	Store 7	Store 8	#
Customer									

Customer satisfaction		х	х	х		х	х	х	6
Product quality	х				х				2
Availability					х		х		2
Hygiene					х	х			2
Spending	х								1
Amount/weight	х								1
Age/size of the population	х								1
Customer trust		х							1
Feel at home		х							1
Exceeding expectations		х							1
Customer is taken seriously			х						1
General atmosphere				х					1
Attention					х				1
Presence					х				1
Customer friendliness					х				1
Indulge the customer						х			1
Freshness							х		1
Service							х		1
Innovation							х		1
Customer focus								x	1
Best supplier								х	1

The results of the second phase regarding the customer perspective are presented in table 13. Immediately it is clear that customer factors are considered of the highest importance. All critical customer factors from literature are confirmed to be important, scoring a minimal of 4,50. Customer satisfaction is seen as the most important factor, with an almost perfect score of 4,88, in line with the findings from the first phase. Store 5 had the only manager that gave customer satisfaction a four on the Likert scale, centering the customer perspective around the factor attention, as mentioned shortly before. Interestingly though, while repurchase intention, customer value, and store image are all seen as critical factors, none of the store managers added these factors in their strategy maps, not even after the second phase.

Factor/Store	Store								
	1	2	3	4	5	6	7	8	Average
Customer	4	4,25	4,75	5	4,5	5	5	5	4,69
Repurchase intention	4	4	5	5	4	5	5	5	4,63
Satisfaction	5	5	5	5	4	5	5	5	4,88
Value	4	4	5	5	5	5	5	5	4,75
Store image	3	4	4	5	5	5	5	5	4,50

Table 13: Aided customer factors

The internal processes perspective

The third perspective includes all the factors related to internal processes that influence retail performance. The results of the first, unaided phase are presented in table 14 per store, and ranked based upon importance (the amount of times the factor was included in the strategy map). Of all the perspectives, the internal processes perspective has the least amount of accordance among the stores. Clarity was the factor that was mentioned the most, by four stores, closely followed by: appreciation, local involvement, communication, and systems (all three mentions). Quality of personnel, work atmosphere, assortment, and structure are included in the strategy map by two stores. This makes a total of nine critical factors within the internal processes perspective based upon the first phase. Interestingly, three of three of the four stores that mentioned clarity as an important factors, also cited appreciation, with no mentions outside the four stores citing clarity.

Factor/Store	Store	#							
	1	2	3	4	5	6	7	8	
Internal									
Clarity				х	х	х	х		4
Appreciation				х	х	х			3
Local involvement			х		х	х			3
Communication	х	х			х				3
Systems	х	х			х				3
Quality of personnel	х						х		2
Work atmosphere						х	х		2
Assortment	х					х			2
Structure		х			х				2
Processes								Х	1
Agreement = Agreement								х	1
Guidelines							х		1
Goal					х				1
Right tools					х				1
Filling in the daytime			х						1
Point of contact			х						1
Minimal stock	х								1

Table 14: Unaided internal factors

The results of the second phase regarding the internal processes perspective are presented in table 15. Compared to the financial and customer factors, the internal factors generally are considered of somewhat lesser importance. Service factors is seen as the most important internal factor, scoring an almost perfect 4,88. Labor, store factors, merchandise, and price and promotion are also factors scoring higher than 4 on the Likert scale, confirming their importance in practice. Service delivery innovation is regarded as relatively unimportant, scoring below 3 (2,88). Store 6 gave service delivery innovation the lowest possible score of 1, mainly influenced by the fairly conservative market in which he operates. Still, while labor is seen as an important factor, no store manager included labor in their strategy maps. The same is true for price and promotion. Separate store factors (hygiene, general atmosphere),

and service factors (service, freshness, attention) were mentioned by several store managers. Merchandise factors mentioned by managers include: assortment, availability, and product quality.

Factor/Store	Store	Store	Stor	Store	Store	Store	Stor	Stor	Avera
	1	2	е З	4	5	6	е 7	е 8	ge
Internal	4,00	3,33	4,2	3,89	3,56	4,00	3,6	4,5	3,90
			2				7	6	
Inventory	3	3	4	3	4	5	2	4	3,50
Labor	5	4	4	4	4	4	3	4	4,00
Transaction	4	3	4	3	2	4	4	4	3,50
Store factors	4	3	5	5	4	5	5	5	4,50
Service factors	5	4	5	5	5	5	5	5	4,88
Merchandise	4	3	5	5	4	5	5	5	4,50
Price &	3	4	4	5	3	4	4	5	4,00
promotion									
Service	4	3	4	2	2	1	3	4	2,88
delivery									
innovation									
CSR	4	3	3	3	4	3	2	5	3,38

Table 15: Aided internal factors

The learning and growth perspective

The fourth and last perspective includes all the factors related to learning and growth that influence retail performance. The results of the first, unaided phase are presented in table 16 per store, and ranked based upon importance (the amount of times the factor was included in the strategy map). The first factor that stands out is employee training, seven out of eight stores list employee training in their strategy maps, making it a vital factor in the learning and growth perspective. The store manager of store 4 is the only entrepreneur that did not choose to include employee training, exclusively training his personnel himself by coaching on the job. All other store managers use external training of employees by Plus to a varying degree. Teh manager of store 5 was the only one to explicitly combine both external training and coaching on the job in his strategy map. Furthermore, only consultation was mentioned multiple times (3), making it an important factor. No less than 13 factors were only mentioned once and were thus specific for a certain store.

Factor/Store	Store	#							
	1	2	3	4	5	6	7	8	
Learning & Growth									
Employee training	х	х	х		х	х	х	х	7
Consultation			х		х			х	3
Coaching on the job				х	х				2
Employee satisfaction		х							1
Positivity		х							1
Feedback		х							1

Hard on the task, heart for the person	x							1
Awareness of the customer		х						1
Christmas bonus		х						1
Independence			х					1
Experience				х				1
Market expansion					х			1
Growth in fresh departments						х		1
Right mix						х		1
Internal promotion							х	1
Best employer							х	1

Table 16: Unaided L&G factors

The results of the second phase regarding the learning and growth perspective are presented in Table 17. Interestingly enough, all factors from literature are considered of high importance, besides store age, scoring above 4 points on the Likert scale. Employee loyalty and employee satisfaction both score a very high 4,75 score, while only one store lists employee satisfaction in their strategy map (store 2 in the second phase) and not one manager mentions employee loyalty in the strategy maps or anything that resembles this factor. This seems to be a discrepancy between the stated matter of importance and the actual operationalization in the strategy map. Employee training scores lower with a score of 4,38, despite being listed in almost every strategy map. IT infrastructure can be placed in the internal perspective as systems, as well as open communication is listed as communication. Human IT resources can be placed under personnel quality in the internal processes perspective. Shared vision and a trusting culture however are mentioned in none of the strategy maps.

Factor/Store	Store 1	Store 2	Store 3	Store 4	Store 5	Store 6	Store 7	Store 8	Average
Learning & growth	4,00	4,33	4,11	4,33	4,00	4,89	4,33	4,44	4,31
Employee loyalty	5	4	5	5	4	5	5	5	4,75
Employee satisfaction	4	5	5	5	4	5	5	5	4,75
Employee training	3	4	4	5	4	5	5	5	4,38
IT infrastructure	4	5	4	3	5	4	3	4	4,00
Human IT resources	4	4	4	3	5	5	4	5	4,25
Open communication	4	5	4	5	4	5	5	5	4,63
Shared vision	4	4	4	5	4	5	4	5	4,38
Trusting culture	5	4	4	5	3	5	5	5	4,50
Store age	3	4	3	3	3	5	3	1	3,13

Table 17: Aided L&G factors

Now that all perspectives have been analyzed, a balanced scorecard can be constructed with all the critical factors from practice that is the end-result of sub-question 1. The balanced scorecard is presented in figure 9.



Figure 9: Balanced scorecard from practice

4.3.2 Relations between the critical factors influencing performance in retail

The second sub-question revolves around the causal relationships between the different critical factors influencing performance in retail from the previous sub-question. This means that only the factors that are at least mentioned twice by managers will be analyzed in this sub-question, since these are the critical factors in the strategy maps. All these factors are listed on the balanced scorecard from practice in figure 9. Only direct relationships are analyzed, specific indirect relationships can be reviewed in the appendix section of this thesis where all strategy maps are presented. In accordance with the structure of this thesis, relations will be analyzed per perspective of the balanced scorecard/strategy map.

