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**CUSTOMERS' WILLINGNESS TO SHARE PERSONAL  
INFORMATION WITH FIRMS AND ITS  
RELATIONSHIP WITH CUSTOMER LOYALTY**

Master's Thesis, Marketing

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## ABSTRACT

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<p>Abstract</p> <p>Information on customers plays an important role in customer relationship management. With customer data companies can identify customers, understand their needs and hence, personalize products and services. New technological advancements have enabled companies to collect data more efficiently and have therefore resulted in broader use of information. However, customers must be willing to provide information needed in CRM. If trust has been built, they might provide information and engage in mutual relationship. Even though customer's willingness to provide information is an important issue for companies, little research has been devoted to this phenomenon.</p> <p>The objective of this research is to gain more insight of customer's willingness to share information by inspecting how the willingness affects the commonly used loyalty metrics (share of wallet, recommend intention, repurchase intention) as well as customer's RFM value (recency, frequency and monetary value of purchases). This study was conducted in cooperation with Osuuskauppa PeeÄssä and Kuopio's Prisma grocery store. A quantitative research method was used by conducting the electronic survey in Kuopio's Prisma's Facebook -page as well as Osuuskauppa PeeÄssä's webpage. The data of 429 responses was analyzed by using SPSS statistics and PLS 3.0 software.</p> <p>The results of this study indicate that customer's willingness to provide information has a significant and positive effect on commonly used loyalty metrics; customer's repurchase intention, recommend intention and share of wallet. In addition SOW positively affects customer's repurchase and recommend intention and customer's RFM value. Also recommend intention has a positive effect on customer's RFM value. Finally, customer's willingness to share information positively affects RFM value indirectly via above mentioned loyalty metrics. The findings suggest that marketers should increase customer's willingness to share information as it, in fact, positively affects the level of customer's loyalty and value. Information should be used in a more customer centric way where additional value is created to the customer.</p>	
Keywords Willingness to share information, Repurchase intention, Recommend intention, Share of Wallet, Loyalty metrics, RFM value	
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# 1 INTRODUCTION

Customers are company's source of revenue and usually the most valuable financial asset. To be able to remain competitive, companies must systematically recognize, measure and manage relationships individually with each of their customers. Consequently, the interest in marketing has shifted from product and company centric to customer relationship management where the objective is to create a two-way relationship between the company and the customer. For many years, companies attempted to gain competitive advantage from brands. But nowadays, in the interactive era, companies are considering how to achieve competitive advantage from customer information and interaction. New technological advancements have enabled companies to collect and maintain extensive customer databases and consequently to manage customer relationships more efficiently. (Peppers & Rogers 2011, 4; 112.)

The broader use of data has been the result of technological advancement, fragmented consumer markets, shrinking mass media audiences and demand for greater economic efficiency (Phelps, Nowak & Ferrel 2004). Up-to-date information enables companies to understand more precisely customer's needs and preferences and helps them to make strategically successful marketing decisions (Frow, Payne, Wilkinson & Young 2011; Schoenbachler & Gordon 2002). Consumer information can depict customer's habits and consequently, help marketers to segment consumers, to use highly targeted one-to-one marketing strategies and to establish a loyalty program based on individual customer purchases (Phelps, Souza, Nowak 2001). All in all, information gives a company the capability to differentiate its customers from another and to improve company's productivity and yield return for many years. Accordingly, the company should consider customer information as an economic asset and a competitive advantage. (Peppers & Rogers 2011, 75.)

Customer data can be generated in various ways for example via credit card purchases, loyalty cards, and surveys. When computers and web links the data together, a picture of individual customer can be created. (Cronin 2000.) Information collection is especially common in the online context, where customer data can be collected without any invasive technologies for example via cookies or when a customer registers to a page. However, the collection of customer records is not enough. To be able to nurture and maintain customer relationships it is crucial to manage and use customer information in a way that benefits both the company as well as customer and won't harm individual customer's privacy. (Chelappa & Sin 2005.)

