Marketing tools in grocery retailing, do they affect store loyalty?
– a study of Service quality, Self-scanning, Club card and Own brands affect on attitude and behaviour loyalty

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Abstract

Title: Marketing tools in grocery retailing, do they affect store loyalty? – a study of Service quality, Self-scanning, Club card and Own brands affect on attitude and behaviour loyalty

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Keywords: Attitude and behaviour loyalty, service quality, self-scanning (TBSS), loyalty program, own brands

Aim of the Thesis: The purpose of this study is to provide a longitudinal examination, within grocery retailing, of four marketing tools and their impact on enhancing customer loyalty. The study examines whether the relationship between the four marketing tools and customer satisfaction has a positive effect on attitude and behavior loyalty.

Methodology: This is longitudinal study, that use data from a prior study conducted in 2004. A quantitative approach has been used and empirical data has been collected through utilize of questionnaires. The data has been analyzed through descriptive statistics and regression analysis.

Theoretical perspective: The perspective for this study is from the customer’s view. It is the customers’ evaluation of the marketing tools and the linkages with customer loyalty that is in focus.

Empirical data: The empirical data has been collected by distributing questionnaires by post mail to respondents from a prior study.

Conclusion: The findings from this study show that the marketing tools have not helped enhancing loyalty between 2004 and 2007. Between these years, service quality has the most affect on loyalty. Self-scanning as an effective marketing tool could be questioned, the relation in this study is not supported
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1. Introduction

1.1 Background

In the retailing sector consumers typically patronize multiple outlets because business is highly competitive (Mägi, 2003; Meyer-Waarden, 2007). This stresses that retailers are urged to find more innovative ways to provide added value for their customers, to gain a competitive advantage (McGoldrick, 2002). Anselmsson & Johansson (2001) argues that retailers need to create customer loyalty in order to control their customer relationships within the grocery industry as well as in other industries. This has lead to more focus on customer loyalty within grocery retailing. Coop argue they work a lot with RM and that they continuously are working with offers to their loyal customers (www.coop.se), and one of ICAs focus points is to listening to customers and work after their needs (www.ica.se).

However, the Swedish grocery industry has for many years been portrayed as an industry with low competition and low customer satisfaction, this limited competition has further made it possible for retailers to keep high prices and pleasant profitability despite customer satisfaction being low considering different service aspects (Anderson et al, 1997). An investigation made by Konkurrensverket (2002) shows that oligopoly exists among Swedish grocery retailers, three giants control 90 % of the market, this further concludes the reason that Sweden have 10% higher grocery prices than the European average. During recent years, Swedish grocery retailers have experienced increased competition within the industry (Konkurrensverket, 2004). The grocery market is becoming tougher. There is a razor-sharp competition in terms of price, quality and the shopping experience (Coop annual report 2006). A few reasons for the increased competition are the retailers’ introduction of own brands and the fact that groceries are facing new players, both local and international chains. This means that there is increased competition in everything from traditional concepts to low-price shops. According to Svante Nilsson, President and CEO, Coop Norden this is:

“...challenging, but of course also exciting to be forced into constant improvement in terms of greater efficiency, price negotiations, concept development and, last but not least, contact with the customer.”

(http://www.coop.se/upload/modul/coopse/redovisning/Coop-annual-report-05.pdf)

According to Anselmsson & Johansson (2001), the increased competition has forced grocery retailers to further positioning themselves. Hemköp, ICA, Coop and Bergendahls nowadays try to position themselves with aspects such as high quality products, high service or with a “green” assortment. According to Coop the retail sector is developing towards clearer positioning of the concepts. Low price shops, supermarkets and local shops are expanding their share of the market relatively strongly. In general a clear position is essential to be able to compete successfully (Coop annual report 2006). These different positions are further limited by Anselmsson and Johansson (2001) since a major part of the assortment is very homogeneous.

Today the marketing literature as well as traditional literature speaks about creating loyalty and profitability through customer satisfaction and service quality (Anselmsson & Johansson,
The correlation between loyalty and vital outcomes, such as increased market share, customer retention, customer satisfaction and positive word-of-mouth effects are argued by many scholars (Anderson and Sullivan, 1993; Bolton and Drew, 1991; Fornell 1992, Mark et al, 2005). The growing competition among retailers and the increased customer dissatisfaction among consumers are reasons for grocery retailers to strive for a higher understanding on how consumers evaluate different retailers. Therefore retailers need to consider powerful ways to positioning themselves. We have in literature found four of the most important strategies that, influence the customer loyalty; service quality, own brands, loyalty card and self scanning (Mägi, 2003; McGoldrick, 2002; Ailawadi, 2001; Grönroos, 1982; Anselmsson, 2001)

1.2 Theoretical relevance

Loyalty is an extensive and unclear term with many meanings. Despite the difficulty to accomplish a general definition, Reynolds et al. (1974-75) has stated one that is well accepted within the area;

"Customer loyalty is viewed as the tendency for a person to continue over time to exhibit similar behaviors in situations similar to those he has previously encountered, e.g. to continue to purchase the same brands and product in the same store each time he needs or wants an identical or similar item."

(Reynolds et al, 1974-75, p 75)

This definition states that it is only the customer’s behavior that is off interest, but one should not only observe the behavior in a vacuum, cut off from the mental world. In addition, an important factor to consider is the customer’s attitude. According to Söderlund (2001) should customer loyalty be seen as “the customer’s attitude based relation over time – in the physical and mental world – to an object at the market” (Adopted from Söderlund, p 30). This description of loyalty fits our conception within the area, why we have chosen to use this definition. Even though one should not neglect the concept and definition that are provided by Reichheld (2003), which is “the willingness of someone, a customer, an employee, a friend to make an investment or personal sacrifice in order to strengthen a relationship”. This definition goes one step further than Söderlund and means that only when you are willing to make a sacrifice you could be described as a loyal customer.

Both Reynolds et al (1974-75) and Söderlund’s (2001) statements focus on the relationship over time. It is therefore not correct to talk about loyalty “now”, i.e. demarcated in a time period. The statement “the customer is loyal” should therefore be impossible and wrong. As a result the central issue would be, how long one should conduct a study concerning loyalty (Söderlund, 2001). Several researchers focus on the importance of enhancing an developing the relationship over time (Grönroos, 1982; Gummesson, 2001; Söderlund 1997, 2001). One of the main focuses in this study is on the enhancing aspect. When comparing customer loyalty between different time aspects, indications show what the development over time looks like. In general, it is often more interesting to compare different loyalty levels between themselves others than evaluating the loyalty level from one simple research (Söderlund, 1997). Despite this longitudinal studies within the area are very limited.
1.2.1 Tools for loyalty in Grocery Retailing

As early as 1961, Lazer and Kelly defined the retail marketing mix as;

“the total package of goods and services that a store offers for sale to the public, the composite of all effort which was programmed by management and which embodies the adjustment of the retail store to its market environment. “

(Lazer and Kelly, 1961)

This definition clearly emphasizes that retailing is not just about offering products for sale. Kotler (1973) agrees that peoples’ purchases are more than the tangible product. The total product includes service, image, atmosphere and other features. In some cases other features are more influential than the product itself in the purchase decision. When looking further at the development within the marketing mix, McGoldrick (2002) uses service and retailers’ own brands as two of his five most important dimensions. Self-scanning is further integrated in the service dimension and loyalty programs is described as an opportunity for retailers to learn a great deal more about their customers, as well as providing an incentive for customers to visit more frequently, spend more and be more loyal (McGoldrick, 2002).

The increased importance of loyal customers and relationships over time are highlighted by many scholars (Gremler & Brown, 1999; Reichheld & Schefter, 2000). Relationship marketing is often presented in contrast to transaction marketing, that says to be equivalent to the traditional view on marketing. In transaction marketing, the fact that a customer has bought a product does not predict the probability for a new purchase, even though a number of purchases have been made (Gummesson, 2001). Gummesson stretches it even further and argues there has been a paradigm shift from transaction towards relationship marketing (RM). Researchers and consults also talk about customer relationship marketing (CRM), which includes customer loyalty, as the most important way to success for businesses (Söderlund, 2001; Gummesson, 2001). Relationship marketing in this study is seen as a marketing strategy, and the realization should lead to improved customer loyalty.

The retail marketing literature has over the years identified several factors that influence store satisfaction and loyalty, i.e. atmosphere (Kotler, 1973), price (Williams et al, 1978), location (Woodside and Trappey, 1992) etc. This study concentrates on and examines four important marketing tools that, researchers earlier have proved to gain store satisfaction and that never before have been evaluated together.

- Service Quality (Grönroos 1982; Taylor & Baker, 1994; Bitner, 1990)
- Self-scanning (Anselmsson, 2001; Dabholkar, 1996)
- Loyalty program – Club card (Dabholkar, 2002; Mägi, 2003)
- Retailers’ own brands (Burt, 2000b; Ailawadi, 2001)

Could these marketing tools develop retailers’ relationships towards the customers and increase the store loyalty? This study investigates the relationship over a three year period, which makes it possible to investigate to what extent the customer loyalty within grocery retailing has changed over time, by testing the four previously mentioned marketing tools.

While the marketing literature has discussed the four marketing tools, yet no study has put them together in the same context and tried to evaluating them. There are no studies that
specifically examine whether these factors are necessary and sufficient to retain customers in a competitive grocery market. In order to conceptualize the framework of the study we have created a model below (Figure 1) that present the framework of this study. The model integrates our four marketing tools that are posited to have independent effects on total customer satisfaction and customer loyalty. In addition, as discussed above, self-scanning is also assumed to moderate the effects of service quality on satisfaction and loyalty.

Service Quality
Self-scanning
Club Card
Own Brands
Customer Satisfaction

Customer Loyalty
(attitude/behavior)

Figure 1. Overview of the study framework - Conceptual model over the customers’ evaluation of the total customer satisfaction and the linkages with customer loyalty

1.3 The aim of the study

This study aims to provide a longitudinal examination, within grocery retailing, of four marketing tools and their impact on enhancing customer loyalty. The study examines whether the relationship between the four marketing tools and customer satisfaction has a positive effect on store attitude and behavior loyalty.

This is a very broad aim that needs to be more specified. Our aim is not to focus in dept in each perspective as each of the tools could be considered as separate research areas that are very wide. The focus is rather on how these tools can be used to influence customer satisfaction and store loyalty.

1.4 Research Perspective

The perspective for this study is from the customer’s view. It is the customers’ evaluation of the marketing tools and the linkages with customer loyalty that is in focus. The questionnaire that is used in this study is built up from well known researchers’ work that all focus on the customer perspective. However, in the introduction chapter, the management perspective has been discussed in some occasions and some of the theories used in chapter two are management oriented, which means that there will be some theoretical discussions from the management perspective. But, the empirical investigation of this study is strictly limited to customer perspective. However, using a customer perspective does not mean that we cannot draw some conclusions about what issues management should consider in order to understand customers’ behavior and attitude.
2. Theory

2.1 Concepts and definitions of loyalty

In recent years researchers have made several efforts to highlight the importance of loyal customers and relationship marketing. The whole discourse surrounding loyalty programs, and whether or not they build loyalty, have been in focus (Dowling, 1997). This has lead to less focus on the general customer and more on the loyal customer. This development towards customer loyalty is integrated in the customer relationship marketing, that is essential for success according to (Söderlund, 2001; Gummesson, 2001). According to Sirgy & Samli (1998) store loyalty is “the single most important facto in retailing success and longevity for the retailer”. Reichheld (1993) says; “The economic benefits of high customer loyalty are considerable and, in many industries, explain the difference in profitability among competitors”, while Gremler & Brown (1999) argues “the cultivation of customer loyalty is an important, if not the most important, challenge for most business”. Reichheld and Schefter (2000) goes further saying: “Building superior customer loyalty is no longer just one of many ways to boost profits. Today it is essential for survival”.

According to Jacoby & Chestnut (1978) at least 53 definitions of loyalty exist, which improves the difficulty of making a clear explanation of loyalty. Söderlund (2001) has made an attempt to sort out the problem and mean that loyalty is the individual attitude based on relationship over time – in the physical and mental world – to a certain object. It is the “relationship over time”, that causes reasons to variety of definitions, because of the several different ways an individual can behave towards an object over time. During a relationship over time, the relationship faces so many things that a clear and homogenous definition is unattainable (Söderlund 2001). Furthermore do the definitions reflect that a customer can be loyal to several different objects. The most common, when it comes to marketing, are brand loyalty and store loyalty (Söderlund, 2001). In this study, store loyalty will be in focus.

2.2 Customer loyalty implications

Every business benefits from a “customer for life” – a customer that always buys from your company when possible. The focus on existing customers is becoming more natural when the population growth decreases, the majority of products on the market becomes more alike and when competition increases (Fornell, 1992). Söderlund (2001) and Gummesson (2002) pinpoint several reasons why it is more profitable to work with existing customers instead of new customers. Firstly, it is more effective, and less costly to work with existing customers because of learning effects and decreased servicing costs (Ganesh et al, 2000), secondly, if companies decrease the defection among existing customers profit will strongly increase. Thirdly, within many businesses approximately 80 % of their business comes from only 20% of their customers. A common conception is that loyal customers are more profitable, not only in the short run because they spend more and repeat sales (O’Brien & Jones, 1995), but also in the long-run as satisfied customers spread recommendations (e.g. positive word of mouth) which provide new referrals, add value or reduce costs (Söderlund, 1997; Reichheld, 1996).
Another reason according to Gummesson (2002) is that customers tend to accept more mistakes from the provider. Because of their current and potential future value, loyal customers are logically at the heart of a company’s most valuable customer group (Ganesh et al., 2000). Further does Reichheld (1996) argue that loyal customers build businesses by buying more and paying premium prices.

2.3 Measures of loyalty

The marketing literature today provides a broad range of loyalty measures, their usefulness depends primarily on the specific market and study objective (Leenheer et al., 2007). Loyalty measures that only considered the customers’ behavior, based on the customer’s acting, were for a long time the most common view. But in recent times, researchers’ argumentation have increased and the importance of customers’ attitudes (Söderlund, 2001; Dick & Basu, 1994). Measuring loyalty barely on purchasing reason may not provide a clear picture, Liljander and Strandvik (1995) argue that customers purchase products, even though he or she is not loyal and has a negative attitude. This study’s loyalty measurement is built upon Söderlund’s (2001) classification between attitude and behavior, which will be in focus and discussed in more detail. Dick & Basu (1994) mean that customer loyalty should be viewed as the strength of the relationship between an individual’s relative attitude and repeated patronage. Söderlund (2001) indicates that there are many different factors in the mental (attitude) and physical (behavior) world that influence customer loyalty. Both views should be considered in order to get a more complete picture and one should not observe either one in a vacuum, cut off from the other.

2.3.1 Satisfaction

Customer satisfaction is closely related to customer loyalty. According to Söderlund (2001) is customer satisfaction a state in the customers head that appears when the customer is exposed to the companies offer. Customer satisfaction is a subjective state and could best be described as a “feeling”, a “judgment”, or an “emotional reaction” (Söderlund, 2001). This definition of customer satisfaction is closely related to the attitude based loyalty definition, which is described in 2.3.3. The concepts loyalty and satisfaction, should not bee seen as equivalent, but many scholars argue by their findings that customer satisfaction is considered being the driving force towards customer loyalty (Anderson & Sullivan, 1993; Bolton & Drew, 1991; Fornell, 1992). According to Söderlund (2001) it exist a lot of empirical studies and statements in the literature and among patricians that indicates a positive relation between customer loyalty and customer satisfaction. A conclusion could be that satisfaction is one of the factors that drive loyalty, but it is not the only factor. Miranda et al (2005) agrees and argue that the relation not secured since customer satisfaction is more complex than that. Research show that customers might stay in relationship because of different barriers, see 2.3.4. Söderlund (2001) argue that there are studies that confirm the argumentation that a satisfied customer is a loyal customer. If this statement is correct the conclusion should be that non-loyal customers should be dissatisfied and make a conscious choice not to interact with that retailer. But many satisfied customer change store despite the satisfaction, according to Gummesson (2002) do satisfied customers switch for a variety of reasons, such as
supplier’s marketing, being persuaded by friends, the desire to test something new, moving or mere coincidence. Gummesson (2002) also states that a relatively immense amount of dissatisfied customers still stay as a customer despite the dissatisfaction.