Financial perspective

Firstly, all the links originating from the financial perspective will be reviewed. In table 18 all links mentioned by the store managers that stem from a financial factor are presented. The two most popular direct causal relationships are: the positive link between sales and gross profit, and the link between gross profit and operational costs, with both three mentions. Confirming the logical link coming from literature, more sales generally translates into an improved gross profit. One store manager however (store 5), explicitly denied the assumed link between sales and gross profit, advocating the role of gross margin. Less sales with a better gross margin could lead to a potentially higher gross profit. The relationship between gross profit and operational costs is based upon the logic that a higher gross profit leads to less influence of operational costs, thus a negative relationship. The next logical relationship from operational costs to net profit is mentioned by two entrepreneurs. Higher operational

costs leads to a lower profit, in line with the literary definition of net profit. One store manager (store 4) cited a direct relationship between gross profit and continuity, hereby focusing on future success of the store itself, and one store manager (store 3) has a direct link in his strategy map between sales and financial independence, focusing more on personal wealth.

From/connected to					
Financial	Continuity	Gross profit	Oper. Costs	Net profit	Finan. Ind
Gross profit	I		III		
Sales		III			I
Net profit					
Operational costs				II	
Financial independence					
Continuity					

Table 18: Relations from the financial perspective

Customer perspective

The second step is analyzing the factors that originate from the customer perspective of the balanced scorecard/strategy map. All causal relationships are presented in table 19. The most popular relationship mentioned by the store managers originates from the customer perspective. Five of the eight store managers cite a direct causal relation between customer satisfaction and sales. More satisfied customers will buy more products is the logic behind this relationship, which is not in line with the findings from literature. Customer satisfaction thus seems to be the main driver of sales. The popular theory in retail literature is an indirect relationship via repurchase intention, which is a factor that does not come back in any strategy map, not even after the second phase. One store manager (store 4) assumes a direct link between customer satisfaction and gross profit, probably because he left out sales in the first place. The same store manager also cites a causal relationship between customer satisfaction and continuity of the store, which could be prove of a long-term vision that reaches beyond short-term financial results. Product quality, availability, and hygiene are all antecedents to customer satisfaction mentioned once by a store manager.

From/connected to	Sales	Gross profit	Continuity	C. Satisf.
Customer				
Customer satisfaction	V	I	I	
Product quality				I
Availability				Ι
Hygiene				I

Table 19: Relations from the customer perspective

Internal processes perspective

The third perspective of which the originating relationships will be reviewed is the internal processes perspective. An overview of all the causal relationships can be found in table 20. The first thing that stands out is the striking diversity of the relationships coming from the internal processes perspective. Not one relationship really stands out, the vertical connection to the customer perspective (to customer satisfaction, hygiene and product quality) is distributed over six different factors. Additionally, at most a relationship originating from the internal perspective is mentioned twice by the store managers. A possible explanation would be that the internal processes perspective is the perspective over which local management has the most influence, creating a variation of options. Customer satisfaction according to the managers is directly linked from: clarity (twice), local involvement (twice), work atmosphere (twice), quality of personnel (once), assortment (once), and structure (once). More clarity and structure internally results in reliability towards the customer, local involvement positively influences the satisfaction of the customer that values the positive attitude of a store, more qualified personnel is better capable of providing service to the customer, a good work atmosphere translates into a positive experience on the floor for the customer, as does a well managed assortment. All the previously named relationships are thus positive relations. Also cited twice is the causal link between appreciation and work atmosphere. Employees that are appreciated by their management feel validated, resulting in a positive increase in the work atmosphere. All other relationships are cited only once and can be found in the following figure 15. All these links are positive, with the exception of the link between clarity and operational costs mentioned by store 6, which is a negative connection.

From/ connected to	Syste ms	Struct ure	C. Satisf.	Work atmos.	Clari ty	Hygie ne	Prod. Quality	Oper. Costs	Quality person.
Internal									
processes									
Clarity			П			I	I	I	I
Appreciation				П					
Local involvement			II						
Communication	I	I							
Systems		I							
Quality of personnel	I		Ι		I				
Work atmosphere			II						
Assortment			I						
Structure			I		I				

Table 20: Relations from the internal processes perspective

Learning & growth perspective

Lastly, all the causal relations stemming from the learning and growth perspective are reviewed. An overview with these relations can be found in table 21. Immediately striking is the large variety of relationships originating from only three critical factors. This could be explained by the fact that the learning and growth perspective is the root of the strategy map, with its influences spreading into the highly varied internal processes perspective. The mostly cited link (three times), is the positive connection between employee training and quality of personnel. By receiving training, employees are better able to fulfill their jobs by gathering knowledge and procedures from the training, improving the quality of personnel. Twice mentioned is the positive relationship between employee training and appreciation. Often called a byproduct of training by managers, is the appreciation employees feel because their employee is investing not only in the future of the company, but also in the personal future of employees. All other links are cited but once by store managers, and all are positive relations. Perhaps notable is the fact that none of the store managers connected employee training with costs, neither directly or indirectly.

From/connect ed to	Quality person.	Syste ms	Emp. Training	Clari ty	Consulta tion	Apprecia tion	Communic ation	Struct ure	Oper. Costs
L&G perspective									
Employee training	III	Ι			I	II			
Consultation			I	I		I	I	I	I
Coaching on the job				I					

Table 21: Relationships from the L&G perspective

Now that all relations from the different perspectives are analyzed, a summarized strategy map with the most important factors and relations can be constructed. Factors that have but one, or no relations to other factors are not included in the summarized strategy map, for the sake of clarity. The thickness of the arrows represents the strength of the relations, a thicker line means a stronger relationship. Red lines represent a negative relationship, while the black lines represent a positive link. The strategy map can be found in figure 10.



Figure 10: Summarized strategy map

5. Conclusions and implications

5.1 Introduction to conclusions and implications

In this last chapter of the thesis, the answers to the sub-questions and main research question are provided, together with the implications for further research. The answers will be based upon the results given in the previous chapter, that were extracted based upon the Delphi methodology, and formed within the theoretical framework of the balanced scorecard and strategy map. The results from chapter 4 are used to compare between the various groups of the efficiency/quality matrix, in order to analyze the agreements and differences.

5.2 Conclusions

5.2.1 What are the critical factors influencing performance in retail?

In the second chapter of this thesis an extensive list (appendix C) was provided with the theoretical critical factors that influence retail performance based upon the available literature. The fourth chapter provided a balanced scorecard with all the critical factors from practice. While overlap can certainly be found, there are also some differences between theory and practice. The figures in appendix G present both the critical factors from theory and practice, comparing these factors vertically between the stores based upon efficiency, and horizontally based upon quality. In the following sections, the conclusions per perspective are given, by summarizing the figures from appendix G in the efficiency/quality matrix. A bold critical factor (for example: gross profit), is mentioned by both stores in that quadrant, while a nonbold factor (for example: continuity), is mentioned by only one of the two stores. Looking at the complete strategy map, efficient stores use less critical factors on average than non-efficient stores (12 vs. 17). This means that generally, the efficient stores use a more direct way towards financial results at the top of the strategy map, while non-efficient stores on average take more factors into account. Quality wise, qualitative stores use an average of 17 factors, against an average 12 factors of non-qualitative stores. This implies that qualitative stores take more factors into account regarding the performance of their organization, perhaps better aware of the many factors that could influence performance.

Financial perspective

Starting with the financial perspective, the two mostly cited factors from literature are also largely represented in practice. Sales, profit, and operational costs are all factors considered important theoretically and practically, with profit further defined as gross profit and net profit in practice. Sales is considered to be of highest importance by all eight stores, with no differences in the score of importance. Six stores included sales in their strategy maps, two of the stores were efficient stores, while four store were non-efficient. Looking at quality in the horizontal comparison, sales as a factor is evenly spread between the qualitative and non-qualitative stores. Profit is somewhat higher valued by efficient stores (0,25 difference), while the difference between qualitative stores and non-qualitative scores is more than a point (1,25), with non-qualitative stores all valuing profit of the highest importance (5). Seven stores included profit in their strategy maps, with no remarkable differences vertically as well as horizontally. Operational costs have a somewhat lower importance to store managers

compared to sales and profit, with little difference between efficient and non-efficient stores. Three of the four non-efficient stores included operational costs in their strategy map, while only one efficient store included operational costs. Quality wise, the difference is larger, with non-qualitative stores giving an average score of 4 compared to a 3,25 score of qualitative stores. Interestingly enough, three of the four qualitative stores included operational costs in their strategy map, as opposed to only one non-qualitative store.