Data collected from a web page enables companies to target marketing communication activities and personalize their services. However, it has been found that the biggest barrier to purchase online was customers' concerns over the privacy of information. Hoffman, Novak and Peralta (1999) found that 87% of Internet users believe they should have complete control over demographic

information and even 63% of consumers declined to provide personal information to Internet sites. Sheehan and Hoy found that consumers who are concerned over their privacy online may even provide false information and as privacy concern increase customers reported that they are less likely to even register web sites that requests information (Sheehan & Hoy 1999). Consequently, several research has found that there is a tension between online marketing practices and customers' privacy concerns and hence, willingness to share personal and financial information. There has been media fuzz concerning the information privacy that has increased customer's concern even more. It has even been claimed that in future for example insurance companies could access grocery store databases to find out customer's dietary habits (YLE 2012).

In the academic literature several researches have examined the reasons for customers' concern over privacy. So the factors that underlie privacy concerns are to be known. Previous studies have concentrated on issues related to the factors that affect the level of privacy concern (Phelps et al. 2000; Ward, Bridges & Chitty 2005; Sheehan 1999.), consumer attitudes about privacy (Campbell 1997; Goodwin 1991.), control over information given to a firm (Culnan 2000; Davis 1997), and perceived risk (Nepomuceno, Laroche & Richard 2013). However, both practical experience and academic studies have shown that consumers are not reluctant to share their information when customers trust the company and there is a clear value proposition for collecting information (Peppers & Rogers 2011, 115).

Several studies have shown that there is a positive link between consumer trust and willingness to provide information to firms (Culnan & Armstrong 1999; Milne & Boza 1999; Schoenbachler & Gordon 2002; Hoffman et al. 1999). Improving trust may be even more effective than reducing customer privacy concerns. Without trust customers will not share personal information which in turn makes it more difficult for company to serve customers individually. Several researchers have suggested that customer relationship management enables marketers to reduce customer privacy issues and increase their willingness to share personal information. Fair information practices help marketers to strengthen the consumer relationship which in turn will make consumers more willing to share their information. (Milne & Boza 1999.)

Customer loyalty can be explained in a significant degree by customer trust. It has been argued that those customers that don't trust a company are unlikely to be loyal. (Ball et al. 2004; Garbarino & Johnson 1999.) Even though customer's trust and willingness to provide information are found to have a positive relationship, relatively little academic research has been devoted to examine the relationship between customers' willingness to share information and customer loyalty. Even though loyalty has become a crucial construct in marketing, not enough is known how customers' willingness to provide information affects customer loyalty. Therefore this study examines how customer loyalty could be improved by increasing customers' willingness to share information. In addition, this research examines if customer's willingness



to provide information has a relationship with the recency, frequency and monetary value (the so called RFM value) of customer's purchases. With these three measures customers can be categorized based on their value. The higher the RFM value, the valuable the customer is to the company (Gupta, Hanssens, Hardie, Kahn, Kumar, Lin & Sriram 2006).

## 1.1 Research objectives

The purpose of this study is to test a model that considers how customer's willingness to share information with firms affects customer loyalty. More specifically the goal is to examine and gain theoretical as well as managerial insight on how customer's willingness to share information affects commonly used customer loyalty metrics like share of wallet, repurchase intention and recommend intention. In addition this research investigates whether these loyalty metrics and customer's willingness to share information have a relationship with the recency, frequency and monetary value of customer's purchases (RFM value). Thus the following research questions are applied. Hypotheses that will be tested are discussed in more detail in chapter 2.5.

Research questions:

*-Does customer's willingness to share information have a positive effect on commonly used loyalty metrics (share of wallet, repurchase intention and recommend intention)?*

*-Does customer's willingness to share information have a positive effect on customer's RFM value?*

*-Which of the commonly used loyalty metrics (share of wallet, repurchase intention, recommend intention) best explain customer's RFM value?*

By answering these research questions the study seeks to provide an insight of customer data gathering's impact on customer's loyalty and value. This research takes place in Finnish domestic grocery industry and is conducted in cooperation with PeeÄssä and Kuopio's Prisma grocery store which is the largest domestic grocery chains in Finland. Consequently, the study also provides fruitful information to Prisma of its customers and their purchase behavior.

## 1.2 Prisma's and S-Group's information policy

Prisma is the hypermarket of the Finnish S-Group. S-Group is a Finnish retailing cooperative organization which consists of 22 regional cooperatives operating all around Finland. PeeÄssä is a regional cooperative in eastern Finland. This research is conducted in cooperation with Kuopio's Prisma which is a part of regional cooperative, PeeÄssä.