When speaking of satisfaction this study focuses on the customers’ overall summarized judgment, that according to Söderlund (2001) includes all the impressions of the different parts in the offer. Moreover, this study uses Sivadas et al, (2000) and Reichheld (2003) question about the overall level of satisfaction with company X. The real contribution will be attained when we put the customer satisfaction in a causal context with the four marketing tools. At first, it is interesting to know what influences the customer satisfaction, i.e. what causes satisfied and dissatisfied costumers. This is important for companies, who want to affect the level of costumer satisfaction when possible. At second, it is interesting to know what effects on the company the customer satisfaction is able to influence. If the customer satisfaction does not influence any visible effects, then it is not interesting for companies to struggle towards customer satisfaction (Söderlund, 1997).

2.3.2. Customer loyalty from a Behavioral perspective

The physical world is about the individual relationship between the observed behavior and the object. Customer loyalty in the behavioral world could be tied to several indicators; Duration: how long the customer remains a customer (Söderlund, 2001; Gremler & Brown, 1999; Gummesson, 2002), Retention: which is the percentage of customers who remain after one year, two years etc (Söderlund, 2001; Gummesson, 2002), Depth: how many different things the customer does over time in relationship to an object (Gremler & Brown, 1999; Söderlund 2001). Finally, the ones used in this study are; Frequency: how often a customer shops during a certain timeframe (Bolton et al, 2000; Park, 1996; Fay 1994) and Customer share (Mägi, 2003; Reichheld 2006). Within the behavior dimension, customer share has become more and more regular and common among researchers. Besides from these buying related behaviors the study also focuses upon word-of-mouth, which refers to Recommendations (Reichheld, 2003)

2.3.2.1 Customer share & Frequency

Cunningham (1961) was one of the first researchers who argued store loyalty is measured by the percentage of total expenditure (i.e. share of wallet) made in a certain store and not by the amount of stores in which customers shop. For retailers, customer “share of wallet” is of great importance, because they need to know how shoppers divide their purchases and how retail managers can increase their share of their customers’ total category expenditures (Reichheld, 2006). However, the reason for this could be the availability in terms of proximity, pricing etc as well as the level of competition. Further, Mägi (2003) highlight there are two aspects of customer share on behavioral loyalty; “share of purchase” and “share of visit”. Although, Mägi agrees these are highly correlated, they are not interchangeable. They should be measured separately since where customer spend most of their budget not always need to be the same as what store they visit most frequently.
2.3.2.2 Recommendations

Reichheld (2003) stresses the importance when measuring loyalty by comparing the linkages between saying positive things about the company, recommending the company to someone and encouraging friends and relatives to do business with the company. Further Reichheld (2006) argues that there are no relation between customer satisfaction and growth. An example is K-mart; they almost went bankrupt even though they enjoy a high degree of customer satisfaction. Through using net promoter score, Reichheld’s (2006) study demonstrates companies not only need satisfied customers. The positive experience is also important as well as customers’ recommendations to family and friends. Reichheld (2003) use the question; How likely would you be to recommend company X to a friend?, as an indicator of loyalty. Söderlund (2001) agrees that a higher degree of customer spreading recommendations could indicate a higher degree of loyalty, as the customer could then be seen as an ambassador.

2.3.3 Customer loyalty from an Attitude perspective

The mental world is about the customers attitudes/intentions towards the object. It is the customers’ awareness that is in focus. Customer loyalty in the mental world could be tied to several indicators: Intentions; which measure to what extent the customer could consider making a behavior in the future. This measure is very common, but the prediction value is low since it is not sure that the behavior actually will occur. Preference, is considered as a type of attitude, for example: “If I prefer A to B, the reason for this is because my attitude towards A is much more positive than towards B (Söderlund, 2001, p 38). Commitment is many times considered to be a synonym to loyalty. The customer is willing to make an effort to continue being a customer. Identification, Park (1996) considers this to be a dimension to loyalty. The conception concern to what extent the customer defines himself as a part of the store. Finally Involvement, which refer to how important or relevant an object is to the customer. The perceived affinity is an indicator of personal relevance.

2.3.3.1 Commitment – Preference - Involvement

When portraying loyalty attitudes Aliawadi (2001) uses three specific questions within the grocery retailing industry, in order to measure store loyalty. First is the willingness to make an effort to shop at their favorite grocery store, secondly is the preference to always shop at one grocery store and finally if customers in general care about which particular grocery store to shop at. There are many cases where researchers tried to define loyalty to an object in terms of the attitude to the object (Söderlund, 2001). Aliawadis questions from 2001 are also used on brand loyalty, in order to evaluate and define brand loyalty as more then the customer behavior. By using willingness to make an effort, preference and involvement, Aliawadi (2001) combine already known factors that influence consumers loyalty, in order to evaluate consumers’ attitudes (Söderlund, 2001).
2.3.4 Comments to the two dimensions

The two dimensions, attitude and behavior, make it possible to separate different levels of loyalty from each other. By only measuring loyalty as a behavior does not capture the essence of loyalty, as these measures could mistake spurious loyalty for loyalty. According to Kotler et al (1999) it should be enough only to focus on existing customers. They argue that customer retention and customer loyalty are almost synonymous, “…the firm’s first line of defense lies in customer retention. And the best approach to customer retention is to deliver high customer satisfaction that results in strong customer loyalty” (p 483). Besides Kotler et al (1999) does several other studies show a significantly positive relationship between actual purchase or purchase intentions, satisfaction and loyalty (Mägi, 2003). But even though, one should remember that an immense deal of purchase intentions and actual purchase behavior is determined by factors such as number of alternatives, switching barriers, and so on. This is supported by Reichheld (2003) who argue that loyalty may have little to do with repeat purchase. Customers’ might be loyal, from a behavior perspective, and more reluctant to switch supplier because of different barriers such as lack of alternatives, number of information-, market-, contract-, search costs-, habits- and barriers of change (Fornell 1992, Reichheld, 2003). Liljander and Strandvik (1995) also define a number of bounds, such as legal, economic, technological, geographical, time, knowledge, social, cultural, ideological and psychological. For example: if two customers A & B, visit a store equal many times, customer A because he/she thinks that the store is superior, but customer B visit the store because of lack of substitutes. This means that customer A is considered as loyal, but customer B is not, he/she only visits the store because of lack of alternatives, and the behavior should therefore be considered as false loyalty. Fornell (1992) argue “Loyal customers are not necessarily satisfied customers, but satisfied customers tend to be loyal customers” (Anselmsson, 2001, p 55). This shows the importance of the use of both dimensions: behavior and attitude. Apart from spurious loyalty and loyalty the figure 2, recognize two other levels of loyalty: latent loyalty, which means that the customer has built an attitude towards the company. He/she could prefer the company but purchase somewhere else instead because of several reasons, for example closeness. The final category is the non-loyal customer, which is the customer that has a week, none or a negative attitude towards the company, meanwhile is the observed behavior low as well.

![Figure 2 Dick and Basu (1994) p 101](image)

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**Repeat Patronage**

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Figure 2 Dick and Basu (1994) p 101
Therefore,

**H1. There is a positive relation between store satisfaction and store loyalty**

**H1a. There is a positive relation between store satisfaction and difference in attitude loyalty between 2004 and 2007**

**H1b. There is a positive relation between store satisfaction and behavior loyalty (share of visit)**

**H1c. There is a positive relation between store satisfaction and behavior loyalty (share of purchase)**

**H1d. There is a positive relation between store satisfaction and behavior loyalty (store recommendation)**

### 2.4 Four Marketing Tools

#### 2.4.1 Service quality

According to Garvin (1998), research about quality started in the USA in the 1920s, by looking at quality in goods. Today, the research is more market oriented, involving understandings for important attributes within customer satisfaction and behavior (Grönroos, 1982; Taylor & Baker, 1994; Bitner, 1990). In today’s competitive retail environment, the delivery of high service quality has long been treated as the basic retailing strategy (Hummel & Savitt, 1988) and service quality has become an important research topic due to its apparent relationship to customer satisfaction, high revenues and higher customer retention (Siu & Tak-Hing, 2001). The first ideas about perceived service quality were developed by Grönroos (1982) and further evaluated by Parasuraman (1985, 1988). In the literature there are many different definitions of service and service quality and there does not seem to exist any clear-cut definition. Thus, Anselmsson & Johansson (2001) explain that the concept of service quality has some common assumptions among service quality researchers; “service quality is a subjective accumulated attitude that is based on a comparison between the customers’ expectations and the experience of the service encounters performance”(p 11).

Grönroos (1982) looks at perceived service quality as an abstract concept where consumption and production occur at the same time, this interactive process decide the customers’ service quality experience in the end. Parasuraman et al (1985) confirm many of Grönroos (1982) assumptions and further contributed to following research by developing a number of concrete but general service quality determinants. In 1998, Parasuraman decreased the number of dimensions to five and created a SERVQUAL scale, that is developed for services and focuses primarily on pure personal based services but it has been subject to much criticism in retailing where goods and services are combined (Finn & Lamb, 1991) and industries are different (Dabholkar et al. 2002). McGoldrick (2002) argue that the scale does not fully reflect the product-service mix of most retail stores and that the scale only has been tested in pure service settings, such as banking. SERVQUAL offers 22 attributes that
represent five major dimensions; Tangibles, Reliability, Responsiveness, Assurance and Empathy. This model is probably the most reviewed and discussed within service quality according to Anselmsson (2001) and Dabholkar et al (1996). Anselmsson (2001) also mention, that in order to handle quality, the service company must focus on delivering those attributes that are important to the target customer. Over the years, SERVQUAL has been in focus for criticism (Cronin & Taylor, 1992) as well as refinements (Dabholkar et al, 1996).

According to Taylor & Baker (1994), the number one goal for retailer should be to create customer satisfaction. Service quality and customer satisfaction are the keys in formation of consumers’ purchase intentions. Their study shows a relationship between; higher levels of service quality and higher levels of satisfaction result in higher levels of purchase behavior. The connection between consumers’ service quality perceptions and satisfaction have been extensively investigated and questioned. Dabholkar (1993) argue whether satisfaction and service quality are in essence the same construct, thus most researchers consider them as different but related (McGoldrick, 2002). In a model, Baker & Parasuraman (1994) illustrate the linkages between satisfaction and service quality and that satisfaction is a more extensive concept, most researchers today agree upon that service quality is a part of the customer satisfaction and that both occur in transactions as well as in the long-term (Anselmsson & Johansson, 2001)

A study by Wong & Sohal (2003) examine the impact of service quality dimensions on customer loyalty. They illustrate there are two levels of retail relationships; the first is person to person (salesperson level) and the second person to firm (store level). The results show that service quality is positively associated with customer loyalty. Taylor & Baker (1994) found that the highest probability for retention was when both service quality and customer satisfaction were high. This means it is not enough to study service quality in relation to buying behavior, in order to understand and foresee the consumers’ behavior one must use both service quality and customer satisfaction. Further, Dabholkar (2000) looked into the relation between service quality, satisfaction and buying intentions and the outcome illustrates that satisfaction has a bigger influence on buying intentions then perceived quality. Dabholkar also propose that the customer first evaluate the service quality, then the overall satisfaction and then finally the buying intentions.

Therefore,

\[ H2. \text{ Satisfaction with service quality has a positive affect on store loyalty } \]

\[ H2a. \text{ Satisfaction with service quality has a positive affect on difference in attitude loyalty between 2004 and 2007 } \]

\[ H2b. \text{ Satisfaction with service quality has a positive affect on behaviour loyalty (share of visit)} \]

\[ H2c. \text{ Satisfaction with service quality has a positive affect on behaviour loyalty (share of purchase)} \]

\[ H2d. \text{ Satisfaction with service quality has a positive affect on behaviour loyalty (store recommendation)} \]
2.4.2 Technology based self service (TBSS) – Self-scanning

TBSS are technological interfaces that enable customers to produce a service where no interpersonal contact is required between buyer and seller (Meuter et al, 2000). Anselmsson (2001) makes the definition: “TBSS involves some kind of hard technology that directly or indirectly is operated by the customer in order to receive service” (p11). Moreover, the TBSS could be one of several services offered by a company, it is also possible that one company has several different TBSS. In this study we only refer to the company’s self-scanning system, which involve self-service where the customer interacts by technology.

The “self-service” phenomenon has become more and more common in today’s marketplaces, much due to the technical spread with Internet showing the way. Technology has dramatically changed the nature of service and the ways companies interact with their customers and technological innovations will continue to be a significant part of customer interactions (Bitner, 2001, Meuter et al, 2000). Parasuraman (1996) strongly agree and argue that technology-based interactions are likely to become a key success factor for long-term businesses. For retailers, the self-scanning technology has been developed, and is today used by several retailers across the world (Dabholkar et al, 2003). Research shows several reasons for using TBSS which could lead to satisfaction. (Meuter et al, 2000, Bitner 2001) First of all the self-service does save time and many times it is seen as a better alternative than the interpersonal method of service delivery, secondly TBSS is used because of the simplicity to use.

In 1996, Dabholkar developed an attribute model, which is based specifically on what consumers would expect from self-service options. The model contain five critical factors that are of importance when describing the decision making through evaluation of consumers expectations. This in turn affects consumers’ willingness and intentions to use TBSS-alternatives. The five factors that are seen as most important for customers when using and evaluating TBSS are: speed of delivery, ease of use, reliability, enjoyment and control (Dabholkar 1996). According to Meuter et al (2000) it is important for companies to understand how customers evaluate TBBS, so they can evaluate and improve the relation. But little is known about how interactions with technological options influence customer evaluations and behaviour (Dabholkar, 1996; Meuter et al, 2000). Research has showed that customers like to engage in these types of TBSS, primarily because they feel involved and engaged (Dabholkar, 1996).

Even tough, that self-scanning technology today is being tested by several retailers across the world, the success of the new technology from the consumer’s perspective is not yet clears (Dabholkar et al, 2003). Given all the potential advantages, it is important to identify the negative side of technology innovations, concerning service. Bitner (2001) argue and explain that customers are not always so optimistic to new things and employers might oppose changes and can not always see the value of technology. Moreover is there a loss of human and personal interaction and the investment costs are enormous for the companies, often with uncertain payback (Bitner, 2001). Finally, despite all the technical innovations, there are still some general expectations customers require, “the more things change, the more things remain the same. As technology profoundly changes the ways companies interact with and serve their customers , customers’ desires for quality service do not change” (Bitner, 2001). No matter how the companies choose to structure the relationship the customers still demand quality service. Customers do not like and get dissatisfied when the self service do not succeed to meet their expectations, for example when the system fails, the design is poorly
and difficult to use or understand, when the customers themselves mess up and finally when there is no service recovery (Bitner, 2001).

Despite the negatives that do exist, several academic researchers have recognized the importance of technology in the delivery of services (Bitner, 2001; Meuter et al, 2000; Dabholkar 1994, 1996; Parasuraman, 1996). Some even propose that the traditional marketplace interaction is being replaced by a market space transaction. Rayport et al (1995) gives the definition of market space as “a virtual realm where products and services exist as digital information and can be delivered through information based channels”. This has lead to a change of the establishment of customer-company interactions in this new market space environment.

Therefore,

H3. Satisfaction with Self-scanning has a positive affect on store loyalty

H3a. Satisfaction with Self-scanning has a positive affect on difference in attitude loyalty between 2004 and 2007

H3b. Satisfaction with Self-scanning has a positive affect on behaviour loyalty (share of visit)

H3c. Satisfaction with Self-scanning has a positive affect on behaviour loyalty (share of purchase)

H3d. Satisfaction with Self-scanning has a positive affect on behaviour loyalty (store recommendation)

The next hypothesis will be considering participating in self-scanning and the affect on store loyalty. According to Dabholkar (1996) are the service quality determinants useful both concerning no-users and regular users. However, most service-quality models are based on after-purchase evaluation.