These findings seem to indicate that non-qualitative stores focus more upon short term financial factors, particularly profit and operational costs when compared to qualitative stores. Based upon the financial perspective, qualitative stores seem to have a better balance regarding financial and non-financial factors. At the same time, the qualitative stores do include operational costs (and profit) in their strategy maps more so than non-qualitative stores, which might suggest that they have a clearer view of the influence of financial factors on their strategy. Non-qualitative stores thus seem more short-term oriented, while qualitative stores have a better strategic focus. Additionally, financial independence is mentioned only by non-qualitative stores, suggesting that personal financial gain is a stronger motivator in nonqualitative stores. Looking at the vertical efficiency comparison, scores of importance are relatively comparable, no large differences occur between efficient and non-efficient stores. However, looking at the factors that were included in the strategy maps, non-efficient stores include: sales, gross profit, net profit, and operational costs in larger amounts than their efficient counterparts. Continuity and financial independence are both cited equally. Logically, non-efficient stores need to focus more upon financial factors, since they are lacking in this area. This could very well be the explanation for the differences in the vertical comparison. An overview of the critical factors mentioned by the different store types can be found in the following table. And as mentioned before, if a factor is mentioned by both stores of that store type, the factor is **bold**.

Financial factors	Non-qualitative	Qualitative
Efficient	Gross profit Sales Financially independent Continuity	Gross profit Sales Product loss Amount of supply Procurement Cost control
Non-efficient	Gross profit Sales Financially independent Investment Operational costs Product loss	Gross profit Sales Operational costs Net profit Department contribution Continuity

Table 22: Financial factors per quadrant

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Customer perspective

Quite clearly, one factor dominates the perspective of the customer, based upon the interviews. Customer satisfaction receives almost the maximum score from all but one store, which values customer satisfaction with a four on the scale of five. It is included in the strategy maps of six stores, while all the other factors from retail literature are not mentioned once, despite receiving almost equally high scores of importance. There is no vertical difference between stores as it comes to customer satisfaction, both efficient and non-efficient stores mention customer satisfaction three times in their strategy maps. Horizontally, there is a slight difference between qualitative and non-qualitative stores. Perhaps surprisingly, all non-qualitative stores cite customer satisfaction, while half of the qualitative stores include customer satisfaction in the strategy map. One store used 'attention' as the main customer factor, while the other store used average transaction per customer. While customer satisfaction is undoubtedly important, focusing on different customer factors might also pay off when it comes to quality.

Looking at some of the other customer factors that were included in the strategy maps, inefficient stores include specific factors of hygiene and availability, contrary to inefficient stores. This suggests perhaps that inefficient stores spend time (and money) at less important activities that distract from the core business. Looking at the horizontal comparison, qualitative scores mention product quality and hygiene twice against zero mentions by the non-qualitative stores. This agrees with the rational thought that qualitative stores indeed pay more attention to qualitative aspects like product quality and hygiene, making it a part of their strategy. Lastly, it is notable to state that looking purely at the average of the customer perspective, non-efficient stores place slightly more value on customer factors (+0,38), and non-qualitative stores value customer factors half a point (0,5) higher. One could say that nonefficient stores focus somewhat more on the customer, while efficient stores focus more on the financial factors. However, the average of the customer factors still outscores the importance of financial factors for efficient stores, denying this last claim. An overview of the critical factors mentioned by the different store types can be found in the following table. And as mentioned before, if a factor is mentioned by both stores of that store type, the factor is bold.

Customer factors	Non-qualitative	Qualitative
Efficient	Customer satisfaction Local involvement Taking the customer serious General atmosphere	Customer satisfaction Spending per cust. Amount/weight per cust. Age/size of population Exceed expectations Feel at home Trust Product quality
Non-efficient	Customer satisfaction Customer focus Best supplier	Customer satisfaction Hygiene Attention

Availability	Product quality	
Service	Meeting customer demands	
Freshness	Customer friendliness	
Innovation	Local involvement	

Table 23: Customer factors per quadrant

Internal processes perspective

The internal perspective is the perspective with the most variety among stores, nine factors are mentioned at least twice, while no factor is mentioned more than four times. Looking purely at the general importance scores of the internal processes perspective, little differences can be seen between the stores, comparing vertically, as well as horizontally. Going deeper into the detail of the vertical comparison, the only large difference occurs with service delivery innovation. Efficient stores place 0,75 point more value to service delivery innovation, as opposed to inefficient stores. An explanation would be that efficient stores are looking for new ways to innovate in order to generate additional income, in order to keep expanding financially in the future, while inefficient stores first need to work at getting the core business efficient. Looking at the featured factors in the strategy map, only work atmosphere stands out, with two mentions by non-efficient stores, while not one efficient stores put more effort into creating an comforting environment for employees, while efficient stores would create an environment where there is a stronger focus on getting hard results.

With the horizontal comparison, the differences in importance scores are somewhat larger of extent, since store factors, merchandise, and price and promotion score a full point higher with non-qualitative stores. Remarkably though, merchandise (or assortment) is featured in not one strategy map by non-qualitative stores, while it is mentioned in half the qualitative stores. So claiming that a factor is important, does not necessarily mean that the factor is used strategically. Additionally the internal factors of: appreciation, local involvement, communication, structure, and systems are all mentioned more in strategy maps of qualitative stores, the last three factors are not even cited once with the non-qualitative stores. Non-qualitative stores outscore their counterparts mainly on the factor of clarity, which is a rather vague term that is rather hard to define. Qualitative stores are better able to transform clarity into less vague factors, which benefits the implementation of the strategy. An overview of the critical factors mentioned by the different store types can be found in the following table. And as mentioned before, if a factor is mentioned by both stores of that store type, the factor is **bold.**

Internal factors	Non-qualitative	Qualitative
Efficient	Clarity Appreciation Point of contact Daytime filling Customer awareness	Systems Communication Counting inventory Minimal stock Structure Quality of personnel Assortment
Non-efficient	Quality of personnel Clarity Guidelines Work atmosphere Processes	Clarity Appreciation Structure Systems Communication Common purpose
		Right resources Driving Work atmosphere Assortment

Table 24: Internal factors per quadrant

Learning & growth perspective

Lastly, the conclusion for the bottom perspective is given. Looking at all stores, employee loyalty and employee satisfaction are both valued highly by store managers, with almost perfect scores on importance and little difference vertically as well as horizontally. However, both these factors are not included in any strategy map, questioning the actual strategic importance of employee loyalty and employee satisfaction. Employee training on the other hand is mentioned by no less than seven of the eight stores, emphasizing the strategic role of training employees in retail. Non-efficient stores value training 0,75 points higher than their counterparts, perhaps because the need for training in these stores is more apparent, since financial results are lacking. Non-qualitative stores value training also 0,75 points higher, which also seems to indicate that the need for training is higher in stores that are lacking in quality. In efficient or qualitative stores, the internal structure is strong enough to sustain the performance, needing less external influences trough training. The distribution among the store types concerning employee training is quite well spread (4-3 and 4-3), which indicates that employee training is an important factor in the strategy map of any store.

Furthermore, non-efficient stores value human IT resources highly compared to efficient stores, while the importance score for the IT infrastructure is balanced. Store managers of the efficient stores seem to trust more in the system itself that is calibrated to be efficient, while managers of non-efficient stores emphasize the role of the human adaption of the system. Comparing on quality, qualitative stores put a higher value on both IT infrastructure (by one point) and human IT resource (by half a point).

This is supported by the fact that systems as a factor is included in two strategy maps of store managers of a qualitative store, while no manager of a non-qualitative store mentions systems to be an important factor. This would imply that qualitative stores use the IT systems in ways that support the strategy of quality followed by Plus. Lastly, store age is valued higher by qualitative stores (3,75), while non-qualitative give store age an average score below three points (2,50). This would indicate that the qualitative stores want to keep their store up to date, more so than the non-qualitative stores, in order to provide the customer with enough quality. An overview of the critical factors mentioned by the different store types can be found in the following table. And as mentioned before, if a factor is mentioned by both stores of that store type, the factor is **bold**.

Learning & growth factors	Non-qualitative	Qualitative	
Efficient	Employee training Consultation Christmas bonus Coaching on the job Independency	Employee training Positivity Feedback Hard on the task, heart for the people Employee satisfaction	
Non-efficient	Employee training Right product mix Focus on fresh departments Consultation Best employer	Employee training Consultation Accompaniment Experience Expanding to the German market	

Table 25: Learning & growth factors per quadrant

5.2.2 How are these critical factors influencing performance in retail interrelated?

Chapter 4 ended with a summarized strategy map, with all the important relations between the cited factors by store managers. The strongest link was found between customer satisfaction and sales, which was mentioned five times. In appendix H figure 20, all the cited links between the critical factors are divided vertically (based upon efficiency), and horizontally (based upon quality), conform the comparison in paragraph 5.2.1. In the following sections, the relations between the critical factors will be reviewed per perspective of the balanced scorecard. Only the relations that are mentioned more than once will be assessed, for the sake of clarity and meaningful comparison.