Prisma features a selection of food and consumer goods but also products for the home along with leisure and clothing products. In this research only the food and consumer goods selection is taken into account. All together there are 64 Prisma stores in Finland. In addition to Prisma, S-group operates in three distinct chains of supermarkets (Alepa, S-market and Sale), department stores (Sokos, Sokos-Emotion, Kodin Terra), service stations (ABC), restaurants (Rosso, Amarillo etc) and hotel chains (Sokos Hotels).

S-group is collecting information from its customers when customers become a co-op member of S-group. For example, customer's name, personal identification number, gender, address and children's ages are collected to the database when a customer becomes a co-op member. In August 2014 S-group started to gather more accurate information from its customers who use S-card in the time of transaction. The purchase information is also linked to customers demographic and lifestyle information which makes it easier for S-group to target its marketing actions. (YLE 2014.)

The information of customer's purchases is examined in the product as well as in the product category level. Product level information is collected in consumer durables stores Sokos and Emotion. Instead S-market, Prisma, Kodin Terra and ABC are gathering category level information on purchases. Sokos Hotels are gathering most generic information and observing only total sum of customer's purchases. Customers can object from using information to target marketing and offerings but they can't completely refuse from information collection during transactions if they want to use S-Etukortti bonus card. (YLE 2014).

S-Group's customers are more willing to provide personal information when they receive advantages from information sharing. Customers understand the cost of printed marketing material to a firm and want therefore these materials to be personalized and targeted based on their real needs and preferences. Most of the customers that own a loyalty card feel that the benefits of the information collection outweigh the negative issues. However, as some customers are still concerned about the information collection, companies should be more open with the data collection and use the information to serve customers better. (Ritvanen 2015.)

### 1.3 Research structure

Figure 1 presents the structure of the study. This research consists of five chapters. After the introduction, the literature review is presented and hypotheses developed, after which the methodology is described. Further, the results of the research are presented. The research concludes with a discussion session.