H6. There is a positive relationship between participation in self-scanning and store loyalty

H6a. There is a positive relationship between participation in self-scanning and difference in attitude loyalty between 2004 and 2007

H6b. There is a positive relationship between participation in self-scanning and behaviour loyalty (share of visit)

H6c. There is a positive relationship between participation in self-scanning and behaviour loyalty (share of purchase)

H6d. There is a positive relationship between participation in self-scanning and behaviour loyalty (store recommendation)
2.4.3 Loyalty Programs

Weather the effect of loyalty programs is positive or negative on loyalty is a topic of debate. Empirical research shows mixed evidence of the loyalty programs effectiveness. Dowling, (1997), Leenheer et al (2007) and Mägi (2003) are somewhat skeptical, whilst other researcher are more positive and explain that an effective loyalty program can create and retain loyal customers, sustain sale levels, raise entry barriers, and act as a form of competitive advantage through differentiation (Noordhoff et al, 2004; Lewis, 2004). When speaking of loyalty programs this study focuses primary on customer clubs.

"A customer club is an at least communicative union of people or organizations, which is initiated and operated by an organization in order to contact these members directly on a regular basis and offer them a benefit package with a high perceived value, with the goal of activating them and increasing their loyalty by creating an emotional relationship”

(Butscher, 2002, p 18)

The statement involves two points – dialogue-oriented communication and exclusive value-driven benefits – that are the main ideas behind the club’s aim of establishing an emotional relationship with members. According to Butscher (2002) it is the emotional relationship that will create loyal customers. The emotional relationship will also ensure that the companies’ customers are immune to competitors’ offers.

The perception behind communication in customer clubs is to establish a dialogue between the company and the club member. Furthermore a customer club should offer real and perceived value to its members (i.e. create value on top of the actual products). This is best accomplished by offering a unique combination of financial and non-financial benefits exclusively to members.

In recent time there has been an enhanced focus on loyalty programs and whether or not they enhance behavioral loyalty (Dowling, 1997; Leenheer et al, 2007). In today’s markets the use of customer membership clubs or loyalty programs has become widespread, and several companies within various business sectors are starting to utilize loyalty programs (Dowling, 1997). Grahamm et al (1997) argue companies utilize one of marketing’s most familiar strategies - if you see a good idea, copy it. Tesco is a good example of a company that early launched a successful loyalty program that afterwards has been copied by many of their competitors. According to Butcher (2002) is almost every adult person participating in some kind of customer loyalty programs. In Europe, the number of members in retail loyalty programs is 453 million in 2001. Of course, many members are registered in more than one program (Butscher, 2002). A study by Mägi (2003) show that 49% of the studied households have more than one card, only 18% have no card at all. The figures concerning cardholders will probably be much higher today. One purpose of such programs is to increase the close and long-term relationship to the customer (Gummesson, 2002). However, Obrien (1995) questions the efficiency and argues that rewards programs are seen as short-term fads; that often are misunderstood and regularly misapplied. Dowling (1997) continues and state that loyalty programs are, despite their popularity, surprisingly ineffective. “In most cases, all that a customer loyalty program will do is cost money to provide more benefits to customers - not
all of which will be seen as relevant to the brand's value proposition and/or positioning”. However, Butcher (2002) does not only argue that customer loyalty program are important, he further means that they are key success factors for many companies. This discussion implies that there are different views and that some loyalty programs suffer a lot of criticism.

Dowling (1997) found three main lessons from his research, whether loyalty programs really works. His first finding was that competitive considerations were a strong reason as well as a possible first-mover advantage. Secondly, the loyalty program must include the overall value-proposition of the products or service. Dowling’s last finding shows that in a great deal of cases, the loyalty program only costs companies money when providing more benefits to the customers. He argue it is rare when companies increase the relative amount of loyal customers. Further not many cases show that loyalty programs would be relevant to brand’s value or positioning.

During the last decades the importance of loyalty programs has been highlighted, and one of the factual issues is whether loyalty program really enhance behavioral loyalty. (Leenheer et al, 2007) Research show that loyalty program members have a much higher share-of-wallet than non-members, but research about how effective the programs really are, is limited. (Leenheer et al, 2007)

Therefore,

**H4. Satisfaction with Club Card has a positive affect on store loyalty**

*H4a. Satisfaction with Club Card has a positive affect on difference in attitude loyalty between 2004 and 2007*

*H4b. Satisfaction with Club Card has a positive affect on behavior loyalty (share of visit)*

*H4c. Satisfaction with Club Card has a positive affect on behavior loyalty (share of purchase)*

*H4d. Satisfaction with Club Card has a positive affect on behavior loyalty (store recommendation)*

2.4.4 Own Brands

During recent years, the competition between retailers own brands and manufactures’ brands have increased and it is now an important question for players within the grocery industry. Not only are retailers more involved in product development of own brands, they also seems to put more emphasis in space allocation, advertising (McGoldrick, 2002) due to their increasing market share (Ward et al, 2002). Own brand products have played a key role for many retailers in the development of brand equity. Retailers own brands account for over 40 % of turnover in the UK grocery market (Burt, 2000a), 20 % on average in Europe while the share in Sweden is about 14 % (AC. Nielsen, 2005).

McGoldrick as well as Burt (2000b), argues that there are four different generations of retailers own brands that need to be separated. The first three generations reflect from generic products without a brand until the third generation, “me too” products, that are the most common in
Sweden. “Me too” products are similar to manufactures’ brands that already exist in the assortment. The fourth generation, are products that are innovative and build upon differentiation to increase image and loyalty to the retailer. The retailers’ own brand situation is unique for every product category and country, depending on the development, however Sweden is particularly interesting according to Anselmsson & Johansson (2005). The fact that Sweden, internationally has a relatively high price-level, could be one of the reasons behind the driving force and development of retailers’ own brands during the latest years. The high concentration of grocery retailers could be another interesting aspect. An investigation shows that the three biggest grocery retailers, control about 90 % of the market, and that indeed is the reason why prices are 10% higher then European average (Konkurrensverket, 2000/2).

Retailers motives for marketing own brands are many. McGoldrick (2002) states the four most important reasons to carry own brands based on data from the private label manufactures’ association: better margins, competitors to manufactures’ brands, improved retailer competitiveness and image/loyalty building. The survey shows that better margins is the overall most important factor, however in the UK, image and loyalty building are more important. In order to discuss the relation between retailers’ own brands and loyalty we are going to take a closer look at retailers’ advantages on how own brands build customer loyalty among retailers. Figure 3 summarize the advantages to retailers with own brands in terms of customer loyalty. This means that a successful assortment of own brands is likely to benefit, not from all but from a majority of cited advantages. McGoldrick (2002) further explain that the objective of building customer loyalty must be considered as long-term. However, it is incorrect, that own brands guarantee success.

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**Customer loyalty**

1. Good value enhances store image
2. Build relationship of trust and credibility
3. Control over relationship with customer
4. Good value builds loyalty to the store and own brand
5. Increase loyalty, even if temporary stock out
6. Own brand may be perceived as equal to or better than manufactures’ brand
7. It is widely assumed that own brands are made by leading manufactures
8. Own brands can give a distinctive corporate image
9. Own brands can carry the retailer’s name into the consumer’s home
10. Retailer advertising can benefit both the stores and the own brand
11. Better design co-ordination can be achieved between the stores and the products

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One of the main goal for own brands in developing customer loyalty has been studied by several researchers. Steerkamp and Dekempe (1997) says;

> *customers’ loyalty is a fundamental reason for having own labels. If you have a nucleus of products which customers see as having a quality image, there is an inevitable dynamic created.* (p 920)

Burt (2000b) consider that the retailers’ own brands are able to increase the customer loyalty and contribute to repeat purchase. Loyalty can be built by offering products that consumers cannot find in competitors’ assortment. Ward et al (2002) argues that higher profits can be achieved when retailers have own brands that create higher loyalty than manufactures’ traditional brands. KPMG (2002) shows that customers buying mainly own brands are less likely to purchase at

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1. A survey of over 200 European retail managers
different stores, hence, they could not strength that own labels could create loyalty. Aliawadi et al (2001) found that loyalty is positively associated with consumption of own brands, this because consumers rely on the store and are familiar with their products. Aliawadi also found that loyal customers buy more own brands in general then others. This depends on the condition that consumers are more likely to come in contact with the products, and after trying one category they are more likely to try another category. One of the reasons for retailers introducing own labels was to create brand loyalty and compete with the manufactures’ brands. Another reason was to create store loyalty by building advantages towards retail competitors.

Therefore,

\textit{H5. Satisfaction with own brands has a positive affect on store loyalty}

\textit{H5a. Satisfaction with own brands has a positive affect on difference in attitude loyalty between 2004 and 2007}

\textit{H5b. Satisfaction with own brands has a positive affect on behaviour loyalty (share of visit)}

\textit{H5c. Satisfaction with own brands has a positive affect on behaviour loyalty (share of purchase)}

\textit{H5d. Satisfaction with own brands has a positive affect on behaviour loyalty (store recommendation)}
3. Methodology

The aim of this study is to provide a longitudinal examination, within grocery retailing, of four marketing tools and their impact of enhancing the customer loyalty. The study examines whether the relationship between the four marketing tools and customer satisfaction has a positive effect on store attitude and behaviour loyalty.

3.1 Research purpose

When doing scientific research three basic purposes exist: exploratory (what), descriptive (how) and explanatory (why). The exploratory approach is used to create understanding for a certain problem. The main purpose is to gather as much information as possible within a specific problem area in order to obtain a broad view within the area. The explorative research is often used when little research has been done and the area is new and unexplored. Furthermore the research is often done through qualitative research. The descriptive research is suitable when a problem already has been structured, and when there is no intention to investigate the casual relationships. The researcher wants to know which aspects of a problem that are relevant and prefer to describe these aspects more methodically. The result that presents often ends with relatively precise and detailed facts. (Easterby-Smith, 2002) Finally; the explanatory research, which often is used when making hypothesis on what kind of correlation exists between different variables. The research builds on prior knowledge and theories and its focuses are on explaining the situation or behaviour and the consequences. Explanatory researches often give rise to a deductive approach and quantitative data collection. (Easterby-Smith, 2002)

Within the loyalty research area there are a lot of previous theory and knowledge available, so this study will first and foremost be based on current theory. With the current theory this study prepared hypothesis in order to find connections between different predefined theoretical concepts or variables. This means that the research purpose for the study is explanatory. Furthermore there is no reason for developing the understanding for the meaning and definition of loyalty, but rather explaining the cause of loyalty.

3.2 Research strategy

All people have a superior framework or perspective about reality, which could be either conscious or unconscious assumptions. It is important to be aware of the framework’s boundaries of how you think, how you act and what you observe, since the system of assumptions that consist of a person’s framework decides how the person interprets the reality. (Easterby-Smith et al, 2002)
3.2.1 Positivistic or Hermeneutic Approach

When making a study there are basically two different ways on how to perceive the reality; the positivistic or hermeneutic approach. Positivistic approach has its ground in the perception that a research can and must distance itself from the subject. This means that science shouldn’t study anything that is not real and measurable (facts, data). Everything stated in the research must be possible to verify or reject through empirical experiences (facts should be separated from values). The purpose for this approach is to create a simplified model of reality since the reality itself is too complex to describe. The hermeneutic approach focuses on interpreting and understanding, rather than explaining the human behaviour and reality. The researcher has a subjective approach and emphasis on individual interpretative process. The approach indicates that there is more than one way to shape the world and the researcher’s worldview is the one that will be reflected. (Bryman & Bell, 2005)

This study is interested in seeing if or how the four marketing tools affect the customers’ relation towards grocery stores. We analyse the physical reality in terms of “cause and effect”, i.e. the aim is to try to find causal connections between marketing tools and loyalty. This means that a positivistic approach is used since the explanation is more important than the understanding. Furthermore we are interested in finding the “general in the special” (Andersson, 1982), i.e we take no interest in the individual respondent and their personal characteristics. The study only categorises the respondents in gender and age, in order to reach general statements. This procedure makes it possible to use standardised research methods.

3.2.2 Inductive or Deductive Method?

When examining social conditions methodically there are two distinct approaches, whether theory guides research - known as a deductive approach, or whether theory is an outcome of research - known as an inductive approach. The characteristic for deductive approach is that the researcher goes from theory to empirical evidence. (Bryman & Bell, 2005)

The other approach is called inductive. This means that the research process begins in the empirical reality and then moves on to search for formal theories. This strategy is more of a discovering method, where the researcher draws conclusions from the gathered information and thereafter formulates a theory. (Bryman & Bell, 2005)

A third alternative is the abductive, which is a combination of the two previous. This approach makes it possible to weave back and forth between data and theory, repeatedly referring back to each other. (Bryman & Bell, 2005)

This study is considered to be deductive, since the theory guides the research. The theoretical framework in this study is based on theories within the field of relationship marketing and foremost loyalty, which is a well-developed field with an immense amount of knowledge. Several researchers constantly present different views that give rise to discussion and calls for attention. The study will test if marketing tools, conceptions and assumptions that already are used today, within both practical and theoretical areas, are closely related or not. The framework considers aspects of the complexity when working with customers and how to
enhance the relationship over time with the help of the marketing tools available on the market today. Four different marketing tools will be tested, analyzed and discussed with the help of theories mainly from researchers such as Dabholkar et al (1996, 2002), Parasuraman, (1985, 2000), Mägi (2003), Ailawadi (2001); Reichheld (2003) and Söderlund (2001). Furthermore has this study prepared hypothesis, within the current theory, that will be tested empirically and thereafter conclusions will be drawn in order to find connections between different predefined theoretical concepts or variables.

With this background an inductive and explorative approach does not seem appropriate. Instead, and as mentioned before, the study takes on an explanatory approach which often gives rise to a deductive approach and quantitative data collection (Easterby-Smith, 2002).

3.2.3 Quantitative or Qualitative?

Research can be based upon two different methods: qualitative or quantitative. Which research strategy that will be used is dependent on the issue of the study. The main difference between the two approaches is how data is collected, translated and used. (Easterby-Smith et al, 2002).

Quantitative research, gathers information which is then presented as numerical data, in figures and/or other statistical ways. Thereafter it is required to plan and undertake research in such ways that information later on can be translated and coded to enable statistical analysis. (Bryman & Bell, 2005)

Qualitative research methods are based upon the researchers’ understanding and/or interpretations of the respondents’ view of reality and how it is translated (Bryman & Bell, 2005). Qualitative research makes it possible to understand the research problem through gathering in-depth information about the research area.

Due to the nature of the aim, this research utilizes a positivistic approach and the research purpose is explanatory, the gathering of empirical data will be done throughout a quantitative approach. Furthermore hypotheses are deducted, which are a statement of an expected general and causal relationship with factors and it can only be tested (rejected or supported) using a quantitative design because the ambition is to achieve statistical generalization. The empirical data will be gathered by using a questionnaire.

3.3 Research design

According to Bryman & Bell (2005) there are five main research designs: experimental, cross-sectional, longitudinal, case study and comparative. This study’s design is a longitudinal, which means that the same sample is studied at least two times on different occasions (Bryman & Bell, 2005), based on a case study.
3.3.1 Case study

In order to understand customers´ attitudes towards four marketing tools and if they affect store loyalty, and if they can enhance the relationship over time, we need to investigate a relatively wide context. According to Yin (1994) a case study is appropriate when we are not entirely certain of what we are searching for within that context. Furthermore case studies are appropriate when one is interested in attitudes and real-life experiences. We are interested in customers’ attitudes and experiences towards service quality, self-scanning, club-cards, and own brands as a part of the ordinary consumption pattern in grocery stores. As a result, a case study based on real-life experiences seems appropriate.

A prior study was conducted in 2004, in a Swedish grocery store - Coop Forum. The store is part of a big chain, but the study was only conducted in one store, located in Malmoe. The store Coop Forum was chosen because of their well developed self-scanning system and their efforts and willingness to continue to develop the system. Furthermore have Coop own brands and a membership system that has been active for many years. The city Malmoe was chosen because of its geographic closeness.

3.3.2. Longitudinal design

The purpose of our two-phase longitudinal design was to investigate how the relationship between retailer and customer can evolve over time. Both cross-sectional and longitudinal designs are very appropriate when mapping changes. But the longitudinal design give knowledge about the relationship between different variables over time, which results in that it is easier to draw causal conclusions (Bryman & Bell, 2005). Pettigrew (1990) mean that longitudinal designs are the only one fitting in order to obtain data about those mechanism and processes through which changes are created. The design is built upon phenomenon on vertical and horizontal analysis levels, and on the mutual correlations between those levels over time. (Bryman & Bell, 2005) Further, since many researchers are of the comprehension that loyalty is a process that developed over time and that it is important to enhance the relationship over time, (Grönroos, 1982; Gummesson, 2001) a longitudinal case study was deemed necessary.