Financial perspective

The top perspective of the strategy map gives us insight in the relations originating from the financial perspective. Immediately apparent is the difference between the efficient and nonefficient stores in the vertical comparison. Non-efficient stores put a lot more emphasis on direct financial links as opposed to their efficient counterparts. Non-efficient stores mention seven direct financial links, as opposed to just one direct link for efficient stores. Primarily the links from and to operational costs shape this difference. Logically, non-efficient stores need to consider the effects of costs because they are lacking financially, explaining the differences. Efficient stores have less need to focus on the financial links, since financial results are already positive. On the horizontal side, qualitative stores mention more direct financial links than non-qualitative stores (6 vs. 2). It could mean that qualitative stores are better aware of the financial links in the organization. Non-qualitative and efficient stores do not cite one relationship that was mentioned more than once in all the interviews, while their counterparts in the efficiency/quality matrix mention the most links of all quadrant types. The qualitative/non-efficient stores really seem to understand their need to improve financially, while the non-qualitative/efficient stores lack financial focus because they are already financially successful. An overview of the relevant relationships between the critical factors can be found in the following table. Relationships mentioned by both stores in a store type are written in **bold**.

Financial factors relations	Non-qualitative	Qualitative
Efficient	-	Sales > Gross profit
Non-efficient	Sales > Gross profit Gross profit > Operational costs	Operational costs > Net profit Gross profit > Operational costs Sales > Gross profit

Table 26: Financial factor relations per quadrant

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Customer perspective

Secondly, the links from the customer perspective will be reviewed. Only one factor is of critical importance in the strategy maps of the stores in the customer perspective. Customer satisfaction is of critical importance to the stores, and the link between customer satisfaction and sales is the most cited link of all strategy maps with five mentions. Vertically and horizontally there is very little difference between the types of stores. It does not seem to matter what type of store, the link between sales and customer satisfaction is mentioned in all four of the store types, with very little difference among the types. An overview of the relevant relationships between the critical factors can be found in the following table. Relationships mentioned by both stores in a store type are written in **bold**.

Customer factors relations	Non-qualitative	Qualitative
Efficient	Customer satisfaction > Sales	Customer satisfaction > Sales
Non-efficient	Customer satisfaction > Sales	Customer satisfaction > Sales

Table 27: Customer factor relations per quadrant

Internal processes perspective

In this third perspective of the internal processes, there are quite some relations between critical factors. First and foremost, there is no relationship from the internal perspective that dominates the strategy maps, as opposed to the customer perspective. Looking at the vertical comparison, there is very little difference between efficient and inefficient stores. All the relations that are mentioned twice are evenly spread between efficient and non-efficient stores, indicating that internal processes do not really differ when dividing stores based upon efficiency. Horizontally, some small variations appear. Non qualitative stores see clarity internally as a direct way to customer satisfaction on two occasions (not mentioned by qualitative stores), while qualitative stores see a direct link between work atmosphere and customer satisfaction twice (not mentioned by non-qualitative stores). This seems to indicate that non-qualitative stores attach more value to a clear work environment to please customers, while qualitative stores attach more value to an attractive work environment to please customers. The rest of the factors is equally spread or mentioned only once, making comparison difficult. An overview of the relevant relationships between the critical factors can be found in the following table. Relationships mentioned by both stores in a store type are written in bold.

Internal factors relations	Non-qualitative	Qualitative
Efficient	Clarity > Customer satisfaction Appreciation > Work atmosphere Local involvement > Customer satisfaction	Systems > Structure Communication > Structure Quality of personnel > systems
Non-efficient	Clarity > Quality of personnel Quality of personnel > Customer satisfaction Clarity > Customer satisfaction	Structure > Clarity Communication > Clarity Clarity > Operational costs Appreciation > Work atmosphere Work atmosphere > Customer satisfaction Local involvement > Customer satisfaction

Table 28: Internal factor relations per quadrant

Learning and growth perspective

The last perspective deals with the relations originating from the learning and growth perspective. The most popular relationship from the learning and growth perspective is the positive link between employee training and personnel quality with three mentions. Non-efficient stores have more direct links compared to their efficient counterparts. This is somewhat logical, since non-efficient stores have an average of 17 critical factors to connect, while efficient stores use an average of 12 factors. The strategy maps of efficient stores are more directly steered towards financial performance, with less links to the top of the strategy map. It seems that non-efficient stores see employee training not only as improving the quality of personnel, but also as a sign of appreciation towards their employees, including consultation with employees. Looking at the quality comparison, there are no notable differences between the various stores concerning the relationships from the learning and growth perspective. An overview of the relevant relationships between the critical factors can be found in the following table. Relationships mentioned by both stores in a store type are written in **bold.**

Learning & growth factors relations	Non-qualitative	Qualitative
Efficient	Consultation > Employee training	Employee training > Quality of personnel

Non-efficient	Employee training > Quality of personnel Employee training > Work atmosphere	Employee training > Consultation Consultation > Structure Consultation > Communication Consultation > Appreciation Employee training > Appreciation

Table 29: Learning & growth factor relations per quadrant

5.2.3 Does quality lead to better performance in the Dutch retail sector?

Now that the sub-questions are answered, it is possible to give an answer on the main question of this thesis, answering if quality leads to a better performance in the Dutch retail sector. The many factors that influence retail performance from literature are narrowed down in practice by the store managers.

Managers of qualitative stores tend to use more factors and causal relations in their strategy map to steer the business, aware of the many influences that could influence overall performance. Certainly in the internal processes perspective, many different factors are mentioned by store managers of qualitative stores. This is not surprising, since the internal processes are under the direct influence of store managers, more so than factors from the other three perspectives. Employee training is not exclusively seen as improving the knowledge and skills of employees, but also as a way to show appreciation to their employees, creating a pleasurable work atmosphere that is valued not only by employees, but also by customers.

Efficient stores on the other hand, use relatively less factors to come to the top of their strategy maps, particularly in the internal processes perspective where the factor 'clarity' is popular as an overall concept that is the heart of the internal perspective. They attach value to guidelines and clear communication within the organization in order to achieve performance. They see employee training mainly as a way of improving the skills of their employees, not mentioning appreciation and work atmosphere as critical factors.

In this thesis an economies of scale effect was also found, implying that it is more easy for larger stores to be efficient. The efficiency standard is more easily surpassed by the larger stores in their sales category, while smaller stores have more difficulty overcoming their efficiency standard. To create a fairer distribution on efficiency, Plus could downgrade the efficiency standard for the smaller stores, while upgrading the standard for larger stores. Additionally, qualitative stores that are also efficient are significantly larger in sales than non-qualitative stores that are efficient. Stores with larger financial options can invest more in quality, which is acknowledged by customers, improving sales, which improves the financial options, creating a virtuous circle. This implies that quality indeed leads to financial success, confirming the strategy of Plus, but that it is restricted by store size.

Besides the differences, there are also similarities between the qualitative and efficient stores. Customer satisfaction is by far the most important factor in the customer perspective with all stores, and the positive relationship of customer satisfaction to sales is seen by most stores as a crucial link in the organization. While other customer factors from literature are valued on paper like: store image, customer value, and repurchase intention, none of the stores include these factors in their strategy maps. Additionally, profit and sales are unanimously seen as critical factors in the organization at the top of the strategy map, in congruence with results from retail literature. Inefficient stores provide an additional focus to operational costs, knowing that these costs are important to the future success of the company since they are currently not reaching their financial targets.

All in all, while providing quality can certainly lead to successful performance in the Dutch retail, other, more direct and efficient ways can also lead to excellent performance. A mix of focusing on quality while keeping the relations between the critical factors logical and clear, could very well be an ideal mix to achieve maximum performance.

5.3 Limitations and implications

In this last part of the chapter and thesis, limitations that restrained the thesis will be discussed, along with both theoretical and practical implications based upon the results and conclusions.

5.3.1 Limitations

First and foremost, the time restriction of a master thesis forms an important limitation. Due to this restriction in time, eight stores were visited (two of each quadrant of the efficiency/quality matrix), where potentially 183 stores could have been visited. It should however be noted that it was not the goal for this thesis to create statistically significant results. Therefore, the strategy map analysis was chosen as the framework for this thesis, which qualifies as a praised framework to gain meaningful data. Additionally, costs were not taken into account for the efficiency distribution. This is caused by the lack of a common comparison standard within the retail organization. Such a common standard could potentially be developed, but this would be time consuming. Lastly, conclusions are limited for the studied Dutch retail organization, they cannot be interpreted generally. This however was the focus of this thesis, external validity is deemed of lesser importance.