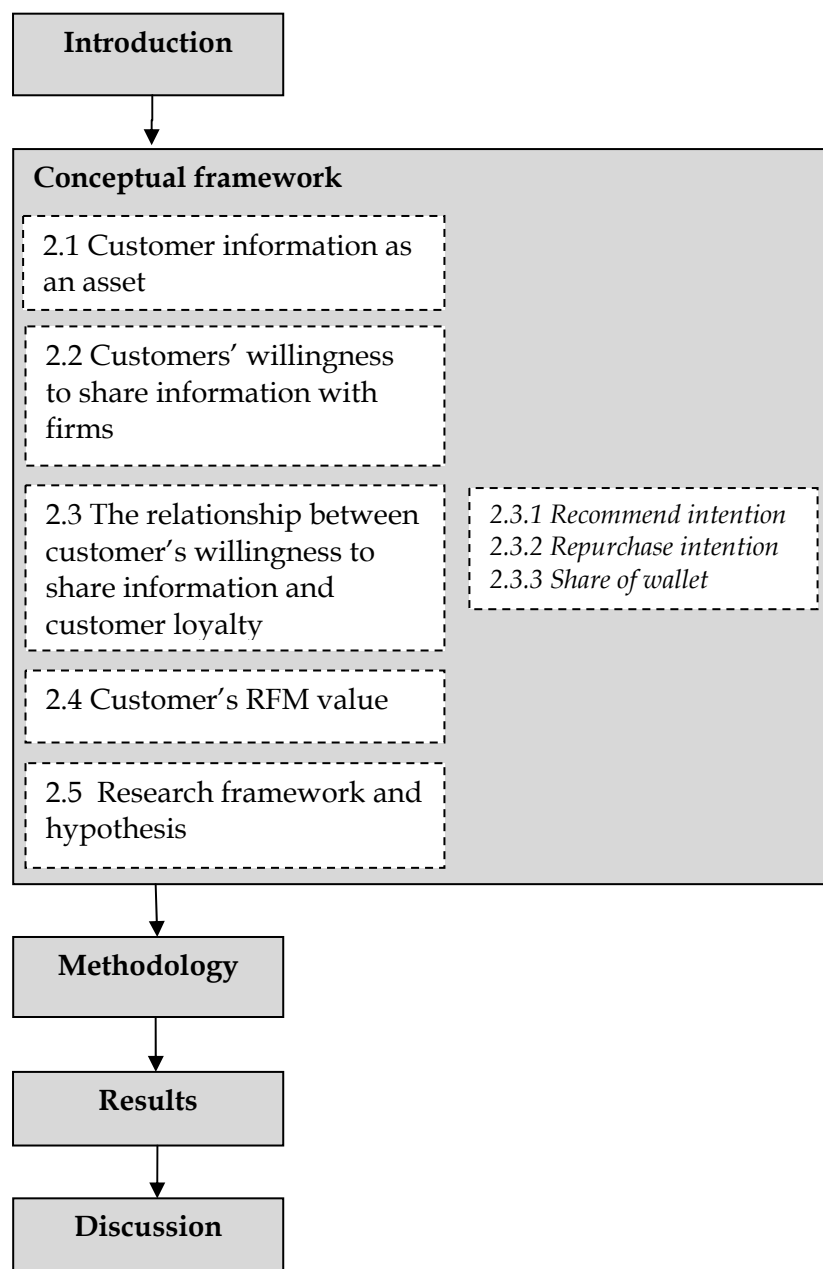


Figure 1 Research structure

## 2 CONCEPTUAL FRAMEWORK

### 2.1 Customer information as an asset

Long-lifetime and loyal customers are more profitable to a firm as they increase profits from the price premium paid, from sales through referrals and from cost savings obtained by serving an old customer. Additionally, loyal customers grow revenue due to increase in sales to that customer. (Jain & Singh 2002.) However, relationship marketing is costly and therefore a company should allocate its resources to those customers who are more likely to yield higher returns in the future (Peppers & Rogers 2011, 121). The capabilities of the organization should be built around the right customers so that the right customers receive customer value from the firm and the firm receives competitive advantage in return (Gordon 2013, 73).

When considering which customers to focus on companies should have an extensive customer database including information of each customer's cost-to-serve, profitability, share of wallet, strategic value and needs (Gordon 2013, 59-60). It is critical to understand differences in customers' values in order to manage different customers differently. When increasing the value of its customer base, a company should identify its customers individually, rank them by their needs, interact with each of them and customize products and services for each. Consequently, the most important aspect in customer relationship marketing is to treat different customers differently. (Peppers & Rogers 2011, 121.)

Therefore, the first task is to individually identify one customer from another. When customers visit the company again, call or visit the website, they must be recognized and remembered. Customer's habits, preferences and other characteristics must be known as precisely as possible. Therefore, companies must have proper technical tools and customer databases to be able to identify its customers and recognize them when they come back. Customer identification enables companies to better allocate its resources on those customers who will bring in the most value for firm. Knowing how customers are different also enables the company to satisfy individual and different customer needs and experiences. (Peppers & Rogers 2011, 77.)

In information management a distinction between data, information and knowledge must be made. Data consist of details such as the value of last purchase or customer's address. With the help of customer data an image of the customer can be made and this way customer information is created. Information becomes knowledge when something is done on the basis of information. For example personalized offers are made with the help of customer information. (Peelen 2005, 91.) With a help of proper customer database consumers who are most likely to buy new products and services can be identified (Stone, Bond, Foss & Patron 2004). Hence, direct interaction with

customers will provide a firm a useful and leading indicator of customers' future behaviour as up-to-date and reliable data about an individual customer can help the company to predict customer behavior more precisely (Peppers & Rogers 2011, 339). Customer data enables the company to approach the right customer at the right time which will result in the increased response rate. Therefore data quality can be considered to have an effect on customer retention and relationship development. (Peelen 2005, 97.)

Consequently, the objective of the data collection is to deepen the relationship with customers and to customize products and services based upon customer's individual needs and preferences (Chelappa & Sin 2005). Customers should be offered personalized products and services that competitors are not able to offer due to the lack of proper customer information (Peppers & Rogers 2011, 151). With the help of information customers can be offered specialized promotions, e-mails and newsletters. In addition firms can for example cross-sell by offering extended warranties after an item is purchased, suggesting accessories and providing discounts on related purchases. In addition customer information can also be used in analyzing trends over time, like trends related to purchase, repurchases and time between repurchases. (Berman 2006.)