In 2004 the study “Teknologibaserad självservice och kundupplevd servicekvalitet- En fallstudie av portabel självscanning i dagligvarubutiken”, was conducted by two master students at the school of economics and management in Lund. The study’s aim was not the same as ours, instead their purpose was to examine whether they could validate a general model for customer-perceived service quality and technology based self-service by applying the model on portable self-scanning in the grocery store. In a wider context they examined whether implementation of such technology influence the customer-perceived service quality on the company in question. The results presented in the study were only a part of another research. This gave us the opportunity to do a longitudinal study, based on a case study based on real-life experiences of a sample cross-section of customers.

Because of the choice of a longitudinal study many of the methodological choices were already set. This concern: the research strategy, the case company, and to some extent the data collection method. Due to this, small modifications have been done.
3.4 Data collection

According to Bryman & Bell (2005), there are several different types of data collecting methods, all with advantages and disadvantages. But when choosing the data collection method, one should choose the most suitable method for the specific study and not the method that seems superior over the other methods (Bryman & Bell, 2005).

3.4.1 Secondary resources

To highlight our research problem within the chosen subject, have we studied existing literature. Through substantial searching we have found theories and information mainly from research articles from the Elin@Lund database, ISI Web of knowledge and other internet sources and books concerned the research question. During our search we also found applicable articles from the reference lists of other articles and master theses.

To review and evaluate the gathered information the Social Sciences Citation Index has been used, which is a database that provides information about the quotation frequency of authors work. When using secondary data one should have a critical approach and be aware of the fact that the material could have been collected for another purpose and another research area than the one one would like to highlight (Bryman & Bell, 2005).

3.4.2 Survey

The survey is a quantitative study, in this case a standardized questionnaire, where the same questions have been distributed to all respondents. According to Bryman & Bell (2005) a high level of standardization is a requirement while comparing individuals and populations. Another advantage when using closed questioning is the possibility of pre-coding the answers (Bryman & Bell, 2005)

The reason for using a questionnaire was to keep this study as similar as the one done in 2004. Additionally a questionnaire is appropriate when testing hypotheses, since they are a statement of an expected general and causal relationship with factors and it can only be tested (rejected or supported) using a quantitative design because the ambition is to achieve statistical generalization.

3.4.2.1 First questionnaire

The first questionnaire consisted of 35 questions, which mainly focused upon the marketing tool – self-scanning. Questions about own brands, loyalty, satisfaction and club cards were involved as well, though, the authors did not present or analysis these results since these tools were not in focus.
The questionnaire was conducted with 400 respondents, which is twice as many as the recommended in a marketing questionnaire (Naresh et al, 2003). The aim was to attain 200 respondents that did not use the self-scanning system but had some knowledge of it, and 200 respondents that did use the self-service. The study’s respondent sample was attained by picking every third person that entered the store, each group (non-users and regular users) separately.

The study, in 2004, where primary based on Dabholkars et al (1996) attribute based model, and her questionnaire was used in order to the keep the study as similar as possible to Dabholkars procedure in 1996. A reason for this was that the authors believed that the study would reach higher effectiveness to support or reject her model. Furthermore was the questionnaire also based on Parasuramans SERVQUAL work from 2000.

The authors aimed to reach a diversity of gender variables among the respondents, which meant that a stratified sample was used. When using this type of sample the aim is that the sample should represent a proportional representation of the areas researched (Bryman & Bell, 2005), in this case the population.

3.4.2.2 Second questionnaire

This study’s questionnaire will be carried out to the same group of respondent that participated in 2004, were all of the respondents where asked whether or not they would like to participate in the future in a follow-up study. The last question in the questionnaire in 2004 was: “May we contact you again in two years, by post mail, to do a follow-up research?” Out of the total 400 respondents only 284 had agreed and were willing to participate again. The sample size and diversity is very important. Considerations on absolute and relative sizes as well as time and cost issues should be taken into account. Further, non-response rates and/or misinterpretations of our questioning should also be taken into account.

The questionnaire from 2004 was closely examined and more questions were added in order to focus more on the loyalty aspect. The prior study only focused upon the attitude dimension, this means that questions concerning the behaviour dimension were added. According to Söderlund (2001) it is important to highlight both dimensions to obtain a total picture of loyalty. Because of the absent of the behaviour dimension in the prior study, we were only able to measure the attitude dimension over time.

The questionnaire contains questions that capture four marketing tools. The remaining questions take various overall measurements of satisfaction, loyalty and customer characteristics. The questionnaire contained a total of 50 questions on five pages.
Q 2-3  →  Speed of delivery
Q 4-7   →  Ease of use
Q 8-11  →  Reliability
Q 12-15 →  Enjoyment
Q 16-18 →  Control
Q 19-21 →  Service quality with self-scanning
Q 22-24 →  Satisfaction with self-scanning
Q 25-26 →  Use of self-scanning in the future
Q 27-30 →  Satisfaction with service quality
Q 31-33 →  Satisfaction with Coop store
Q 34-36 →  Own brand loyalty
Q 37    →  Satisfaction with own brands
Q 38-40 →  Store loyalty
Q 41    →  Store recommendation
Q 42-44 →  Share of visit/share of purchase
Q 45-46 →  Share of wallet over a three year period
Q 47-48 →  Satisfaction with club card
Q 49-50 →  Gender, Age

Dabholkar attribute model

All questions about satisfaction and the one with store recommendation are based on Reichheld (2003, 2006). The questions about store loyalty and own brand loyalty are based on Ailawadi (2001) and the questions about share of wallet derive from Mägi (2003). Finally, as presented above, the questionnaire starts with Dabholkar's (1996) five dimensions about self-scanning. Moreover, the questions are in a logical order, controlled by Dabholkar in order to get the highest response rate.

3.5 Measurement and scaling

"Measurement means assigning numbers or other symbols to characteristics of objects according to certain pre-specified rules" (Naresh et al, 2003, p 292). In order to measure a characteristic this must be given a number that represent the value that the characteristics have. This pre-coding is a requirement for the quantitative method and permit statistical analysis of the resulting data. (Naresh et al, 2003)

3.5.1 Scales

Scaling may be considered an extension of measurement, and involves creating a range upon which measured objects are located. Scaling is the process of placing the respondents on a continuum with respect to their perceptions, attitudes, preferences or other relevant characteristics toward the object. Four primary scale exist; nominal, ordinal, interval and ratio. This study foremost uses an ordinal scale, which is “a ranking scale in which numbers are assigned to objects to indicate the relative extent to which the objects possess some characteristics” (Naresh et al, 2003, p 295). This type of scale determines whether an object has more or less of characteristics than another object, but not the magnitude of the differences. If the variables also discern differences and allow you to compare the differences
between objects, the scale is an interval scale. In an interval scale, “*numerically equal distances on the scale represent equal values in the characteristics being measured*” (Naresh et al, 2003, p 296). This means that our questionnaire ordinal scale could be interpreted as an interval scale and the one used is the semantic differential scale. This scale is “*a seven-point rating scale with end points associated with bipolar labels that have semantic meaning*” (Naresh et al, 2003, p 305) In this study the respondents were asked to mark the blank that best indicated how they would describe the object being rated, on a seven-point rating scale, enclosed at each end by one of two bipolar adjectives, such as “very dissatisfied” and “very satisfied”.

For this study the above scale choices where obvious since the prior research (2004), that is a part of this longitudinal research, has used this scale with the explanation that Dabholkar (1996) uses these in her research. Those questions that had been added, for our study, have all been adjusted to a seven-point semantic scale. The reason for this modification is that we want the scales to be homogeneous so that we limit interpretation failures in the questionnaire. According to Dabholkar it is important to use the same scales in the questionnaires so that the respondents do not get confused.

3.5.2 Measure values

Alpha test is done in this study on variables where we created an average on different means. The goal for an Alpha test is to get rid of questions in the questionnaire that have not relevance for the research and outcome. It could be possible that a question is not necessary and that it does not affect the test or the model’s trustworthiness. An alpha test determinates what questions that possibly could be eliminated so the really conclusive questions are the ones that emerge.

This study will use SPSS in order to foresee information about possible relations between the variables. SPSS makes it possible, from the gathered information, to see relations between the variables and determinate if there exist any statistical relation between the variables.

In order to evaluate the relation between the marketing tools and store loyalty this study will utilize the statistical method regression analysis. Regression helps, in a more exact way, to foresee tendencies and patterns in the information (Holme & Solvang, 1997). The first type of regression this study will use is linear, which means that there is one dependent variable and only one independent, instead of many. In this study the independent variable represents the marketing tools and the dependent variable represents the different loyalty measures in attitude and behaviour. Moreover regression can determinate which of the independent variables (marketing tools) that have the largest affect on the dependent variable (store loyalty). The regression method then show, whether there is any certain secure statistical relation between the variables.

The $R^2$ scale from the analysis is between 0 and 1. A high $R^2$ scale means that the model is good, has a good explanation possibility, and reverse. Within social science it is not common that the scale is higher than 0.5. Statistically the $R^2$ scale is an expression of how much of the variation in the dependent variable the independent variable can explain, hence, when comparing value between questions the adjusted $R^2$ is preferable. An adjusted $R^2$ scale on for example 0.20, means, that we explained 20% of the variation in the dependent variable (store
loyalty) with the help of the independent variable (marketing tool). This technique gives the study possibility to determine both the form of the relation and the strength. The information gathered will be on an interval scale level and that is a necessary condition for this kind of analysis (Körner, 1996). Moreover, when the sig. 2-tailed is below 0.05, the hypothesis in this study is accepted and statistically secure, the F value tell us if the regression models and the included variables are significant predictors.

Finally, the second type of regression this study will use is multiple, which means that there are many independent variables and only one dependent. Most social situations cannot be explained from only one independent variable, therefore multiple regressions is used, to get a better and more detailed understanding of the object of study (Holme & Solvang, 1997). This study will use the multiple regressions to summarize the affect of all marketing tools on loyalty. The multiple regressions will show which of the marketing tool (independent variables) that has the biggest affect on behaviour and attitude loyalty (dependent variable). The standard beta value is preferable when comparing the marketing tools and their level of significance for each independent variable will show us about their individual impact on the dependent variable (loyalty) (Körner, 1996).

3.6 The research object of the study

Coop Norden is a Swedish company with its head office in Stockholm. It is also the largest retail business in the Nordic region (Denmark, Norway and Sweden), with over 20 depots, 3,000 shops and 60,000 staff, serving 11 million customers, five million of whom are members. Every year Coop Norden turns over SEK 86,500 million in Denmark, Norway and Sweden. The retail business is run through 16 different chains. Coop Norden is owned jointly by the Swedish, Danish and Norwegian consumer cooperatives. (www.coop.se)

In this study we only consider Coop Sweden when referring to Coop and not the whole conciliation Coop Norden. In Sweden Coop Norden comprise the retail concepts Coop Extra, Coop Nära, Coop Forum, which is the country’s largest supermarket chain and has the widest range of products and finally Coop Konsum., which is Sweden’s largest integrated FMCG
chain. Coop Sweden’s turnover for the business is 26 billion SEK and the number of employees is 9 000. The consumer co-operation in Sweden has a customer share of 17.5% (2005) of the Swedish FMCG market. The biggest competitor is ICA, which has around 37% of the market. (www.coop.se)

Coop has a club card called MedMera. The card is free and every time a member shops in a Coop store they draw their card in the cashier and every coin renders a point in a bonus system. When a member has reached a certain amount of points a bonus check is delivered. The MedMera card is a joint venture, which means that members also collect points here, for example Vattenfall, Akademibokhandel, Power, KappAhl, and OKQ8. The membership also involves discount at other Coop co-operations, for example City Hotels.

The development of own brands has a high priority. During the last year Coop launched over 2000 new products in own brands and the development is continuing. It is the customers who choose, and it is Coops task to offer them a wide, varied choice in terms of products and price. The benefits are very clear for both Coop and the customer. With 11 million customers in the Nordic region, Coop is strong when it comes to negotiating directly with producers of quality products. This means cheaper goods with larger margins.

In 1999 Coop installed its self-scanning system, called Shop Express, at B&W grocery store in Bromma, Sweden. In January 2003 the self-scanning system was introduced in the Coop Forum – Stadion store (the case study store), as the 17th store supermarket in Sweden. In order to use the system one must have the MedMera card. When a customer shall use the self-scanning system they draw their card in a card reader, and acquire a scanner. Then the customers scan all the products they want to buy, by themselves. When every purchase is done the customer goes to the Shop-Express encounter, for payment. Here the customer can choose if they want to draw their pay card, for example MedMera, VISA, American Express and so on, by themselves or if they want the cahier to receive the payment. If the customers for example have coupons they must pay through the cashier.

3.7 The quality of the research design – validity, generality and reliability

In this final section we explain what validity, generality and reliability is, and what we have done to achieve this. We also present some limitations which assist the reader to make his/her own opinion about the validity and reliability of the study. According to Yin (1994) four aspects are of interest when evaluating the quality of case studies within social science: Construct validity, internal validity, external validity (generality) and reliability. According to Bryman & Bell (2005) does high validity implies that the results should be trustworthy and that the study ought to be based on enough facts. High reliability implies that the result of the study would be the same if the study was repeated in another time and place. This means that the study is consistent and has not been affected by random or temporary measuring faults.
3.7.1 Construct validity

Construct validity aims to see if the measures used for the study are correct for the concepts being studied. In this study the question should be if we are really measuring loyalty and if we are measuring it in the right way? The loyalty area is broad and researchers are constantly discussing how to define the concept and how to measure it. One way to assure construct validity according to Yin (1994) is to use multiple sources of information. In this study two different kinds of sources were used; first secondary data in terms of previous empirical research; second, primary data in terms of quantitative questionnaire with the same customer sample that participated in the study 2004. Furthermore the questionnaire used in the study is based upon previous research, done by well cited researchers’ work.

3.7.2 Internal validity

The second criterion concerns if the research design is capable of eliminating bias. It also includes the effects of irrelevant variables. (Bryman & Bell, 2005) In this study the question is whether or not we have captured the essentials in store loyalty and how the customers evaluate the marketing tools? In order to reach high internal validity we use the regression analysis, which main purpose is to verify that the essentials of the construct are examined. The outcome of our regression will identify the relevant determinants in the four marketing tools evaluation and how good they explain store loyalty.

In the study where we created an average on different means (question 34-36, 38-40) an Alpha test has been done, in order to get rid of questions in the questionnaire that have not relevance for our research. Sometimes a question does not affect the test or the model’s constancy. An alpha test determinates if and which questions that could be eliminated so the really conclusive questions are the ones that emerge.

This study is a part of another study, and the whole questionnaire consisted of more questions then the ones we have focused upon and analyzed. An advantage could be that the respondent can not foresee our purpose with the study, which could result in less bias.

3.7.3 External validity (generality)

The next criterion to take into account is the generalizability. Does the research contain necessary facts of sufficient size, from which conclusions could be drawn to the whole population? Generalizability can best be achieved by using a representative sample. In this longitudinal study, the prior sample is based upon Coop Forums customers, users- and no-users of their self-scanning system Shop Express. Furthermore the authors aimed to reach a diversity of gender variables among the respondents, which meant that a stratified sample was used. The second study was based upon the same sample that was used in the prior research. After one week a remainder was sent out in order to increase the answering of the sample size. However, a representative sample will not ensure that the results will be generalizable, as the representative sample not always represents the whole population (Bryman & Bell, 2005).
According to Easterby-Smith et al (2002), a study should try to understand as much as possible of a certain situation and thereafter try to apply this to other situations, and thereby to some extent create universal validity. An opposite view is also presented where Easterby-Smith et al (2002) instead argue that generalized theories might be unsuitably forced upon others. Consequently all theories should be understood in relation to the context in which they were developed.

The extern validity could be questioned since the sample only consists of customers at Coop Forum-Stadion, whom might not be representative for the whole society and therefore lower the validity. Furthermore are women overrepresented, but it is likely that women are overrepresented as store visitors. The age varied between 22-88 years with a mean at 59 years. This unequal distribution of our respondents means that we can not ignore that the research results could have been different if we had have a total diversity of demographic- and gender variables among the respondents, which would have been ideal since today’s consumers are both men and women (Firat et al. 1998). A wider domain of lifestyles, demographic variables, different grocery stores and a greater sample number may be needed to make generalizations applicable to the overall research question. Moreover, the questionnaire study is built on a relatively small number of respondents, which also affects the study’s generalization.