5.3.2 Theoretical implications

This thesis could potentially be the starting point of various future research directions. Currently, this thesis was the first study that implements the strategy map framework to assess the strategy of a Dutch retailer among its stores. Statistically relevant data could be gathered when the framework of this study is used to assess a large amount of stores, although it would be time consuming. The same research design of this study could be implemented in various sectors of business, to compare similarities and differences between types of industry. A comparison could also be made within the supermarket industry, comparing the different organizations (with differing strategies) within one type of industry.

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5.3.3 Practical implications

The database that was constructed specifically for this study can be of great value to the retail organization. With the constructed database, Plus has a visual representation of the efficiency/quality matrix for its stores. This can be used as a monitoring tool to steer the stores to more favorable dimensions of the matrix. Combined efforts of headquarters and local personnel to improve efficiency/quality can be monitored in the database. The constant data gathering of the specialists means that the database can be updated on a daily basis, always keeping up with current performance. The gathered data can also be compared to other data (like customer satisfaction scores, amount of returns) in order to come to additional results and conclusions. The score of quality by specialists for example could be compared to the customer satisfaction score, studying the coherence between the two scores.

Additionally, the balanced scorecard/strategy map framework could be adapted by specialists or cluster managers to assess the strategy of the multiple stores throughout the country, in the same way that was done in this thesis. This would provide a tool for specific stores to monitor their performance based upon their own strategy map or suggestions by peers.

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Appendix A



Appendix B



Appendix C

Factor	Author(s)	Significant	Controllable
Financial		Significant	Controllable
perspective			
Sales	Thomas et al. (1998), Barros & Alves (2003), Barro (2005), Korhonen & Syrjänen (2004), Vaz et al. (2010), Donthu & Yoo (1998)	Yes	Yes
Profit	Thomas et al. (1998), Barros & Alves (2003), Barros (2005), Korhonen & Syrjänen (2004)	Yes	Yes
Location costs	Thomas et al. (1998), Thomas et al. (1999)	Yes	No
Operating expenses	Thomas et al. (1998), Thomas et al. (1999)	Yes	Yes
Store size in square meters	Thomas et al. (1998), Barros & Alves (2003), Korhonen & Syrjänen (2004), Vaz et al. (2010), Donthu & Yoo (1998), Kamakura et al. (1996)	Yes	Yes/no Total size is uncontrollable, department size is controllable
Market attractiveness (Nearby population & purchasing power)	Thomas et al (1998), Thomas et al. (1999), Barros (2005)	Yes	No
Nearby competition	Thomas et al. (1999), Barros (2005)	Yes	No
Commercial concentration	Donthu & Yoo (1998)	No	No
Customer perspective		Significant	Controllable
Customer repurchase intention	Hellier et al. (2003), Keiningham et al. (2007), Noyan & Simsek (2012)	Yes	Yes
Customer satisfaction	Hellier et al. (2003), Keiningham et al. (2007)	Yes	Yes
Customer value	Hellier et al. (2003), Keiningham et al. (2007), Oh (1999), Cronin et al. (2000)	Yes	Yes
Store image	Grönroos (2007),	Yes	Yes

Factors influencing retail performance from literature

	Bloemer & de Ruyter (1997)		
Internal processes		Significant	Controllable
Operations		Significant	Controllable
management process		Significant	Controllable
Inventory			
Cost of inventory	Thomas et al. (1998), Thomas et al. (1999), Barros & Alves (2003), Vaz et al. (2010)	Yes	Yes
<u>Labor</u>			
Total amount of labor hours	Kamakura et al. (1996), Korhonen & Syrjänen (2004)	Yes	Yes
Total number of employees	Barros (2004)	No	Yes
Full time/part time ratio	Thomas et al (1998), Barros (2005), Barros & Alves (2003)	Yes	Yes
Absenteeism	Barros (2005), Barros & Alves (2003)	Yes	Yes
<u>Transaction</u>			
Avg. monetary size of transaction	Thomas et al. (1998), Thomas et al. (1999)	Yes	Yes
Dromotion transactions	Donthy & Voc (1008)	Na	Vaa
Fromotion transactions	Dollulu & 100 (1998)	NO	res
Customer management process	Dollala & 100 (1998)	Significant	Controllable
Customer management process Store factors	Dolitilu & 100 (1998)	Significant	Controllable
Customer management process Store factors Controllable store convenience (Opening hours, store communication, ease of movement)	Pan & Zinkhan (2006), Ruiz et al. (2010), Jones et at al. (2006), Vazquez et al. (2001)	Yes	Yes
Customer management process Store factors Controllable store convenience (Opening hours, store communication, ease of movement) Uncontrollable store convenience (Location and parking space)	Pan & Zinkhan (2006), Ruiz et al. (2010), Jones et at al. (2006), Vazquez et al. (2001) Pan & Zinkhan (2006)	Yes Yes	Yes
Customer management process Store factors Controllable store convenience (Opening hours, store communication, ease of movement) Uncontrollable store convenience (Location and parking space) Store atmosphere (music, lighting, resting areas, cleanliness, temperature)	Dollaria & 100 (1998) Pan & Zinkhan (2006), Ruiz et al. (2010), Jones et at al. (2006), Vazquez et al. (2001) Pan & Zinkhan (2006) Baker et al. (1992), Pan & Zinkhan (2006), Ruiz et al. (2010), Vazquez et al. (2010),	No Significant Yes Yes Yes Yes	Yes No Yes
Customer management process Store factors Controllable store convenience (Opening hours, store communication, ease of movement) Uncontrollable store convenience (Location and parking space) Store atmosphere (music, lighting, resting areas, cleanliness, temperature) POP displays	Dollaria & 100 (1998) Pan & Zinkhan (2006), Ruiz et al. (2010), Jones et at al. (2006), Vazquez et al. (2001) Pan & Zinkhan (2006) Baker et al. (1992), Pan & Zinkhan (2006), Ruiz et al. (2010), Vazquez et al. (2001) Glanz & Yaroch (2004)	No Significant Yes Yes Yes Yes Yes	Yes No Yes
Customermanagement processStore factorsControllable storeconvenience (Openinghours, storecommunication, ease ofmovement)Uncontrollable storeconvenience (Locationand parking space)Store atmosphere(music, lighting,resting areas,cleanliness,temperature)POP displaysService factors	Dollaria & 100 (1998) Pan & Zinkhan (2006), Ruiz et al. (2010), Jones et at al. (2006), Vazquez et al. (2001) Pan & Zinkhan (2006) Baker et al. (1992), Pan & Zinkhan (2006), Ruiz et al. (2010), Vazquez et al. (2001) Glanz & Yaroch (2004)	No Significant Yes Yes Yes Yes Yes Yes Yes	res Controllable Yes No Yes Yes
Customermanagement processStore factorsControllable storeconvenience (Openinghours, storecommunication, ease ofmovement)Uncontrollable storeconvenience (Locationand parking space)Store atmosphere(music, lighting,resting areas,cleanliness,temperature)POP displaysService factorsDecision convenience	Dollaria & 100 (1998) Pan & Zinkhan (2006), Ruiz et al. (2010), Jones et at al. (2006), Vazquez et al. (2001) Pan & Zinkhan (2006) Baker et al. (1992), Pan & Zinkhan (2006), Ruiz et al. (2010), Vazquez et al. (2001) Glanz & Yaroch (2004) Grewal et al. (2006)	No Significant Yes	res Controllable Yes No Yes Yes
Customermanagement processStore factorsControllable storeconvenience (Openinghours, storecommunication, ease ofmovement)Uncontrollable storeconvenience (Locationand parking space)Store atmosphere(music, lighting,resting areas,cleanliness,temperature)POP displaysService factorsDecision convenienceAccess convenience	Dontinu & Too (1998) Pan & Zinkhan (2006), Ruiz et al. (2010), Jones et at al. (2006), Vazquez et al. (2001) Pan & Zinkhan (2006) Baker et al. (1992), Pan & Zinkhan (2006), Ruiz et al. (2010), Vazquez et al. (2001) Glanz & Yaroch (2004) Grewal et al. (2006) Grewal et al. (2006)	No Significant Yes Yes	res Controllable Yes No Yes Yes Yes Yes
Customermanagement processStore factorsControllable storeconvenience (Openinghours, storecommunication, ease ofmovement)Uncontrollable storeconvenience (Locationand parking space)Store atmosphere(music, lighting,resting areas,cleanliness,temperature)POP displaysService factorsDecision convenienceAccess convenienceTransactionconvenience	Dontinu & Too (1998) Pan & Zinkhan (2006), Ruiz et al. (2010), Jones et at al. (2006), Vazquez et al. (2001) Pan & Zinkhan (2006) Baker et al. (1992), Pan & Zinkhan (2006), Ruiz et al. (2010), Vazquez et al. (2001) Glanz & Yaroch (2004) Grewal et al. (2006) Grewal et al. (2006) Grewal et al. (2006)	No Significant Yes Yes	Yes No Yes Ye
Promotion transactionsCustomer management processStore factorsControllable store convenience (Opening hours, store communication, ease of movement)Uncontrollable store convenience (Location and parking space)Store atmosphere (music, lighting, resting areas, cleanliness, temperature)POP displaysService factors Decision convenience Transaction convenienceBenefit convenience	Dollaria & 100 (1998) Pan & Zinkhan (2006), Ruiz et al. (2010), Jones et at al. (2006), Vazquez et al. (2001) Pan & Zinkhan (2006) Baker et al. (1992), Pan & Zinkhan (2006), Ruiz et al. (2010), Vazquez et al. (2006), Glanz & Yaroch (2004) Grewal et al. (2006) Grewal et al. (2006) Grewal et al. (2006) Grewal et al. (2006)	No Significant Yes	Yes Yes No Yes