So database marketing requires building and maintaining a proper database of consumers. It relies on creating an information bank which is then used to analyze customer's buying habits. (Stone et al. 2004, 19-20.) Hence, customer knowledge relies on the quality of the data. Customer data must be complete, accurate and updated. The story behind the transaction and person must be known to be able to bond with a customer. (Peelen 2005, 104.) Consumer data can be collected and added to the database for example through coupons or offers, consumer satisfaction questionnaires, loyalty cards, lifestyle surveys or e-mail addresses (Stone et al. 2004, 22-23).

For the effective use of databases, it is necessary to attribute unique customer identifiers to each individual customer record. Names are not always enough and usually more precise customer information is needed, like e-mail address, phone number and information relating to billing, product returns, claims history, transaction history, communication history etc. In addition, companies must collect directly supplied data via questionnaires, customer surveys and interactions. This kind of data consists of three types of information: behavioral, attitudinal and demographic data. Behavioral data contains information such as purchase and buying habits, customer's communication channels chosen, language used and share of wallet. Attitudinal data instead is related to satisfaction levels, brand preferences, opinions and personal values. Demographic information consists of data such as age, income, education level, marital status, gender, home ownership and so on. (Peppers & Rogers 2011, 114.)

According to Chelappa & Sin (2005) demographic information can be then classified into three different categories: anonymous, personally unidentifiable and personally identifiable information. In the online context anonymous

information includes a machine's IP address, local time or browser language. This information is gathered during page visits without any invasive technologies. Instead, collection of personally unidentifiable information, such as age, gender, education, income, ZIP code or hobbies involves sophisticated online tracking technologies like cookies. Personally unidentifiable information taken alone cannot be used to identify individuals, but however, as a whole this information enables the company to depict a proper customer profile. Personally identifiable information like name, address, credit card number or social security number, can be used to identify an individual. Such information is gathered from the customer explicitly. (Chelappa & Sin 2005.) In all situations customers should feel having the control over the information given to the firm as by achieving customer's expectations of trust, the company will earn customer's loyalty. (Peppers & Rogers 2011, 98.)

Once the information is collected, it must be linked to all transactions and interactions with customers, so that the customer is recognized as the same customer not a different one. The data should be available to all people in the organization that need access to it and it should be updated frequently. In addition, it is important to prevent the unauthorized use of customer information and to secure individual customers' privacy. (Peppers & Rogers 2011, 110.) Hence, customer information must be stored in a usable, retrievable and secure format (Stone et al. 2004).

It has been said that customer relationship marketing needs to evolve. After its introduction CRM was developed into a quite firm-oriented construct. Customer information has been used so far mainly product and company centric. As stated before, the objective has been to cross-sell, target marketing communication and to segment customers with the help of customer information. When the attention in current marketing thinking is shifting from selling goods to supporting customers' value-creating processes, it is important to think, how customer data can be used for the benefit of the customer instead of only company's value creation processes. (Saarijärvi, Karjaluoto & Kuusela 2013.) Without addressing the customer perspective, customers may feel they receive no benefits from sharing their information with the firm (Boulding, Staelin, Ehret & Johnston 2005; Frow et al. 2011).

Consequently, evolution in marketing thinking opens up new opportunities offering companies a new practice for customer data usage. Once the information is gathered, the ownership of the data should be reclaimed for the customers. It should be used for the advantage of the customer to be able to serve them better. For example, in the grocery store the data from customer's purchasing history can be given back to the customer as nutritional information. This can help customers make healthier lifestyle choices and bring them additional value. However, all this to be succeeded customers should be motivated to share their information with firm by justifying information sharing with the benefits customers can get. All in all, companies have to develop business models based on co-creation and develop value that contributes mutual benefit. (Saarijärvi et al. 2013.)

## 2.2 Customer's willingness to share information

Most customers want to be treated individually. However, customer relationship management systems enable the personalization of only those customers who are interacting with a firm and are willing to provide personal information (Boulding et al. 2005). Customer relationship management requires information from customers. According to Peppers and Rogers (2011) companies' competitive advantage derives from the information they gather from customers. However, it is customer who eventually decides whether to trust the company enough to provide personal information. Those customers who are willing to share their information get more personalized service but have to sacrifice their privacy. (Peppers & Rogers 2011, 243.) Many customers are willing to share demographic data as a part of their loyalty membership application in able to get more personalized rewards and communication (Berman 2006). However, several studies have suggested that consumers may not be willing to share information due to the concern for privacy issues (Chelappa & Sin 2005; Wu, Huang, Yen & Popova 2012).