3.7.4 Reliability

Concerning the criterion reliability; are the results repeatable? Are the measures that have been used consistent, or have the results been affected by random or temporary occasions? The replication criteria, means that it should be possible to conduct the same research again and find similar results. It is therefore important that researchers’ characteristics and expectations do not influence the results, and that the procedures that have been used in the study are explicitly presented. When using qualitative approaches the replication criterion is difficult to fulfil, since analysing and interpreting this kind of data always is subjective to some extent. In this study a quantitative approach has been used, which indicates that there is reason to be more confident that the statically data analysis and interpretation would be replicable. All the data collected from the questionnaires was continuously coded and entered into SPSS, which is a well-known statistic program. The questionnaire is also included in Appendix 1, which allows the possibility for replication, for future research. All respondents have filled in the questionnaires in their homes, meaning that we have not had any control. Moreover there is always the possibility that they have not been all completely truthful. This may be further compromised if the respondents are not fully serious about filling in the questionnaire. However, if they did not want to participate for some reason they would not return it, so the ones that took their time and answered might be interested to some extent. Another limitation, according to Bryman & Bell (2005), concerns the research design. When doing a longitudinal study the decline of the sample is a problem. An additional problem is that there are no guidelines for which time interval that is most appropriate concerning new data collection.
4. Results and analysis

This section aims to validate the theoretical findings that were presented in the previous chapter and empirical findings. Combining results and analysis, makes it easier to evaluate the four different marketing tools and 24 hypothesis and this way accomplish less repeate.

4.1 Descriptive statistics

A total of 284 questionnaires were sent out by post mail, and 128 respondents answered, which gives us a respondent rate of 45%. 52 questionnaires were returned because the respondents had moved. Another 23 arrived after final date and after the analysis had started. 107 of the respondents did not answer the questionnaire at all. According to Anselmsson (2001) 45% is a normal respondent rate for mail distributed surveys.

Women are overrepresented in the study since 66,4% of the respondents were women and only 33,6% were men. But it is likely that women are overrepresented as store visitors. The age varied between 22-88 years with a mean at 59 years (std. deviation 14). As many as 99,2% of the respondents have a club card at Coop and 74% have at least one time used the self-scanning system Shop Express. Finally, the average respondent shop groceries 2,6 times per week.

Among the 74% of the respondents that use the self-scanning system Shop Express, as many as 80,5% use it every time they shop. 6,5% of the respondents use the Shop Express often, 2,1% sometimes, 4,4% seldom and 6,5% have for some reason stopped using the Shop Express. However, when speaking about Own brand loyalty, the mean has decreased from 4,68 (Alpha 92,7) in 2004 to 4,10 (Alpha 73,4) in 2007, based on a 7-scale level.

It is interesting to compare attitude loyalty over time. In order to measure attitude loyalty between 2004 and 2007, a mean was created from Ailawadi’s questions (38-40) from 2004 (Alpha 94%) and 2007 (Alpha 91%). All 128 respondents answered this question and surprisingly the mean in attitude loyalty decreased on a 7-scale from 4,82 (std. Deviation 1,5) in 2004 to 4,18 (Std. Deviation) in 2007, that is a decrease with 13,3%. On the other hand when measuring behavior loyalty, questions were asked if the respondent increased their share of visits and share of purchased during the latest three years. The result shows that out of 128 respondents, 25% have increased their share of visits and 32,8 % have increased their share of purchases at the store in question. 19,5% have decreased their share of visits and 21,9% have decreased their share of purchases and the rest remain the same. This shows that there is a slight increase in the behavior loyalty when asking about the customers’ share of visit and purchase over a three year period. The result of this comparison shows that the mean on attitude loyalty decreased for sure over a three year period but the respondents thoughts towards their behavior loyalty have slightly increased, this shows why researchers divide loyalty in behavior and loyalty and why it is so complex.

Customer satisfaction of the marketing tools is calculated below in table 1, including the total mean of the respondents as well as the difference between men and women. The highest total
The research issue of the study, store loyalty, is calculated below on three behavior loyalty aspects; share of purchase, share of visit and store recommendation. The results show that 30,5% spend more than 2/3 on their grocery budget at the store in question and 42,2% spend between 1/3 to 2/3 of their budget. On the other hand 40% of the respondents visit the store in question in more than 2/3 of the cases they go shopping, 32,8% visit Coop between 1/3 and 2/3 of the cases. As many as 36,8% see the store as their prime store and visit Coop to 100% when shopping for groceries.

**Table 1 Customer satisfaction of the marketing tools, Mean difference between gender**

| Table 1 Customer satisfaction of the marketing tools, Mean difference between gender |
|----------------------------------|------------------|------------------|------------------|------------------|------------------|
| Valid                           | 99                | 127              | 128              | 128              | 127              |
| Missing                         | 29                | 1                | 0                | 0                | 1                |
| Mean Total                      | 5,86              | 5,23             | 5,85             | 4,66             | 5,24             |
| Std. Deviation                  | 1,28              | 1,43             | 1,29             | 1,42             | 1,47             |
| Mean Men                        | 5,93              | 5,07             | 5,67             | 4,65             | 5,07             |
| Mean Women                      | 5,84              | 5,31             | 5,94             | 4,66             | 5,33             |

**Share of purchase**

<table>
<thead>
<tr>
<th>Share of purchase</th>
<th>Frequency</th>
<th>Valid</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>less than 1/3</td>
<td>35</td>
<td>27,30</td>
<td></td>
</tr>
<tr>
<td>between 1/3 to 2/3</td>
<td>54</td>
<td>42,20</td>
<td></td>
</tr>
<tr>
<td>more than 2/3</td>
<td>39</td>
<td>30,50</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>128</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Missing</td>
<td>0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Share of visit (%)**

<table>
<thead>
<tr>
<th>Share of visit (%)</th>
<th>Frequency</th>
<th>Valid</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>less than 1/3</td>
<td>33</td>
<td>26,4</td>
<td></td>
</tr>
<tr>
<td>between 1/3 to 2/3</td>
<td>41</td>
<td>32,8</td>
<td></td>
</tr>
<tr>
<td>more than 2/3</td>
<td>51</td>
<td>40,0</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>125</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Missing</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2. Share of purchase

Table 3. Share of visit %
Last but not least regarding behavior loyalty is whether the respondents would recommend the store to family and friends. Almost 60% answer 5 or above on a 7-scale, that they would recommend Coop and the mean is 4,83.

<table>
<thead>
<tr>
<th>Store recommendation</th>
<th>Frequency</th>
<th>Valid Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all likely</td>
<td>6</td>
<td>4,69</td>
</tr>
<tr>
<td>2</td>
<td>8</td>
<td>6,25</td>
</tr>
<tr>
<td>3</td>
<td>8</td>
<td>6,25</td>
</tr>
<tr>
<td>4</td>
<td>30</td>
<td>23,44</td>
</tr>
<tr>
<td>5</td>
<td>27</td>
<td>21,09</td>
</tr>
<tr>
<td>6</td>
<td>26</td>
<td>20,31</td>
</tr>
<tr>
<td>Very likely</td>
<td>23</td>
<td>17,97</td>
</tr>
<tr>
<td>Total</td>
<td>128</td>
<td>100</td>
</tr>
<tr>
<td>Missing</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

Table 4. Store recommendation

Out of the 128 respondents who answered, 18 (or 14,3%) answered that they never shop at Coop Forum – Stadion, a reason for this could be that they have moved. If this is the case, some of the result concerning both the attitude and especially the behavior dimension could be affected, since closeness, according to Liljander & Strandvik 1995, is a bound that could keep the customer loyal. Especially when it comes to grocery stores, which have a quite homogeneous assortment, the fact that people move could be affecting the results. Furthermore one must experience and have some kind of preferences in order to know if one is satisfied with the store in question. The whole discussion give rise to the question; If one really can be loyal to a grocery store?

4.2 Hypothesis

The research issue in this study, the relation between the marketing tools and store loyalty will be measured below with 24 hypothesis, 6 of these focuses on how attitude loyalty has been affected between 2004 and 2007. There are four store loyalty values (loyalty difference between 2004 and 2007, share of visit, share of purchase and store recommendation) that will be measured towards the marketing tools (service quality, self-scanning, club card and own brands). The regression analysis determinate which of the independent variables (marketing tools) that have the largest affect on the dependent variable (store loyalty). Further, participation in self-scanning will be measured towards store loyalty. This will show if there is any difference between users and non-users, on the relation between self-scanning and store loyalty. Finally, all hypothesis will later be compared in section 4.3 with the other marketing tools.
4.2.1 Store satisfaction

_H1. There is a positive relation between store satisfaction and store loyalty._

<table>
<thead>
<tr>
<th>Hypothesis, Independent variable, Store satisfaction</th>
<th>Dependent variable</th>
<th>$R^2$</th>
<th>Adjusted $R^2$</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1a, Store satisfaction</td>
<td>Loyalty difference between 2004 and 2007</td>
<td>0.046</td>
<td>0.038</td>
<td>0.017*</td>
</tr>
<tr>
<td>H1b, Store satisfaction</td>
<td>Share of visit</td>
<td>0.096</td>
<td>0.088</td>
<td>0.000</td>
</tr>
<tr>
<td>H1c, Store satisfaction</td>
<td>Share of purchase</td>
<td>0.066</td>
<td>0.059</td>
<td>0.003</td>
</tr>
<tr>
<td>H1d, Store satisfaction</td>
<td>Store recommendation</td>
<td>0.487</td>
<td>0.483</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Table 5. H1, Store satisfaction. * 98.3% level, sign 0.007

_H1a. There is a positive relation between store satisfaction and difference in attitude loyalty between 2004 and 2007._ This positive relationship was supported (98.3% level, sign 0.017) and the store satisfaction can explain 3.8% of the variation in loyalty difference between 2004 and 2007.

_H1b. There is a positive relation between store satisfaction and behaviour loyalty (share of visit)._ This relationship was supported and the store satisfaction can explain 8.8% of the variation in Share of visit.

_H1c. There is a positive relation between store satisfaction and behaviour loyalty (share of purchase)._ This relationship was supported and the store satisfaction can explain 5.9% of the variation in Share of purchase, slightly less than the Share of visit.

_H1d. There is a positive relation between store satisfaction and behaviour loyalty (store recommendation)._ Finally, this relationship was supported and can explain as much as 48.3% of the variation in Store recommendation, this measure has the superior explain probability.

This study shows that there exists a positive relationship between store satisfaction and all loyalty measurements (H1a-d). This is supported by many scholars, who argue that customer satisfaction is the driving force towards customer loyalty (Anderson & Sullivan 1993; Bolton & Drew, 1991; Fornell, 1992). But even if the study shows a positive relation, it is not overall very strong. This rather weak explanation could be a reason for the disagreement, concerning if satisfaction is the best measure tool for loyalty, between several researchers. Miranda et al (2005) criticize the measure and argue that consumers’ satisfaction levels are not the only key to store loyalty. Söderlund (2001) agrees and argues that customer satisfaction is a condition inside the customers’ head and that it is closely related to the attitude perspective.

Only between store recommendations and store satisfaction the explanation is very strong, 48.3% could be explained, which is the second highest clarification that this study has
detected. Reichheld (2003) stresses the importance when measuring loyalty that one should comparing the linkages between recommending the company to someone and encouraging friends and relatives to do business with the company and loyalty. According to this study is Reichhelds argumentation, concerning store satisfaction and store recommendation very similar since the positive relation between the two is very high.

4.2.2. Service quality and loyalty

*H2. Satisfaction with service quality has a positive affect on store loyalty* is the first hypothesis tested from the four marketing tools. By service quality, we mean the customer “attitude that is based on a comparison between the customers expectations and the experience of the service encounters performance” (Anselmsson & Johansson, 2001).

<table>
<thead>
<tr>
<th>Hypothesis, Independent variable, Service quality satisfaction</th>
<th>Dependent variable</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>H2a, Loyalty difference between 2004 and 2007</td>
<td>0.082</td>
<td>0.075</td>
<td>0.001</td>
<td></td>
</tr>
<tr>
<td>H2b, Share of visit</td>
<td>0.085</td>
<td>0.077</td>
<td>0.001</td>
<td></td>
</tr>
<tr>
<td>H2c, Share of purchase</td>
<td>0.074</td>
<td>0.067</td>
<td>0.002</td>
<td></td>
</tr>
<tr>
<td>H2d, Store recommendation</td>
<td>0.487</td>
<td>0.458</td>
<td>0.000</td>
<td></td>
</tr>
</tbody>
</table>

Table 6. H2, Satisfaction with service quality

*H2a. Satisfaction with service quality has a positive affect on difference in attitude loyalty between 2004 and 2007*. This positive relation was supported (99.9% level, sign 0.001) and can explain 7.5% of the variation in loyalty difference between 2004 and 2007.

*H2b. Satisfaction with service quality has a positive affect on behaviour loyalty (share of visit)*. This relation was also supported and can explain 7.7% of the variation in Share of visit.

*H2c. Satisfaction with service quality has a positive affect on behaviour loyalty (share of purchase)*. The positive relation was supported and can explain 6.7% of the variation in Share of purchase.

*H2d. Satisfaction with service quality has a positive affect on behaviour loyalty (store recommendation)*. The relation was supported and can explain as much as 45.8% of the variation in the Store recommendation.

In today’s competitive retail environment, high service quality has long been treated as the basic retailing strategy (Hummel & Savitt, 1988) and service quality has become an important research topic due to its apparent relationship to customer satisfaction and higher customer retention (Siu & Tak-Hing, 2001). Wong, et al (2003) examines in a study the impact of service quality dimensions on customer loyalty. They illustrate there are two levels of retail
relationships; the first is person to person (salesperson level) and the second person to firm (store level). This research focuses on both levels; the total service quality in the store. The results from this study show that service quality is positively related with customer loyalty and that satisfaction with service quality has a positive affect on both attitude and behavior loyalty. H2a, the attitude loyalty difference between 2004 and 2007, that really can explain the relationship over time is explained to 7.5%. The value is rather poor but the positive affect on attitude loyalty is statistically secure.

Dabholkar (2000) looked into the relation between service quality in store, satisfaction in store and buying intensions, the outcome illustrates that store satisfaction has a bigger influence on buying intensions than perceived service quality. Ailawadi’s attitude loyalty question (38-40) about buying intension; willingness to make an effort to shop at their favorite grocery store, preference to always shop at one grocery store and finally if customers in general care about which particular grocery store to shop at, shows the opposite. H2a, about service quality explains the variation to 7.5% while H1a, about store satisfaction only explains 3.8% of the variation in attitude loyalty. This means that the service quality in this study has a larger affect on attitude loyalty and buying intensions.

Dabholkar (1993) argue whether satisfaction and service quality are in essence the same construct, thus McGoldrick (2002) as many other scholars consider them as different but related. Our findings is concurrent that service quality positively affects the store satisfaction, service quality can explain as much as 77.8% (see table 11) of the variation in the store satisfaction, the highest in this study. However, in a model from 1994, Parasuraman illustrates the linkages between satisfaction and service quality and that satisfaction is a more extensive concept, most researchers today agree upon that service quality is a part of the customer satisfaction and that both occur in transactions as well as in the long-term (Anselmsson & Johansson, 2001).

Finally, despite all the technical innovations (i.e. self-scanning etc.) there are still some general expectations customers require according to Bitner, (2001). This is supported by the findings in this study, no matter how the companies choose to structure the relationship this study show that customers still demand quality service.

4.2.3 Self-scanning and loyalty

H3. Satisfaction with Self-scanning has a positive affect on store loyalty. By self-scanning, we mean technological interfaces that enable customers to produce a service where no interpersonal contact is required between buyer and seller (Meuter et al, 2000).