convenience			
Personnel friendliness	Pan & Zinkhan (2006),	Yes	Yes
	Cronin et al. (2000),		
	Vazquez et al. (2001),		
	Gomez et al. (2004)		
Speed of checkout	Pan & Zinkhan (2006),	Yes	Yes
	Gomez et al. (2004)		
<u>Merchandise</u>			
Product variety	Grewal et al. (2006),	Yes	Yes
(quality, brand, size,	Vazquez et al. (2001),		
flavor)	Pan & Zinkhan (2006),		
	Ruiz et al. (2010),		
	Gomez et al. (2004) ,		
	Bauer et al. (2012) ,		
	Propiorazula & Hover		
	(2006)		
Product quality	Pan & Zinkhan (2006)	Ves	Vec
(organic products well	Vazquez et al (2000) ,	105	105
known brands	Bauer et al (2012)		
freshness guarantee)	Duder et ul. (2012)		
Presentation (logical	Bauer et al. (2012),	Yes	Yes
arrangement,	Broniarczyk & Hoyer		
appealing)	(2006)		
<u>Price</u>			
Price variety	Bauer et al. (2012)	Yes	No
Offering private labels	Bauer et al. (2012)	Yes	No
Loyalty cards price	Gomez et al. (2004)	Yes	No
Availability loyalty	Gomez et al. (2004)	Yes	No
cards			
Complementary	McLoughlin (2004)	No	Yes
promotion		<u></u>	~
Innovation process		Significant	Controllable
Service delivery	Chen et al. (2009),	Yes	Yes
innovation	Reinartz et al. (2011)		
(E-commerce and			
B egulatory and social		Significant	Controllable
nrocess		Significant	Controllable
Corporate social			
responsibility			
Human responsibility	Ailawadi et al. (2011),	Yes	Yes
	Martinuzzi et al.		
	(2011)		
Product responsibility	Ailawadi et al. (2011),	Yes	Yes
	Martinuzzi et al.		
	(2011)		
Environmental	Ailawadi et al. (2011),	Yes	Yes
responsibility	Martinuzzi et al.		
	(2011)	Sion: (* 4	Contuelleble
Learning & growth		Significant	Controllable
perspective			

Human capital			
Employee loyalty	Niehoff et al. (2001), Roehling et al. (2001)	Yes	Yes
Employee satisfaction	Chi & Gursoy (2009)	Yes	Yes
Employee training	Kapsalis (2007), Glaveli & Karassavidou (2011)	Yes	Yes
Employee experience	Thomas et al. (1998), Thomas et al. (1999)	No	Yes
Management experience	Thomas et al. (1998), Thomas et al. (1999), Donthu & Yoo (1998)	Yes	Yes
Information capital			
IT infrastructure	Bharadwaj (2000)	Yes	Yes
Human IT resources	Bharadwaj (2000)	Yes	Yes
Intangible IT-enabled resources	Bharadwaj (2000)	No	Yes
Organizational capital			
Open communication	Merlo et al. (2006)	Yes	Yes
Shared vision	Merlo et al. (2006)	Yes	Yes
Trusting culture	Merlo et al. (2006)	Yes	Yes
Store age	Thomas et al. (1998), Thomas et al. (1999), Barros & Alves (2003)	Yes	Yes