In some circumstances customer information can be collected without any invasive technologies at the time of the transaction and the collection doesn't require the active involvement of customer. However, other times companies must rely on customers wanting to share their information voluntarily to the firm. (Boulding et al. 2005.) Therefore, investments in information collection and personalization may be undermined if consumers are not willing to provide personal information (Chelappa & Sin 2005). There are many factors that are considered to influence customer's willingness to provide personal information to firms. These factors are for example the type of information requested, benefits offered in exchange and individual characteristics like Internet experience when purchasing online (Ward et al. 2005).

The increased information collection has brought into question the organizations ability to protect individual customer's privacy and secure the customer information (Schoenbachler & Gordon 2002). Consequently, to be able to personalize products and product purchasing experiences companies must not only have technical capabilities to collect and process customer information, but also capabilities to increase customer's willingness to provide this information. If the company is to establish a long-term relationship with its customer, it is essential to guarantee, that the personalization or customization won't risk customer's privacy. (Chelappa & Sin 2005.)

Information privacy is defined as a consumer's ability to control the nature and extent of information about them which is being communicated to others (Campbell 1997). Companies have the responsibility to secure the personal data they process. In addition, customers must be assured that the information won't be misused. According to the European Personal Data Protection Act information about consumers has to be collected for specific purposes and it must be stored in individually identifiable form. Companies

must also tell the consumer who will have the access to the information. Additionally, it has to be informed if the information is used in marketing and the consumer must have the chance to object from information collection. (Peppers & Rogers 2011, 248; Petty, 2000.)

People react these information privacy issues in different ways. Some customers understand that the collection of personal information may improve targeting. However, some consumers may feel insecure and want to minimize the information held on them. (Stone et al. 2004, 223.) Consumers may not respond to marketing offers in order to avoid providing information that could identify and classify them. Customers may even use cash rather than credit card in order to avoid sharing personal information. Most consumers would like to have more control over how information about them is used. Giving more controls to customers might even reduce their privacy concerns. (Phelps et al. 2001.) If the information is used beyond the original transaction, consumers become increasingly concerned (Sheehan & Hoy, 2000). According to Davis (1997) personal information can be seen as a personal property. This leads to a point where information ownership issues must be discussed. It has been argued whether the original owner has the control or whether the company who has gathered the information should control its use. (Davis 1997.) Additionally, consumers must be informed that the information is collected. As customers become aware that marketers have somehow obtained information without their awareness, their privacy concerns are likely to increase (Sheehan & Hoy 2000).

Accordingly, the successful implementation of CRM requires that companies consider the issues of consumer trust. Even though customers would prefer personalized services, it is essential to assure that the information given won't affect customer's privacy. Customers need to know that the company will use the information only to the limited services agreed. (Stone et al. 2004, 222.) Information privacy issues have led us to a point where customers need to feel confident and trusting enough to be able to provide personal information to the firm (Schoenbachler & Gordon 2002). Poddar, Mosteller and Scholder (2009) claim that whether the consumer is engaged in a transaction may determine the customer's willingness of sharing personal information. The more engaging and longer the relationship has been between the consumer and the firm, the more comfortable the consumer might be with sharing information with that firm. Hence, customer's willingness to provide sensitive information is related to the degree to which they trust the data gathering firm (Milne & Boza, 1999).

Customer's level of trust might affect customer's willingness to continue a relationship with company and recommend the company to others. The way how a firm pays attention to its customers affects customers' willingness to do business with a company in the future. Customer's future intention might increase if a customer thinks that a company provides good customer service, and treats a customer as an individual, such as providing personal contact and sending only relevant messages. (Peppers & Rogers 2011, 337.) In addition



customer must feel that the collection and of personal information are properly managed in the organization (Chelappa & Sin 2005). Fair information practices minimize the consumer privacy risk and help build trust between the firm and the consumer and hence increase customers' willingness to provide information (Sheehan & Hoy 2000; Culnan 2000).