<table>
<thead>
<tr>
<th>Hypothesis, Independent variable, Self-scanning satisfaction</th>
<th>Dependent variable</th>
<th>( R^2 )</th>
<th>Adjusted ( R^2 )</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>H3a, Loyalty difference between 2004 and 2007</td>
<td>0.005</td>
<td>-0.006</td>
<td>0.506</td>
<td></td>
</tr>
<tr>
<td>H3b, Share of visit</td>
<td>0.032</td>
<td>0.022</td>
<td>0.078</td>
<td></td>
</tr>
</tbody>
</table>
Table 7 Self-scanning satisfaction

<table>
<thead>
<tr>
<th></th>
<th>Share of purchase</th>
<th>0.053</th>
<th>0.043</th>
<th>0.022</th>
</tr>
</thead>
</table>

**H3a.** Satisfaction with Self-scanning has a positive affect on difference in attitude loyalty between 2004 and 2007. The positive relation was not supported (49.4% level, sign 0.506) because the significance is higher then 0.05, meaning threshold value for 95% probability level.

**H3b.** Satisfaction with Self-scanning has a positive affect on behaviour loyalty (share of visit). Even this positive relation was not supported because the significance is higher then 0.05, 92.2% probability level.

**H3c.** Satisfaction with Self-scanning has a positive affect on behaviour loyalty (share of purchase). This relation was supported since the significance in this case was below 0.05, and can explain 4.3% of the variation in the Share of purchase.

**H3d.** Satisfaction with Self-scanning has a positive affect on behaviour loyalty (store recommendation). In this last hypotheses concerning self-scanning, the relation was supported and can explain 6.6% of the variation in Store recommendation.

Research shows that technology has changed the character of service and the ways companies interact with their customers, and these technical innovations will continue to be a significant part of customer interactions. Some even suggest that the traditional marketplace interaction is being replaced by a market space transaction (Rayport et al, 1995). Parasuraman (1996) strongly agrees and argues that technology-based interactions are likely to become a key success factor for long-term businesses. Bitner (2001) and Meuter (2000) propose that the use of TBSS include several reasons that could lead to higher satisfaction.

Concerning store loyalty over time (H3a), the marketing tool self-scanning, has not helped to affect attitude loyalty. The respondents that showed a positive satisfaction with self-scanning did not reach a higher attitude loyalty, 2007 than 2004. The relationship is also negative when loyalty is measured through share of visit (H3b). Only when measuring loyalty through share of purchase (H3c) and store recommendations (H3d) the relationship seems to be positive. But even here only a little percent is explained by the variables. Dabholkar (2003) has highlighted the problem and argues that even though self-scanning technology is being used by several retailers across the world, the success from the consumers’ perspective is not yet clear. This could be explained through the fact that customers are not always so optimistic to new things. Moreover there is a loss of human and personal interaction which many customers still want (Bitner, 2001). Another explanation could be that the self-scanning system has not meet the customers’ expectations, for example when the system fails, the design is poorly and difficult to use or understand, when the customers themselves mess up and finally when there is no service recovery (Bitner, 2001). The age in this study varied between 22-88 years with a mean at 59 years, which could be another explanation since older people may be more resistant for new things. We doubt those are the reasons in this study because the average satisfaction is high, as can be seen below and in table 1.
When measuring satisfaction average for the marketing tools the highest total mean on satisfaction self-scanning is at 5.86. A mean close to 4 means that the respondent is neither dissatisfied nor satisfied, which means that the customers are relatively satisfied with the self-scanning system. But even though, the hypothesis concerning the relation to attitude loyalty was not supported. Concerning the differences in loyalty from 2004 to 2007 the self-scanning has not enhanced the relationship. It seems that customers are rather satisfied with the marketing tool, but the tool do not help to create higher store loyalty. This discussion shows that Dabholkar (1996) and Meuter (2000) are right when saying that little is known about how interactions with technological options influence customer evaluations and behavior. Furthermore this results show that also Meuter et al (2000) is accurate when saying that companies must put more effort and try to understand how customers evaluate TBBS, so they can evaluate and improve the relation.

4.2.4 Club Card and loyalty

**H4. Satisfaction with Club Card has a positive affect on store loyalty.** By club card, we mean “an communicative union of people, which is initiated and operated by an organization in order to contact these members directly on a regular basis and offer them a benefit package with a high perceived value, with the goal of activating them and increasing their loyalty by creating an emotional relationship” (Butscher, 2002, p 18)

<table>
<thead>
<tr>
<th>Hypothesis, Independent variable, Club card satisfaction</th>
<th>Dependent variable</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>H4a, Loyalty difference between 2004 and 2007</td>
<td>0.080</td>
<td>0.073</td>
<td>0.001</td>
<td></td>
</tr>
<tr>
<td>H4b, Share of visit</td>
<td>0.092</td>
<td>0.084</td>
<td>0.001</td>
<td></td>
</tr>
<tr>
<td>H4c, Share of purchase</td>
<td>0.145</td>
<td>0.138</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>H4d, Store recommendation</td>
<td>0.150</td>
<td>0.143</td>
<td>0.000</td>
<td></td>
</tr>
</tbody>
</table>

Table 8. Club card satisfaction

**H4a.** Satisfaction with Club Card has a positive affect on difference in attitude loyalty between 2004 and 2007. This positive relation was supported (99% level, sign 0.001) and can explain 7.3% of the variance in the loyalty difference between 2004 and 2007.

**H4b.** Satisfaction with Club Card has a positive affect on behaviour loyalty (share of visit). This relation was also supported and can explain 8.4% of the variation in the Share of visit.

**H4c.** Satisfaction with Club Card has a positive affect on behaviour loyalty (share of purchase). This relation was supported and can explain 13.8% of the variation in the Share of purchase.
**H4d. Satisfaction with Club Card has a positive affect on behaviour loyalty (store recommendation).** Finally this relation was supported and can explain 14.3% of the variation in store recommendation.

Concerning store loyalty over time (H4a), our results showed that club-cards have a positive relationship to store loyalty. From 2004 to 2007 the marketing tool club-card, has had an impact on the attitude loyalty. The relationship is not so strong, 7.3% but, even though, the respondents that showed a positive satisfaction with club-cards reach a higher store loyalty, 2007 than 2004. Despite this result, that gives proof to the efficiency of loyalty programs over time, a wider discussion concerning club card as a marketing tool will be considered below.

Empirical research shows mixed evidence of the loyalty programs effectiveness. Even though, many grocery chains put a lot of effort to attracting new members. In today’s markets the use of customer membership clubs or loyalty programs has become widespread, and several companies within various business sectors are starting to utilize loyalty programs (Dowling, 1997). Our study shows (see 4.1) that 99.2% of the respondents have the Coop member card - MedMera. 2004 the amount was 93%. But the increase from 2004 to 2007, and the high sum is not in it self a support that the store today reaches a higher store loyalty since almost every adult person is participating in some kind of customer loyalty programs and of course, many members are registered in more than one program (Butscher, 2002). A study by Mägi (2003) shows that 49% of the studied households have more than one card, only 18% had no card at all. Furthermore the membership is free and involves several benefits and price reductions which might affect the customers’ willingness to be members, despite their attitude towards the store. Every time a member shops in a Coop store they draw their card in the cashier and every coin gives a point in a bonus system. When a member has reached a certain amount of points a bonus check is delivered. The MedMera card is a joint venture, which means that members also collect points here, for example Vattenfall, Akademibokhandel, Power, KappAhl, and OKQ8.

The above shows that it might not be meaningful to draw conclusions between the high sum club-card members and store loyalty and say that a club member is a loyal customer. But our results do show that there exist a positive relationship between club card and all of the measure tools that we have used (H4b-d), coherent with Lewis (2004). According to Svante Nilsson, President and CEO, Coop Norden, Coop is constantly improving itself and focuses on its customers and tries to increase the close and long-term relationship to the customer. This could lead to a higher perceived emotional relationship for the customers, which could be one explanation to the positive relationship between club card and all our measure variables. According to Butscher (2002) it is the emotional relationship that will create loyal customers. The emotional relationship will also ensure that the companies’ customers are immune to competitors’ offers. This is not supported by Dowling (1997) who argues that in many cases, the loyalty program is ineffective and only costs companies money when providing more benefits to the customers. He argues that it is rare when companies increase the relative amount of loyal customers, further not many cases show that loyalty programs would be relevant to brand’s value or positioning. Butcher (2002), on the other hand does not only argue that customer loyalty program are important, he also means that it is a key success factos for many companies.

Mägi (2003), Dowling (1997) wonder whether loyalty programs really enhance behavior loyalty and argues that empirical evidence of any affect of loyalty program on behaviour loyalty is limited. But, as mentioned, did all our measures on behavior loyalty show a positive
relationship; share of visit, share of purchase and recommendations. What is notable is that share of visit did not reach that high scores, despite the fact that the measurement is included in customer behavior loyalty. On the other hand did the measurement share of purchase reached a rather high explanation, coherent with Leenheer (2007), a reason for this could be that customers tend to gather there purchases in the same store in order to receive more points in the bonus system and thereafter receive a check. However, Obrien (1995) questions the efficiency and argues that rewards programs, as the one Coop has, are seen as short-term fads; that are often misunderstood and regularly misapplied.

4.2.5 Own brand and loyalty

H5. *Satisfaction with own brands has a positive affect on store loyalty.* By own brands, we mean “Me too” products that are similar to manufactures’ brands that already exist in the assortment.

<table>
<thead>
<tr>
<th>Hypothesis, Independent variable, Own brand satisfaction</th>
<th>Dependent variable</th>
<th>R^2</th>
<th>Adjusted R^2</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>H5a, Loyalty difference between 2004 and 2007</td>
<td>0.067</td>
<td>0.060</td>
<td>0.003</td>
<td></td>
</tr>
<tr>
<td>H5b, Share of visit</td>
<td>0.116</td>
<td>0.109</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>H5c, Share of purchase</td>
<td>0.157</td>
<td>0.150</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>H5d, Store recommendation</td>
<td>0.339</td>
<td>0.334</td>
<td>0.000</td>
<td></td>
</tr>
</tbody>
</table>

Table 9. Own brand satisfaction

*H5a. Satisfaction with own brands has a positive affect on difference in attitude loyalty between 2004 and 2007.* This positive relation was supported (97% level, sign 0.003) and can explain 6 % of the variation in the loyalty difference between 2004 and 2007.

*H5b. Satisfaction with own brands has a positive affect on behaviour loyalty (share of visit).* This relation was also supported and can explain 10.9 % of the variation in the Share of visit.

*H5c. Satisfaction with own brands has a positive affect on behaviour loyalty (share of purchase).* This relation was also supported and can explain 15 % of the variation in the Share of visit.

*H5d. Satisfaction with own brands has a positive affect on behaviour loyalty (store recommendation).* Finally, this relation was supported and can explain as much as 33.4 % of the variation in the Store recommendation.

Retailers’ motives for marketing own brands are many, McGoldrick (2002) states the four most important reasons; better margins, competitors to manufactures’ brands, improved retailer competitiveness and image/loyalty building. The motives behind own brands need to be
considered as better margins are more important for retailers than building loyalty. This means that retailers produce own brands primarily because of profit reasons and not because of the customer needs. However, Ailawadi (2001) argues that one of the reasons for retailers introducing own labels is to create brand loyalty and compete with the manufacturers’ brands. Another reason is to create store loyalty by building advantages towards retail competitors.

Burt (2000b) considers that the retailers’ own brands are able to increase the customer loyalty and contribute to repeat purchase. The results from this study shows that satisfaction with own brands has a positive affect on both attitude and behavior loyalty, all hypothesis are supported (H5a-d). But satisfaction with own brands can only explain 6% of the variation in the attitude loyalty difference between 2004 and 2007. Burt (2000b) further believe that loyalty can be built through offering products that consumers cannot find in competitors assortment and Ward et al (2002) believes that higher profits can be achieved when retailers have own brands that create higher loyalty than manufactures traditional brands.

KPMG (2002) shows that customers buying mainly own brands are less likely to purchase at different stores, hence, they could not strength that own brands could create loyalty. The results from our study show that satisfaction with own brands can explain 10,9% in the share of visit, 15% in the share of purchase and 33,4% of the variation in store recommendation, which is rather high. Aliawadi et al (2001) found that consumption of own brands is positively associated with loyalty, a reason for this could be because consumers rely on the store and are familiar with their products when they visit the store frequently, i.e. share of visit is high. Aliawadi also found that loyal customers buy more own brands in general than others. The rather high value on share of visit and share on purchase could depend on the condition that consumers are more likely to come in contact with the products, and after trying one category they are more likely to try another category.

4.2.6 Participation in Self-scanning and store loyalty

H6. There is a positive relationship between participation in self-scanning and store loyalty. According to Dabholkar (1996) the service quality determinants are useful both concerning non-users and regular users, however, many of the respondents that have not used the self-scanning did not answer the questions about the self-scanning. This made it interesting to also separate the users from non-users in the evaluation of participating in self-scanning.

<table>
<thead>
<tr>
<th>Hypothesis, variable, Used Self-scanning</th>
<th>Dependent variable</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>H6a, Loyalty difference between 2004 and 2007</td>
<td>0.030</td>
<td>0.022</td>
<td>0.050</td>
<td></td>
</tr>
<tr>
<td>H6b, Share of visit</td>
<td>0.093</td>
<td>0.086</td>
<td>0.001</td>
<td></td>
</tr>
<tr>
<td>H6c, Share of purchase</td>
<td>0.099</td>
<td>0.092</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>H6d, Store recommendation</td>
<td>0.036</td>
<td>0.028</td>
<td>0.034</td>
<td></td>
</tr>
</tbody>
</table>

Table 10. Participation in self-scanning
H6a. There is a positive relationship between participation in self-scanning and difference in attitude loyalty between 2004 and 2007. The positive relation was not supported (94.9 level, sign 0.050) with less possible margin.

H6b. There is a positive relationship between participation in self-scanning and behaviour loyalty (share of visit). The relation was supported and can explain 8.6% of the variation in the share of visit.

H6c. There is a positive relationship between participation in self-scanning and behaviour loyalty (share of purchase). This relation was also supported and can explain 9.2% of the variation in the share of purchase.

H6d. There is a positive relationship between participation in self-scanning and behaviour loyalty (store recommendation). Finally, this relation was supported but can only explain 2.8% of the variation in the store recommendation.

The result that participation in self-scanning has a positive relation in attitude loyalty over time was not supported (H6a). Despite, that the respondents actually used self-scanning over a three year period, the learning affects have not helped affecting the store loyalty. The same result was achieved on question H3a, if satisfaction with self-scanning has a positive affect on attitude loyalty over time. The relation between self-scanning and attitude loyalty from this study calls for more research, as clarified by Dabholkar (1996). The relation between self-scanning and loyalty is rejected with less possible margin 94.99%, the probability level should be 95% to be statistically secure.

When looking more in depth on the different loyalty measurements and separating users from non-users, there are more interesting results to explain. Table 11 below explains the mean difference between users and non-users on behavior and attitude loyalty. The minus means (development is negative) on loyalty difference between 2004 and 2007 explain that on average, user of self-scanning are more likely to be loyal. The means on share of visit explain that on average, users of Self-scanning do 68% of their grocery purchases at the store in question, for non-users it is only 43%. The mean on share of purchase for users is 2.18 and for non-users it is 1.64. This is on a 3-scale, and the higher mean for users indicates that the average respondent spends more of their grocery budget at the store in question than a non-user as argued by Leenheer (2007). Finally, the last mean on store recommendation means that users are more likely to recommend the store then non-users. All these positive affects on behavior loyalty explain to some extent that users of self-scanning are more likely to be loyal in their behavior. This is also confirmed by the supported hypothesis on behavior loyalty (table 10, H6b-d). However, H6a, whether there is a positive relation between participation and attitude loyalty is not supported and the relation calls for more research.

<table>
<thead>
<tr>
<th>Loyalty difference between 2004 and 2007</th>
<th>Used Self-scanning?</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scale from −7 to +7</td>
<td>No</td>
<td>33</td>
<td>-1.13</td>
<td>1.48</td>
</tr>
<tr>
<td>Scale from 0-1</td>
<td>Yes</td>
<td>94</td>
<td>-0.48</td>
<td>1.68</td>
</tr>
<tr>
<td>Share of visit % (2007)</td>
<td>No</td>
<td>32</td>
<td>0.43</td>
<td>0.39</td>
</tr>
<tr>
<td>Share of purchase (2007)</td>
<td>Yes</td>
<td>92</td>
<td>0.68</td>
<td>0.33</td>
</tr>
<tr>
<td>Store recommendation (2007)</td>
<td>No</td>
<td>33</td>
<td>1.64</td>
<td>0.70</td>
</tr>
<tr>
<td>Store recommendation (2007)</td>
<td>Yes</td>
<td>94</td>
<td>2.18</td>
<td>0.73</td>
</tr>
</tbody>
</table>

Table 11. Mean difference between users and non-users of Self-scanning
4.3 Loyalty Scheme

The loyalty scheme below (table 11) summarize all regression analyzes made in order to answer the hypothesis. This gives a comprehensive view on all the values in this study and makes it possible to easier evaluate our findings. The multiple regression scheme (table 12) will show which of the marketing tools that has the largest effect on behavior and attitude loyalty.