Appendix D

	Factor
Winkelbeeld AGF-afdeling	(1/3/5)
Voldoen de producten als het gaat om	
uitstraling en versheid zoals de klant die van	
ons verwacht?	5
Zijn alle landelijke actie artikelen voldoende	•
aanwezig.	3
Zijn alle producten voorzien van schapstickers	
en actie beprijzing	3
Zijn producten op/over datum in koeling	
nanklaar of on de tafels aanwezig?	
(steekproefgewijs)	5
Zijn er niet meer dan 7 artikelen out of stock in	
de koeling panklaar?	1
Zijn er niet meer dan 3 artikelen out of stock op	
de tafels en wandstellingen?	1
Zijn de vernakkingen van de AGE-artikelen	
schoon en heel?	1
	-
Klopt de prijs van de weegschaal met de	-
betrettende prijscommunicatie?	3
Commercieel winkelspel	
Zijn alle varianten van een actie aanwezig	1
Zijn de AGF-medewerkers klantvriendelijk?	
(Groet/knik/lach of andere bliik van	
herkenning?	3
Hebben de bananen de juiste kwaliteit/kleur?	2
	5
Is er sprake van combi-verkoop actiekoelingen	
	_
(AGF/KW/Slagerij)	1
(AGF/KW/Slagerij) Hvaiene & Voedselveiliaheid	1
(AGF/KW/Slagerij) Hygiene & Voedselveiligheid	1
(AGF/KW/Slagerij) Hygiene & Voedselveiligheid	1
(AGF/KW/Slagerij) Hygiene & Voedselveiligheid Zijn de koelingen/tafels/vloer/glazen deuren, schoon op vrij van productroston/ctof/uuil op	1
(AGF/KW/Slagerij) Hygiene & Voedselveiligheid Zijn de koelingen/tafels/vloer/glazen deuren, schoon en vrij van productresten/stof/vuil en schimmelvorming? (extra gandacht voor	1
(AGF/KW/Slagerij) Hygiene & Voedselveiligheid Zijn de koelingen/tafels/vloer/glazen deuren, schoon en vrij van productresten/stof/vuil en schimmelvorming? (extra aandacht voor roosters)	1
(AGF/KW/Slagerij) Hygiene & Voedselveiligheid Zijn de koelingen/tafels/vloer/glazen deuren, schoon en vrij van productresten/stof/vuil en schimmelvorming? (extra aandacht voor roosters)	1
(AGF/KW/Slagerij) Hygiene & Voedselveiligheid Zijn de koelingen/tafels/vloer/glazen deuren, schoon en vrij van productresten/stof/vuil en schimmelvorming? (extra aandacht voor roosters) Is de sinaaspers schoon en is de vloer hij de	1
(AGF/KW/Slagerij) Hygiene & Voedselveiligheid Zijn de koelingen/tafels/vloer/glazen deuren, schoon en vrij van productresten/stof/vuil en schimmelvorming? (extra aandacht voor roosters) Is de sinaaspers schoon en is de vloer bij de pers schoon?	1
(AGF/KW/Slagerij) Hygiene & Voedselveiligheid Zijn de koelingen/tafels/vloer/glazen deuren, schoon en vrij van productresten/stof/vuil en schimmelvorming? (extra aandacht voor roosters) Is de sinaaspers schoon en is de vloer bij de pers schoon?	1 3 3
(AGF/KW/Slagerij) Hygiene & Voedselveiligheid Zijn de koelingen/tafels/vloer/glazen deuren, schoon en vrij van productresten/stof/vuil en schimmelvorming? (extra aandacht voor roosters) Is de sinaaspers schoon en is de vloer bij de pers schoon? Wordt de werkkleding schoon, netjes en	1 3 3
(AGF/KW/Slagerij) Hygiene & Voedselveiligheid Zijn de koelingen/tafels/vloer/glazen deuren, schoon en vrij van productresten/stof/vuil en schimmelvorming? (extra aandacht voor roosters) Is de sinaaspers schoon en is de vloer bij de pers schoon? Wordt de werkkleding schoon, netjes en volledig met naambordje gedragen?	1 3 3
(AGF/KW/Slagerij) Hygiene & Voedselveiligheid Zijn de koelingen/tafels/vloer/glazen deuren, schoon en vrij van productresten/stof/vuil en schimmelvorming? (extra aandacht voor roosters) Is de sinaaspers schoon en is de vloer bij de pers schoon? Wordt de werkkleding schoon, netjes en volledig met naambordje gedragen?	1 3 3
(AGF/KW/Slagerij) Hygiene & Voedselveiligheid Zijn de koelingen/tafels/vloer/glazen deuren, schoon en vrij van productresten/stof/vuil en schimmelvorming? (extra aandacht voor roosters) Is de sinaaspers schoon en is de vloer bij de pers schoon? Wordt de werkkleding schoon, netjes en volledig met naambordje gedragen? Houden medewerkers zich aan do	1 3 3
(AGF/KW/Slagerij) Hygiene & Voedselveiligheid Zijn de koelingen/tafels/vloer/glazen deuren, schoon en vrij van productresten/stof/vuil en schimmelvorming? (extra aandacht voor roosters) Is de sinaaspers schoon en is de vloer bij de pers schoon? Wordt de werkkleding schoon, netjes en volledig met naambordje gedragen? Houden medewerkers zich aan de algemene en specifieke	1 3 3 1
(AGF/KW/Slagerij) Hygiene & Voedselveiligheid Zijn de koelingen/tafels/vloer/glazen deuren, schoon en vrij van productresten/stof/vuil en schimmelvorming? (extra aandacht voor roosters) Is de sinaaspers schoon en is de vloer bij de pers schoon? Wordt de werkkleding schoon, netjes en volledig met naambordje gedragen? Houden medewerkers zich aan de algemene en specifieke afdelingsrichtlijnen voor persoonlijke	1 3 3
(AGF/KW/Slagerij) Hygiene & Voedselveiligheid Zijn de koelingen/tafels/vloer/glazen deuren, schoon en vrij van productresten/stof/vuil en schimmelvorming? (extra aandacht voor roosters) Is de sinaaspers schoon en is de vloer bij de pers schoon? Wordt de werkkleding schoon, netjes en volledig met naambordje gedragen? Houden medewerkers zich aan de algemene en specifieke afdelingsrichtlijnen voor persoonlijke hygiëne? (schone handen, nette	1 3 3 1
(AGF/KW/Slagerij) Hygiene & Voedselveiligheid Zijn de koelingen/tafels/vloer/glazen deuren, schoon en vrij van productresten/stof/vuil en schimmelvorming? (extra aandacht voor roosters) Is de sinaaspers schoon en is de vloer bij de pers schoon? Wordt de werkkleding schoon, netjes en volledig met naambordje gedragen? Houden medewerkers zich aan de algemene en specifieke afdelingsrichtlijnen voor persoonlijke hygiëne? (schone handen, nette schoenen, nette haardrachgt, sierraden	1 3 3 1
(AGF/KW/Slagerij) Hygiene & Voedselveiligheid Zijn de koelingen/tafels/vloer/glazen deuren, schoon en vrij van productresten/stof/vuil en schimmelvorming? (extra aandacht voor roosters) Is de sinaaspers schoon en is de vloer bij de pers schoon? Wordt de werkkleding schoon, netjes en volledig met naambordje gedragen? Houden medewerkers zich aan de algemene en specifieke afdelingsrichtlijnen voor persoonlijke hygiëne? (schone handen, nette schoenen, nette haardrachgt, sierraden volgens HH-reglement)	1 3 3 1
(AGF/KW/Slagerij) Hygiene & Voedselveiligheid Zijn de koelingen/tafels/vloer/glazen deuren, schoon en vrij van productresten/stof/vuil en schimmelvorming? (extra aandacht voor roosters) Is de sinaaspers schoon en is de vloer bij de pers schoon? Wordt de werkkleding schoon, netjes en volledig met naambordje gedragen? Houden medewerkers zich aan de algemene en specifieke afdelingsrichtlijnen voor persoonlijke hygiëne? (schone handen, nette schoenen, nette haardrachgt, sierraden volgens HH-reglement)	1 3 3 1
(AGF/KW/Slagerij) Hygiene & Voedselveiligheid Zijn de koelingen/tafels/vloer/glazen deuren, schoon en vrij van productresten/stof/vuil en schimmelvorming? (extra aandacht voor roosters) Is de sinaaspers schoon en is de vloer bij de pers schoon? Wordt de werkkleding schoon, netjes en volledig met naambordje gedragen? Houden medewerkers zich aan de algemene en specifieke afdelingsrichtlijnen voor persoonlijke hygiëne? (schone handen, nette schoenen, nette haardrachgt, sierraden volgens HH-reglement)	1 3 3 1 1
(AGF/KW/Slagerij) Hygiene & Voedselveiligheid Zijn de koelingen/tafels/vloer/glazen deuren, schoon en vrij van productresten/stof/vuil en schimmelvorming? (extra aandacht voor roosters) Is de sinaaspers schoon en is de vloer bij de pers schoon? Wordt de werkkleding schoon, netjes en volledig met naambordje gedragen? Houden medewerkers zich aan de algemene en specifieke afdelingsrichtlijnen voor persoonlijke hygiëne? (schone handen, nette schoenen, nette haardrachgt, sierraden volgens HH-reglement) Is het dan ook daadwerkelijk schoon?	1 3 3 1 1 5
(AGF/KW/Slagerij) Hygiene & Voedselveiligheid Zijn de koelingen/tafels/vloer/glazen deuren, schoon en vrij van productresten/stof/vuil en schimmelvorming? (extra aandacht voor roosters) Is de sinaaspers schoon en is de vloer bij de pers schoon? Wordt de werkkleding schoon, netjes en volledig met naambordje gedragen? Houden medewerkers zich aan de algemene en specifieke afdelingsrichtlijnen voor persoonlijke hygiëne? (schone handen, nette schoenen, nette haardrachgt, sierraden volgens HH-reglement) Is het dan ook daadwerkelijk schoon? Algemeen AGF afdeling	1 3 3 1 5
(AGF/KW/Slagerij) Hygiene & Voedselveiligheid Zijn de koelingen/tafels/vloer/glazen deuren, schoon en vrij van productresten/stof/vuil en schimmelvorming? (extra aandacht voor roosters) Is de sinaaspers schoon en is de vloer bij de pers schoon? Wordt de werkkleding schoon, netjes en volledig met naambordje gedragen? Houden medewerkers zich aan de algemene en specifieke afdelingsrichtlijnen voor persoonlijke hygiëne? (schone handen, nette schoenen, nette haardrachgt, sierraden volgens HH-reglement) Is het dan ook daadwerkelijk schoon? Algemeen AGF afdeling Beschikken de afdelingsmedewerkers over de	1 3 3 1 5
(AGF/KW/Slagerij) Hygiene & Voedselveiligheid Zijn de koelingen/tafels/vloer/glazen deuren, schoon en vrij van productresten/stof/vuil en schimmelvorming? (extra aandacht voor roosters) Is de sinaaspers schoon en is de vloer bij de pers schoon? Wordt de werkkleding schoon, netjes en volledig met naambordje gedragen? Houden medewerkers zich aan de algemene en specifieke afdelingsrichtlijnen voor persoonlijke hygiëne? (schone handen, nette schoenen, nette haardrachgt, sierraden volgens HH-reglement) Is het dan ook daadwerkelijk schoon? Algemeen AGF afdeling Beschikken de afdelingsmedewerkers over de basiskennis AGF?	1 3 3 1 5 3
(AGF/KW/Slagerij) Hygiene & Voedselveiligheid Zijn de koelingen/tafels/vloer/glazen deuren, schoon en vrij van productresten/stof/vuil en schimmelvorming? (extra aandacht voor roosters) Is de sinaaspers schoon en is de vloer bij de pers schoon? Wordt de werkkleding schoon, netjes en volledig met naambordje gedragen? Houden medewerkers zich aan de algemene en specifieke afdelingsrichtlijnen voor persoonlijke hygiëne? (schone handen, nette schoenen, nette haardrachgt, sierraden volgens HH-reglement) Is het dan ook daadwerkelijk schoon? Algemeen AGF afdeling Beschikken de afdelingsmedewerkers over de basiskennis AGF?	1 3 3 1 1 5 3
(AGF/KW/Slagerij) Hygiene & Voedselveiligheid Zijn de koelingen/tafels/vloer/glazen deuren, schoon en vrij van productresten/stof/vuil en schimmelvorming? (extra aandacht voor roosters) Is de sinaaspers schoon en is de vloer bij de pers schoon? Wordt de werkkleding schoon, netjes en volledig met naambordje gedragen? Houden medewerkers zich aan de algemene en specifieke afdelingsrichtlijnen voor persoonlijke hygiëne? (schone handen, nette schoenen, nette haardrachgt, sierraden volgens HH-reglement) Is het dan ook daadwerkelijk schoon? Algemeen AGF afdeling Beschikken de afdelingsmedewerkers over de basiskennis AGF? Beschikt de afdelingsverantwoordelijke over	1 3 3 1 1 5 3