Normally it is impossible to say whether the customers have been loyal from the beginning or if the marketing tools have had an impact. In this study the attitude dimension could be measured at two different points with the same sample; at first in 2004 and secondly in 2007. This means that it is possible to say whether or not the marketing tools have enhanced the relationship over time.

<table>
<thead>
<tr>
<th>Loyalty difference between 2004-2007</th>
<th>Share of visit</th>
<th>Share of purchase</th>
<th>Store recommendation</th>
<th>Store satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Store satisfaction</td>
<td>0.038</td>
<td>0.088</td>
<td>0.059</td>
<td>0.483</td>
</tr>
<tr>
<td>Service quality satisfaction</td>
<td>0.075</td>
<td>0.077</td>
<td>0.067</td>
<td>0.458</td>
</tr>
<tr>
<td></td>
<td>0.001</td>
<td>0.001</td>
<td>0.002</td>
<td>0.000</td>
</tr>
<tr>
<td>Self-scanning satisfaction</td>
<td>-0.006</td>
<td>0.022</td>
<td>0.043</td>
<td>0.066</td>
</tr>
<tr>
<td></td>
<td>0.506</td>
<td>0.078</td>
<td>0.022</td>
<td>0.006</td>
</tr>
<tr>
<td>Club card satisfaction</td>
<td>0.073</td>
<td>0.084</td>
<td>0.138</td>
<td>0.143</td>
</tr>
<tr>
<td></td>
<td>0.001</td>
<td>0.001</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>Own brand satisfaction</td>
<td>0.060</td>
<td>0.109</td>
<td>0.150</td>
<td>0.334</td>
</tr>
<tr>
<td></td>
<td>0.03</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>Participation</td>
<td>0.022</td>
<td>0.086</td>
<td>0.092</td>
<td>0.028</td>
</tr>
<tr>
<td>Self-scanning</td>
<td>0.050</td>
<td>0.001</td>
<td>0.000</td>
<td>0.034</td>
</tr>
</tbody>
</table>

Table 11. Conclusions hypothesis. Adj. R2 / Sig. threshold value for 95% probability level.

* Sig 98,3% prob. Level, ** 99% prob.level.

With the loyalty scheme in mind, it is easies to point out which of the marketing tools that affects store loyalty the most. One of the research issues of this study, the relation between the marketing tools and attitude loyalty over time, is seen in the first column in table 11. All marketing tools, except self-scanning were supported and when comparing the adjusted R² values, service quality explain the variation in loyalty best at 7,5%. Table 12 confirm that service quality has the most individual impact (beta 0,21). This means that service quality is the best loyalty tool in this study when looking at loyalty between 2004 and 2007. Club card and own brand are second and third after service quality, which means they also need to be considered as affecting the store loyalty over time.
Table 12. Multiple regression

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>Loyalty difference between 2004-2007</th>
<th>Share of visit</th>
<th>Share of purchase</th>
<th>Store recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-scanning satisfaction</td>
<td>-0.06</td>
<td>0.08</td>
<td>0.06</td>
<td>0.08</td>
</tr>
<tr>
<td>Service quality satisfaction</td>
<td>0.21</td>
<td>0.06</td>
<td>0.02</td>
<td>0.57</td>
</tr>
<tr>
<td>Own brand satisfaction</td>
<td>0.11</td>
<td>0.19</td>
<td>0.29</td>
<td>0.34</td>
</tr>
<tr>
<td>Club card satisfaction</td>
<td>0.13</td>
<td>0.09</td>
<td>0.24</td>
<td>-0.05</td>
</tr>
</tbody>
</table>

When using share of visit as a behavior loyalty measurement the study shows another result. In the second column is own brand, the marketing tool that affects share of visit the most (beta 0.19, table 12). Behind is club cards, though the discussion surrounding club card as a marketing tool is doubtful in this study since 99.2% of the respondents are members and there is not fair distribution between members and non-members. However, the results explain that own brands have the most effect on share of visit and that could be explained that those who visit the store frequently are familiar with the products and after trying one category they are more likely to try another category.

Share of purchase as a behavior loyalty measurement illustrate almost the same values as share of visit, but self-scanning is supported in this third column (table 11). This means that self-scanning positively affects share of purchase. The adjusted R² values are slightly higher but the order remains the same for share of purchase as share of visit. Finally this means that own brands have the biggest impact on share of visit (see table 12), i.e. on how much of the grocery budget the customer spends at the store in question. An interesting aspect to highlight is that the mean of own brand loyalty has decreased on a 7-scale from 4.68 till 4.10 between 2004 and 2007. This means that even though, own brands positively affect behavior loyalty, i.e. share of visit and share of purchase, the attitude loyalty towards own brands has decreased over time. This means own brands affect behavior and attitude loyalty but Coop has failed in their marketing of own brands, as the average loyalty has decreased.

All marketing tools are supported to affect store recommendation, and in some cases the relation is very high. Service quality can explain as much as 45.8% (table 11) of the variation in the store recommendation. Table 12 show that service quality is superior, which means that those who will recommend the store are also satisfied with the service quality. The relation between own brands and store satisfaction is also very high. That means those who are satisfied with the own brand assortment are very likely to recommend the store. As in the share of purchase the relation between Self-scanning and loyalty is rather poor. As discussed the marketing tool need more evaluation.

This study found it important to add store satisfaction as a loyalty measure in table 11, this because the real contribution of store satisfaction will be attained when we put the customer satisfaction in a causal context with the four marketing tools, argued by Sivadas et al., (2000) and Reichheld (2003). At first, it is interesting to know what influences the customer satisfaction, i.e. what causes satisfied and dissatisfied customers. Here the study illustrate in column five that service quality once again has the biggest affect, and can explain 77.8% of the variation in store satisfaction. This is important for companies, who want to affect the level of customer satisfaction when possible. At second, it is interesting to know what effects on the company the customer satisfaction are able to influence. The marketing tools have the
most positive affect on store recommendation, where as much as 51,4% of the variation can be explained, see table 13. If the customer satisfaction does not influence any visible effects, then it is not interesting for companies to struggle towards customer satisfaction (Söderlund, 1997).

When speaking about store satisfaction, Bitner (2001) and Meuter (2000) propose that the use of TBSS include several reasons that could lead to higher store satisfaction. According to this study there exist a relationship between self-scanning and store satisfaction. The respondents that were satisfied with the self-scanning system also seemed to show a satisfaction with the total store. But only 4,9% of the variation in total store satisfaction could be explained by the self-scanning system (see table 11).

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Adjusted R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loyalty difference between 2004 and 2007</td>
<td>0,070</td>
</tr>
<tr>
<td>Share of visit</td>
<td>0,058</td>
</tr>
<tr>
<td>Share of purchase</td>
<td>0,192</td>
</tr>
<tr>
<td>Store recommendation</td>
<td>0,514</td>
</tr>
<tr>
<td>Predictors: (Constant), Satisfaction with self-scanning/ service quality/ own brands/ club card</td>
<td></td>
</tr>
</tbody>
</table>

Table 13 Multiple regression

Finally, the four marketing tools have the highest affect on behavior loyalty, i.e. share of visit, share of purchase, store recommendation (table 13), in the store investigated than attitude loyal, which is concurrent with findings by Liljander and Strandvik (1995). The respondents that answered that they are satisfied with the marketing tools also answered that they would recommend the store. The highest beta value in the study explain that there is a very high positive relation between satisfaction with service quality and store recommendation (table 12). This means that even in the behavioral loyalty, satisfaction with the service in store is the main driving force.
5 Conclusions and implications

This study is a longitudinal research, based on a prior study done in 2004, literature review and a quantitative field study. The research process was based on several stages. First, the previous study, literature on research in loyalty and in four marketing tools: service quality, self-scanning, loyalty program and own brands from various theoretical areas were reviewed, that resulted in a combined conceptual framework which was developed to illustrate the different marketing tools and the difference in attitude and behaviour loyalty. Second, based on what was learnt from existing research and our issue interest, we developed 24 hypotheses. Third, testing and validation of the hypothesis were performed through a quantitative field study.

5.1 Conclusions

Retailers positioning is a must if companies want to last in the highly competitive grocery retailing market. This stresses that retailers are urged to find more innovative ways to provide added value for their customers, to gain a competitive advantage (McGoldrick, 2002). Past research in this theoretical field state that retailers using service quality, self-scanning, club card and own brands can gain increased market share, customer retention, customer satisfaction and positive word-of-mouth and loyalty (Anderson & Sullivan, 1993; Bolton & Drew, 1991; Fornell, 1992; Mark et al, 2005). Previous research has not been able to evaluate these marketing tools together, but terminates that maintaining both attitude and behaviour loyalty is essentially necessary in order to understand how consumers evaluate different retailers. Neither a longitudinal study of attitude loyalty has been examined in previous research. The marketing tools investigated in this study with its associated benefits are considered to create an unequal amount of attitude and behaviour loyalty. Further, loyal and disloyal customers are attracted by different advantages, therefore retailers need to segment loyal customers, to be able to target them successfully.

The findings from this study show that attitude loyalty between 2004 and 2007 decreased (from 4.82 in 2004 to 4.18 in 2007 on a on a scale from 1-7). This means that the marketing tools in this study failed on enhance the customer loyalty between 2004 and 2007, however, the authors are aware that there are other marketing tools that also affect customer loyalty. Both Reynolds et al (1974-75) and Söderlund (2001) states that loyalty focus on the relationship over time. It is therefore not correct to talk about loyalty “now”, i.e. demarcated in a time period. This finding is remarkable and shows the fact that there was a negative development on attitude loyalty, on the store in question. This study to some extent questions the reliability on previous research regarding loyalty. Söderlund (1997) say it is more interesting to compare different loyalty levels between themselves others than evaluating the loyalty level from one simple research. Despite this, there are lack of longitudinal studies within the area. An explanation to the fact that attitude loyalty has decreased, could be the increased competition among retailers, facing new players and retailers’ introduction of own brands and that more retailers are working with these marketing tools. Another reason could be that the first questionnaire was done in the store in question and the second questionnaire were sent out by post mail, maybe the respondents are more nice when they answer in store.
However, even though the attitude loyalty between 2004 and 2007 decreased, this study examine which one of the marketing tools that has the most affect on attitude loyalty between the years. Satisfaction with service quality has the most positive relation. Grönroos (1982), Taylor & Baker (1994) and Bitner (1990) agrees and argues, that service quality has the superior affect on loyalty. This means that service quality is the main driver for loyalty in this study, however, satisfaction with service quality, has more affect on behaviour than attitude loyalty. Service quality has the highest impact on store recommendation and store satisfaction of all the marketing tools. Dabholkar (1993) agrees and argues whether satisfaction and service quality are in essence the same construct.

Club card has second strongest affect on attitude loyalty between 2004 and 2007, but the discussing regarding the high member rate at 99,2% in this study, makes this marketing tool doubtful, as there are not many non-members in the population studied.

Own brands has the third strongest affect on attitude loyalty between 2004 and 2007. However, it is interesting that own brands has the most positive affect of all marketing tools on share of visit and share of purchase. Another interesting aspect is that own brands has the lowest mean concerning satisfaction in relation to all marketing tools, meaning that the respondents that buy own brands are less satisfied with the marketing tool in general.

Regarding self-scanning as an effective marketing tool, the findings from this study shows an doubtful answer. Results explain that the relation between participation in self-scanning and attitude loyalty between 2004 and 2007 calls for more research, in order to examine how interactions with self-scanning influence customer evaluations and behaviour, coherent with Dabholkar (1996) and Meuter (2000). The relation is with less possible margin not statistically secure. The interesting finding here, is that the respondents that use the self-scanning are very satisfied in general with the marketing tool, even though, the positive affect between self-scanning and attitude loyalty is somewhere between supported and rejected.

5.2 Managerial implications

The unquestionable fact that the grocery retail market in Sweden is marked by sharp competition in terms of new entrants, own brands, quality and the shopping experience. A few reasons for the increased competition are the retailers introduction of own brands and groceries are facing new players, both local and international chains. This makes it interesting for retailers, in the grocery market, to differentiate themselves, attract and retain loyal customers thus gaining a sustainable competitive advantage, and hopefully gain the highest market share through the use of the most effective marketing tools.

Almost everybody in this research, have loyalty cards. Not everybody have used self-scanning allowing the store in this study, implying a large segment for self-scanning implementation. However, more than 30% spend more then 2/3 on their grocery budget at the store in question, and approximately 40% of the respondents visit the store in question in more then 2/3 of the cases they go shopping. Almost 37% see Coop as their prime store and visit Coop to 100% when shopping for groceries. This implying a broad range of profit on which the supermarket can take advantage of, which may be possible through an successful use of the marketing tools. One must also be aware that there are other marketing tools in grocery retailing that might affect the high figures.
However, for long-term relationships between the retailer and its customers, attitude loyalty might become a more important measure (Noordhoff et al, 2004). The finding that behaviour loyalty was more recognized than attitude loyalty show that the service quality is in fact attracting customers towards being behaviour loyal. The retailer will not find any differences in terms of profits between loyal customers and behaviour loyal customers. However, this might be unwanted, when competitors lowers barriers whom customers are attitude loyal to. Mainly in sharp competition industries attitude or latent loyalty customers are favoured to spurious loyalty customers. Overall, the marketing tools positive relation on behaviour loyalty is higher than on attitude loyalty. Satisfaction with service quality has the highest positive relation with store recommendation. This means that those respondents that are satisfied with the service quality also seem to recommend the store.

Swedish grocery retailers are urged to launch new products under joint brands. Own brands do not detract from the choice of branded goods. It is the customers who choose, and it is retailers’ task to offer them a wide, varied choice in terms of products and price. The development of own brands has a high priority for Coop. The benefits are clear for both the business and the customer, meaning cheaper goods with larger margins. With 11 million customers in the Nordic region, Coop Norden is strong when it comes to negotiating directly with producers of quality products. However, when analyzing share of visit and share of purchase own brands has the biggest influence. This could be explained that those who visit the store frequent and spend more of their budgets are more likely to come in contact with the products, and are more familiar with the products.

5.3 Future research and limitations

As authors, we are well aware of the existence of several other marketing tools that affect satisfaction and loyalty. But our focus has only been on the four service quality, self-scanning, club card and own brand. According to Liljander (1997) emotions could play an important part in determining satisfaction with a service. Kotler (1973), Baker (1994) and Bitner (1992) present the store environment as a critical factor that drives and influence customer satisfaction with the store.

An issue in retailing that is the effects of loyalty cards might manifest themselves on the chain, rather than individual store level (Mägi, 2003). The effects on chain-level will not be examined in this study, only the individual store level will be high lightened.

Research has shown that the effects of satisfaction on behavioural outcomes are moderated by individual difference variables such as age, income, education and gender (Mägi, 2003; Reynolds et al, 1974-1975; McGoldrick & Andre, 1997; Anselmsson, 2001). However this study does not focus on these aspects, despite the fact that it is intuitive that not all consumers react in the same way to being more or less satisfied. A qualitative study might give more answers to the due if individual difference variables have any impact on the results.

In this study women are strongly overrepresented. But it is likely that women are overrepresented as store visitors. The age varied between 22-88 years with a mean at 59 years. Concerning gender aspects, difference in mean between men and women were found to be very small on how they perceive Own brands and Self-scanning. However, the differences are
larger at Service quality, Club Card and Store satisfaction, even though they are rather small. Ideally it would have been desirable to have a total diversity of demographic- and gender variables among the respondents. Especially the age variable, which shows a mean of 59 years, would have been interesting to examine whether or not it affects the studies generazability. A study that focuses more upon a stratified sample concerning both age and gender would be preferable.

This study’s sample only consists of customers at Coop Forum-Stadium, whom might not be representative for the whole society. It would have been interesting to see if the same results would have been reached in an ICA store, the biggest grocery chain in Sweden. If so the generazibility would be high since the two could be considered to represent the Swedish grocery industry in this kind of concept stores.