Appendix E

Economies of scale effect	#	%	Partial %
Amount of stores > €7.865 efficient	90	49,2%	51,7%
Amount of stores > €7.865 non-efficient	84	45,9%	48,3%
Amount of stores < €7.865 efficient	2	1,1%	22,2%
Amount of stores < €7.865 non-efficient	7	3,8%	77,8%
Total amount of stores	183	100%	
Amount of stores > €9.680 efficient	82	44,8%	50,9%
Amount of stores > €9.680 non-efficient	79	43,2%	49,1%
Amount of stores < €9.860 efficient	10	5,5%	45,5%
Amount of stores < €9.860 non-efficient	12	6,6%	54,5%
Total amount of stores	183	100%	
Amount of stores > €12.100 efficient	63	34,4%	48,5%
Amount of stores > €12.100 non- efficient	67	36,6%	51,5%
Amount of stores < €12.100 efficient	29	15,8%	54,7%
Amount of stores < €12.100 non- efficient	24	13,1%	45,3%
Total amount of stores	183	100%	
Amount of stores > €14.520 efficient	52	28,4%	52,5%
Amount of stores > €14.520 non- efficient	47	25,7%	47,5%
Amount of stores < €14.520 efficient	40	21,9%	47,6%
Amount of stores < €14.520 non- efficient	44	24,0%	52,4%
Total amount of stores	183	100%	
Amount of stores > €19.360 efficient	40	21,9%	76,9%
Amount of stores > €19.360 non- efficient	12	6,6%	23,1%
Amount of stores < €19.360 efficient	52	28,4%	39,7%
Amount of stores < €19.360 non- efficient	79	43,2%	60,3%
Total amount of stores	183	100%	
Amount of stores > €24.200 efficient	27	14,8%	87,1%
Amount of stores > €24.200 non- efficient	4	2,2%	12,9%
Amount of stores < €24.200 efficient	65	35,5%	42,8%
Amount of stores < €24.200 non- efficient	87	47,5%	57,2%
Total amount of stores	183	100%	

16	8,7%	100,0%
0	0,0%	0,0%
76	41,5%	45,5%
91	49,7%	54,5%
183	100%	
6	3,3%	100,0%
0	0,0%	0,0%
86	47,0%	48,6%
91	49,7%	51,4%
183	100%	
	16 0 76 91 183 6 0 86 91 183	16 8,7% 0 0,0% 76 41,5% 91 49,7% 183 100% 6 3,3% 0 0,0% 86 47,0% 91 49,7% 183 100%

Appendix F















Appendix G

Vertical					
comparison	Store	Store 5.6.7.8		Store	Store 5.6.7.8
(Efficient vs.	1,2,3,4	(Non-		1,2,3,4	(Non-
Non-	(Efficient)	efficient)		(Efficient)	efficient)
efficient)					
Theoretical			Practical	#	#
Financial	4,11	3,96	Financial		
Sales	5,00	5,00	Sales	2	4
Profit	4,50	4,25	Gross profit	3	4
Location costs	3,75	3,75	Net profit	0	2
Operational costs	3,50	3,75	Operational costs	1	3
Size of store/department	3,50	3,50	Financial independence	1	1
Market attractiveness	4,50	4,25	Continuity	1	1
Nearby competition	4,00	3,25	Customer		
Customer	4,50	4,88	Customer satisfaction	3	3
Repurchase intention	4,50	4,75	Product quality	1	1
Satisfaction	5,00	4,75	Availability	0	2
Value	4,50	5,00	Hygiene	0	2
Store image	4,00	5,00	Internal		
Internal	3,86	3,94	Quality of personnel	1	2
Inventory	3,25	3,75	Work atmosphere	0	2
Labor	4,25	3,75	Clarity	1	3
Transaction	3,50	3,50	Assortment	1	1
Store factors	4,25	4,75	Appreciation	1	2
Service factors	4,75	5,00	Local involvement	1	2
Merchandise	4,25	4,75	Communication	2	1
Price & promotion	4,00	4,00	Structure	1	1
Service delivery innovation	3,25	2,50	Systems	2	1
CSR	3,25	3,50	Learning & growth		
Learning & growth	4,19	4,42	Employee training	3	4
Employee loyalty	4,75	4,75	Consultation	1	2
Employee satisfaction	4,75	4,75	Coaching on the job	1	1
Employee training	4,00	4,75			

IT infrastructure4,004,00Human IT3,754,75resources	
Human IT 3,75 4,75 resources	
Open 4,50 4,75	
communication	
Shared vision 4,25 4,50	
Trusting culture 4,50 4,50	
Store age 3,25 3,00	

Figure 18: Vertical comparison of critical factors

Horizontal					
comparison	Store 1,2,5,6	Store		Store 1,2,5,6	Store 3,4,7,8
(Qualitative	(Qualitative)	3,4,7,8		(Qualitative)	(Non-
vs. Non-		(Non-			qualitative)
qualitative)		quantativej			
Theoretical			Practical	#	#
Financial	3,79	4,29	Financial		
Sales	5,00	5,00	Sales	3	3
Profit	3,75	5,00	Gross profit	4	3
Location costs	3,50	4,00	Net profit	2	0
Operational costs	3,25	4,00	Operational costs	3	1
Size of	3,50	3,50	Financial	0	2
store/department			independence		
Market	4,25	4,50	Continuity	1	1
attractiveness					
Nearby	3,25	4,00	Customer		
competition				_	
Customer	4,44	4,94	Customer satisfaction	2	4
Repurchase	4,25	5,00	Product quality	2	0
intention					
Satisfaction	4,75	5,00	Availability	1	1
Value	4,50	5,00	Hygiene	2	0
Store image	4,25	4,75	Internal		
Internal	3,72	4,08	Quality of personnel	1	2
Inventory	3,75	3,25	Work atmosphere	1	1
Labor	4,25	3,75	Clarity	1	3
Transaction	3,25	3,75	Assortment	2	0
Store factors	4,00	5,00	Appreciation	2	1
Service factors	4,75	5,00	Local involvement	2	1
Merchandise	4,00	5,00	Communication	3	0
Price &	3,50	4,50	Structure	2	0
promotion					
Service delivery innovation	2,50	3,25	Systems	3	0

CSR	3,50	3,25	Learning & growth		
Learning & growth	4,31	4,31	Employee training	4	3
Employee loyalty	4,50	5,00	Consultation	1	2
Employee satisfaction	4,50	5,00	Coaching on the job	1	1
Employee training	4,00	4,75			
IT infrastructure	4,50	3,50			
Human IT resources	4,50	4,00			
Open communication	4,50	4,75			
Shared vision	4,25	4,50			
Trusting culture	4,25	4,75			
Store age	3,75	2,50			

Figure 19: Horizontal comparison of critical factors

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Appendix H

Vertical comparison (Efficient vs. Non- efficient)	Store 1,2,3,4 (Efficie nt)	Store 5,6,7,8 (Non- efficien t)	Horizontal comparison(Qualit ative vs. Non- qualitative)	Store 1,2,5,6 (Qualitati ve)	Store 3,4,7,8 (Non- qualitati ve)
Financial					
Gross profit > Oper. Costs		Ш		II	I.
Sales > Gross profit	I.	II		П	1
Operational costs > Net profit		II		II	
Customer					
Cust. Satisfaction > Sales	П	111		II	III
Internal processes					
Clarity > Cust. Satisfaction	I.	I			П
Appreciation > Work atmos.	I.	I		I	l I
Local invol. > Cust. Satisfaction	I	I		I	I
Work atmos. > Cust.	I.	I		П	
Satisfaction					
Clarity > Oper. Costs		I		I	
Clarity > Quality of personnel		I			I
Communication > Structure	I			I	
Quality of pers. > Cust. Satisfaction		I			I.
Quality of pers. > Clarity		I			I.
Structure > Cust. Satisfaction	I			I	
Structure > Clarity		I		I	
Learning & growth					
Employee training > Quality pers.	I	II		I	II
Employee training > Appreciation		II		I	I.
Employee training >		I		I	
Consultation					
Consultation > Employee	l l				L I
training					
Consultation > Clarity		Ι		Ι	
Consultation > Appreciation		I		I	
Consultation > Communication		Ι		I	
Consultation > Structure		I		I	

Consultation > Oper. Costs	1	I