This study shows that almost every respondent has the Coop member card - MedMera. But, it is doubtful to draw conclusions between the high sum of club-card members and store loyalty and say that a club member is a loyal customer, even though the results do show that there exists a positive relationship between club card and all loyalty measure used. Butscher (2002) says that almost every adult has a club card and a study by Mägi (2003) shows that many members are registered in more than one program. Perhaps a future research that would examine two groups that consist of club card members and non-members would show whether club card members actually are more loyal than non-members.

The results shows that the highest total mean on satisfaction is the marketing tool self-scanning at 5.86. But even though the customers seem to be satisfied with the self-scanning system the positive relation between self-scanning and attitude loyalty was not supported. Concerning the differences in loyalty from 2004 to 2007 the self-scanning has not enhanced the relationship. Both Dabholkar (1996) and Meuter (2000) agree that the relation is not clear and the relation between self-scanning and attitude loyalty call for more research.

What we find lacking within the discourse concerning loyalty programs is some actual research done on valuating the specific value of a loyalty program. Much research has been done on researching whether or not loyalty programs work from a theoretical point of view. But regarding clearly financial papers which investigate the actual financial benefits of loyalty programs we find little literature. In spite of Grahame R. Dowling’s work from 1997 that rather clearly shows in which instances loyalty programs pay or do not pay off, we believe that actual financial research should be done to validate if these respective loyalty programs are beneficial in a long-term perspective. But financial profit is not the only definition for success. Other factors are strategic and qualitative such as growth, long-term development, the building of network plus future relationships. We are constantly measuring the return on financial capital, but is it possible to measure the return of relations, networks and interactions and is it possible to equal loyalty with profitability? Gummesson (2002) argues it is important to build loyal customer but it should not become an end in itself. As shown in the study there are several reasons for companies to create and maintain loyal customers. Nevertheless, we suggest a study that by the utilization of quantitative data studies investigates whether or not groceries actually have had increased revenue due to the fact that they have employed loyalty programs.
References

Articles


Anselmsson & Johansson, (2001), ”Servicekvalitet som konkurrensmedel i dagligvaruhandeln. Ett instrument för att mäta kundupplevd servicekvalitet i dagligvaruhandeln”, Rapport från Lund International Food Studies

Anselmsson & Johansson, (2005), ”Tredje generationen av handelns egna märkesvaror- Uppfattad kvalitet, prisänslighet, köpeterande och effekter på butiksimage och butikslojalitet”, Rapport från Lund International Food Studies, November 2005


**Books**

Andersson, Sten, (1982), *Postivism kontra hermeneutik*, Graphic Systems AB, Göteborg


Naresh K, Malhotra & David F. Birks, (2003), ”Marketing Research: an applied approach” Pearson Education Limited, Essex


Söderlund, Magnus, (1997), ”Den nöjda kunden”, Lieber AB. Upplaga 1:1

Internet sources

www.coop.se
www.ica.se

Thesis
Michaela Navratil & Henrik Paulsson. (2004), "Teknologibaserad självservice och kundupplevd servicekvalitet". Lund University
Appendix 1 - Questionnaire

This is an attitude study, where experience of the Shop Express is not necessary. We would like you to fill out as many questions as possible. The scale is from 1-7.

1. Have you used Shop Express? Yes / No
2. Using the Shop express is … (slow / fast)
3. At the counter, it would be a short / long time to checkout…(short / long)
4. Using Shop Express is…(Complicated / not complicated)
5. Using the Shop Express is…(Confusing / not confusing)
6. Using Shop Express requires…(little/a lot of work)
7. Using Shop Express takes…(a lot of effort / little effort)
8. Using Shop Express means I would be charged… (the wrong price / the right price) for items bought.
9. Shop Express (does not work well/ works well)
10. Shop Express (does not / does) result in errors
11. Shop Express is…(not reliable / reliable)
12. Using Shop Express will (not be/ be) enjoyable
13. Using Shop Express (is not / is) fun
14. Using Shop Express (is not/ is) entertaining
15. Using Shop Express will (not be / be) interesting
16. How much control do you have over what is registered when you use Shop express (little control / much control)
17. Using Shop Express gives me control over my purchase…(disagree / agree)
18. Using Shop Express gives me control over my spending…(disagree / agree)
19. What level of service quality do you perceive from using Shop Express? (Low / High service quality)
20. Using Shop Express will provide (poor/excellent) service

21. The Shop Express provides a high level of service quality (strongly disagree/strongly agree)

*Here are three questions only for the ones that have tried Shop Express, otherwise go to question number xx*

22. How satisfied are you with Shop Express? (very dissatisfied/very satisfied)

23. How well does Shop Express match your expectations (not at all/completely)

24. Imagine a perfect self-service option. How close to your ideal is Shop Express? (not at all close/very close)

25. Do you think you will use Shop Express within the next 12 months? (not at all likely/very likely)

26. Are you likely to use Shop Express within the next 12 months? (not at all likely/very likely)

*Here are some questions about Coop Forum the store*

27. Overall, this store deliver excellent service quality…. (strongly disagree/strongly agree)

28. This store has a high standard of service…. (strongly disagree/strongly agree)

29. This store provides superior service in every way … (strongly disagree/strongly agree)

30. How satisfied are you with the overall service of the store? (very dissatisfied/very satisfied)

31. How satisfied are you with the this store? (very dissatisfied/very satisfied)

32. How well does this store match your expectations (not at all/completely)

33. Imagine a perfect store. How close to your ideal is this store? (not at all close/very close)

*Here are some questions about the store brands (e.g. Coop extra, Signum, Änglamark)*

34. I often buy store brands. (strongly disagree/strongly agree)

35. I look for store brands when I go shopping. (strongly disagree/strongly agree)

36. My shopping cart contains store brands for several products. (strongly disagree/strongly agree)
37. How satisfied are you with the store brands of this retail chain? (very dissatisfied/ very satisfied)

Here are some questions about your purchasing habits at Coop Forum

38. I prefer to always shop at this grocery store.

39. I am willing to make an effort to shop at this grocery store.

40. Usually, it is important to me to shop at this store.

41. How likely is it that you would recommend this store to friends and family? (Not at all likely/ extremely likely)

42. How often do you shop for groceries every week? __________ per week

43. How many of these are at Coop Stadion? _________

44. How big a share of your grocery budget do you spend at Coop Stadion? (less than one-third, between one-third and two-thirds, more than two-thirds)

45. Has your visits to Coop increased during the latest three years?

46. Has your purchase at Coop increased during the latest three years?

47. Do you have a membership card for this store? (Yes / No)

48. How satisfied are you with your membership card? (very dissatisfied/ very satisfied)

Finally, we would like to ask a few questions about your self

49. Gender (Male/ Female )

50. Age ___

Thank You!
Appendix 2 - Hypothesis

H1. There is a positive relation between store satisfaction and store loyalty

H1a. There is a positive relation between store satisfaction and difference in attitude loyalty between 2004 and 2007

<table>
<thead>
<tr>
<th>N</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
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<td>0,038</td>
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</tr>
<tr>
<td>Total</td>
<td>126</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Predictors: (Constant), How satisfied are you with this store? (2007)
Dependent Variable: Loyalty difference between 2004 and 2007.

H1b. There is a positive relation between store satisfaction and behaviour loyalty (share of visit)

<table>
<thead>
<tr>
<th>N</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression 1</td>
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<td>0,088</td>
<td>12,90</td>
<td>0,000</td>
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<tr>
<td>Residual</td>
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<tr>
<td>Total</td>
<td>123</td>
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</tr>
</tbody>
</table>

Predictors: (Constant), How satisfied are you with this store? (2007)
Dependent Variable: Share of visit

H1c. There is a positive relation between store satisfaction and behaviour loyalty (share of purchase)

<table>
<thead>
<tr>
<th>N</th>
<th>R²</th>
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<th>F</th>
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<tr>
<td>Regression 1</td>
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<td>0,059</td>
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<tr>
<td>Total</td>
<td>126</td>
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</tbody>
</table>

Predictors: (Constant), How satisfied are you with this store? (2007)
Dependent Variable: Share of purchase (2007)

H1d. There is a positive relation between store satisfaction and behaviour loyalty (store recommendation)

<table>
<thead>
<tr>
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</tbody>
</table>

Predictors: (Constant), How satisfied are you with this store? (2007)
Dependent Variable: Store recommendation (2007)
H2. Satisfaction with service quality has a positive affect on store loyalty

H2a. Satisfaction with service quality has a positive affect on difference in attitude loyalty between 2004 and 2007

<table>
<thead>
<tr>
<th>N</th>
<th>R²</th>
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<tr>
<td>Total</td>
<td>126</td>
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</tbody>
</table>

Predictors: (Constant), How satisfied are you with Coops total service? (2007)
Dependent Variable: Loyalty difference between 2004 and 2007

H2b. Satisfaction with service quality has a positive affect on behaviour loyalty (share of visit)

<table>
<thead>
<tr>
<th>N</th>
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<th>F</th>
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</table>

Predictors: (Constant), How satisfied are you with Coops total service? (2007)
Dependent Variable: Share of visit

H2c. Satisfaction with service quality has a positive affect on behaviour loyalty (share of purchase)

<table>
<thead>
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<th>R²</th>
<th>Adjusted R²</th>
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<td>Total</td>
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</tbody>
</table>

Predictors: (Constant), How satisfied are you with Coops total service? (2007)
Dependent Variable: Share of purchase(2007)

H2d. Satisfaction with service quality has a positive affect on behaviour loyalty (store recommendation)

<table>
<thead>
<tr>
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</tbody>
</table>

Predictors: (Constant), How satisfied are you with Coops total service? (2007)
Dependent Variable: Store recommendation (2007)

H3. Satisfaction with Self-scanning has a positive affect on store loyalty
H3a. Satisfaction with Self-scanning has a positive affect on difference in attitude loyalty between 2004 and 2007

<table>
<thead>
<tr>
<th></th>
<th>N</th>
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<tr>
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Predictors: (Constant), How satisfied are you with Shop Express? (2007)
Dependent Variable: Loyalty difference between 2004 and 2007

H3b. Satisfaction with Self-scanning has a positive affect on behaviour loyalty (share of visit)

<table>
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Predictors: (Constant), How satisfied are you with Shop Express? (2007)
Dependent Variable: Share of visit

H3c. Satisfaction with Self-scanning has a positive affect on behaviour loyalty (share of purchase)

<table>
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<td>Total</td>
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Predictors: (Constant), How satisfied are you with Shop Express? (2007)
Dependent Variable: Share of purchase (2007)

H3d. Satisfaction with Self-scanning has a positive affect on behaviour loyalty (store recommendation)

<table>
<thead>
<tr>
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<th>N</th>
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<th>Adjusted $R^2$</th>
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</tr>
</tbody>
</table>

Predictors: (Constant), How satisfied are you with Shop Express? (2007)
Dependent Variable: Store recommendation (2007)

H4. Satisfaction with Club Card has a positive affect on store loyalty

65
H4a. Satisfaction with Club Card has a positive affect on difference in attitude loyalty between 2004 and 2007

<table>
<thead>
<tr>
<th>N</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>1</td>
<td>0,080</td>
<td>0,073</td>
<td>11,03</td>
</tr>
<tr>
<td>Residual</td>
<td>126</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>127</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Predictors: (Constant), How satisfied are you with Coop Club Card?  
Dependent Variable: Loyalty difference between 2004 and 2007

H4b. Satisfaction with Club Card has a positive affect on behaviour loyalty (share of visit)

<table>
<thead>
<tr>
<th>N</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>1</td>
<td>0,092</td>
<td>0,084</td>
<td>12,39</td>
</tr>
<tr>
<td>Residual</td>
<td>123</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>124</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Predictors: (Constant), How satisfied are you with Coop Club Card?  
Dependent Variable: Share of visit

H4c. Satisfaction with Club Card has a positive affect on behaviour loyalty (share of purchase)

<table>
<thead>
<tr>
<th>N</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>1</td>
<td>0,145</td>
<td>0,138</td>
<td>21,28</td>
</tr>
<tr>
<td>Residual</td>
<td>126</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>127</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Predictors: (Constant), How satisfied are you with Coop Club Card?  
Dependent Variable: Share of purchase (2007)

H4d. Satisfaction with Club Card has a positive affect on behaviour loyalty (store recommendation)

<table>
<thead>
<tr>
<th>N</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>1</td>
<td>0,150</td>
<td>0,143</td>
<td>22,27</td>
</tr>
<tr>
<td>Residual</td>
<td>126</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>127</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Predictors: (Constant), How satisfied are you with Coop Club Card?  
Dependent Variable: Store recommendation (2007)

H5. Satisfaction with own brands has a positive affect on store loyalty
H5a. Satisfaction with own brands has a positive affect on difference in attitude loyalty between 2004 and 2007

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>1</td>
<td>0.067</td>
<td>0.060</td>
<td>9.08</td>
<td>0.003</td>
</tr>
<tr>
<td>Residual</td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>127</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Predictors: (Constant), How satisfied are you with Coop Own brands?
Dependent Variable: Loyalty difference between 2004 and 2007

H5b. Satisfaction with own brands has a positive affect on behaviour loyalty (share of visit)

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>1</td>
<td>0.116</td>
<td>0.109</td>
<td>16.10</td>
<td>0.000</td>
</tr>
<tr>
<td>Residual</td>
<td>123</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>124</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Predictors: (Constant), How satisfied are you with Coop Own brands?
Dependent Variable: Share of visit

H5c. Satisfaction with own brands has a positive affect on behaviour loyalty (share of purchase)

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>1</td>
<td>0.157</td>
<td>0.150</td>
<td>23.47</td>
<td>0.000</td>
</tr>
<tr>
<td>Residual</td>
<td>126</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Total</td>
<td>127</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Predictors: (Constant), How satisfied are you with Coop Own brands?
Dependent Variable: Share of purchase (2007)

H5d. Satisfaction with own brands has a positive affect on behaviour loyalty (store recommendation)

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>1</td>
<td>0.339</td>
<td>0.334</td>
<td>64.60</td>
<td>0.000</td>
</tr>
<tr>
<td>Residual</td>
<td>126</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>127</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Predictors: (Constant), How satisfied are you with Coop Own brands?
Dependent Variable: Store recommendation (2007)
H6. There is a positive relationship between participation in self-scanning and store loyalty

H6a. There is a positive relationship between participation in self-scanning and difference in attitude loyalty between 2004 and 2007

<table>
<thead>
<tr>
<th>N</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression 1</td>
<td>0.030</td>
<td>0.022</td>
<td>3.90</td>
<td>0.050</td>
</tr>
<tr>
<td>Residual 125</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total 126</td>
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</tr>
</tbody>
</table>

Predictors: (Constant), Have you used Shop Express? (2007)
Dependent Variable: Loyalty difference between 2004 and 2007.

H6b. There is a positive relationship between participation in self-scanning and behaviour loyalty (share of visit)

<table>
<thead>
<tr>
<th>N</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression 1</td>
<td>0.093</td>
<td>0.086</td>
<td>12.54</td>
<td>0.001</td>
</tr>
<tr>
<td>Residual 122</td>
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</tr>
<tr>
<td>Total 123</td>
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<td></td>
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<td></td>
</tr>
</tbody>
</table>

Predictors: (Constant), Have you used Shop Express? (2007)
Dependent Variable: Share of visit

H6c. There is a positive relationship between participation in self-scanning and behaviour loyalty (share of purchase)

<table>
<thead>
<tr>
<th>N</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression 1</td>
<td>0.099</td>
<td>0.092</td>
<td>13.81</td>
<td>0.000</td>
</tr>
<tr>
<td>Residual 125</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Total 126</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Predictors: (Constant), Have you used Shop Express? (2007)
Dependent Variable: Share of purchase (2007)

H6d. There is a positive relationship between participation in self-scanning and behaviour loyalty (store recommendation)

<table>
<thead>
<tr>
<th>N</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression 1</td>
<td>0.036</td>
<td>0.028</td>
<td>4.61</td>
<td>0.034</td>
</tr>
<tr>
<td>Residual 125</td>
<td></td>
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</tr>
<tr>
<td>Total 126</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Predictors: (Constant), Have you used Shop Express? (2007)
Dependent Variable: Store recommendation (2007)