Improving trust and decreasing concerns are two distinct approaches to managing customer information. When a firm tries to reduce concerns, communication is more secretive. Instead, in a trust building strategy, communication is informative and benefit-driven, aimed at developing customer relationship. Improving trust may be more effective than reducing privacy concerns. Without trust customers will not share personal information which in turn makes it more difficult for company to serve customers individually. (Milne & Boza 1999.) Consequently, customer information resources can be improved by supporting the customer relationship and trust building activities between partners (Schoenbachler & Gordon 2002).

### **2.3 The relationship between customer's willingness to share information and customer loyalty**

Good customer databases can identify top customer by driving customer loyalty, recency and frequency and increasing revenues and market share for the brand. The customer information and how it is used drives the customer relationship management. However, to be able to ensure the quality of the database companies must build trust to increase customer's willingness to share information. (Schoenbachler & Gordon 2002.) Customer's willingness to rely on firm is an outcome of trust: a firm cannot be considered trustworthy if customer is not willing to take actions that would otherwise entail risk (Morgan & Hunt 1994). In this research the relationship between customers' willingness to share information and customer loyalty metrics is measured. It has been said that marketers who are able to build trust and mutually beneficial customer database, are able to foster greater customer loyalty and therefore firm profitability (Schoenbachler & Gordon, 2002).

Loyalty can be described as a customer's commitment to do business with the same company. Loyalty may be expressed to brands, services, stores, product categories and activities by consumers (Uncles, Dowling & Hammond 2003). There are number of benefits companies can achieve with loyal customers and well-run loyalty program. Loyal customers might have lower price sensitivity, stronger attitudes towards the brand and higher average sales. (Berman 2006.) In addition, loyal customers increase profits from the price premium paid, from sales through referrals and from cost savings that can be achieved by serving an old customer (Jain & Singh 2002).

Because loyalty is so important to profitable growth, it is also essential to measure and manage it (Reichheld 2003). When defining customer loyalty two

different directions should be taken account: attitudinal and behavioral loyalty. According to the attitudinal loyalty definition, customer is loyal if he or she has a positive attitude toward company or brand. By behavioral definition customers are considered to be loyal to a company because they buy and continue to buy from it. However according to this definition, it is theoretically possible to be loyal to a brand even if a customer really doesn't like it, but has other reasons for repeat purchase. Hence, considering customer loyalty both definitions need to be taken account. (Peppers & Rogers 2011, 64-65.)

Consequently, there are alternative measurements of customer loyalty. According to Keiningham et al. (2011) traditional customer loyalty measuring metrics, like satisfaction are inadequate to measure the real satisfaction of customers. These measures can't for example tell how the spending of customers is divided among the company and its competitors. Therefore, companies are starting to measure customer loyalty with other metrics like share of wallet (Mayer-Waarden 2007), repurchase intention (Reichheld & Sasser 1990) and recommend intention (Keiningham, Aksoy, Buoye & Cooil 2011). Customer's primary behavior may illustrate customer's loyalty. Primary behavior means customer's actual purchasing behavior like share of wallet or recency, frequency, and monetary value of the purchase. Additionally, secondary behavior like referrals and spreading the word are perceived to be good indications of loyalty. (Jones & Sasser 1995; Uncles et al. 2003; Aksoy 2013.)

Consequently, in this research customer loyalty is measured with primary behavior metrics like share of wallet and recency frequency and monetary value of the purchase. In addition secondary behavior metrics like repurchase intention and recommend intention are used. In this chapter these customer loyalty metrics and their relationship on customer's willingness to share information are examined more carefully. In addition the research hypotheses are developed and further the research model is introduced.

### **2.3.1 Share of wallet**

Keiningham et al. (2011) define share of wallet as a percentage of a customer's spending within a category that is captured by a certain brand, store or firm. Traditional loyalty metrics like satisfaction are not telling how the spending of customers is divided. Customers may be satisfied or even recommend the brand to others but are still loyal to multiple brands. (Keiningham et al. 2011.) Therefore, researchers are becoming more interested in consumer's share of spending as a behavioral measure of customer loyalty. Customer loyalty is seen as an important strategic objective for managers and an important factor of company's financial success. However, it seems that brand loyalty is to be declined as customers are dividing their purchases among multiple brands in the same category. (Cooil, Keiningham, Aksoy & Hsu 2007.)

Nowadays customers hold rather polygamous loyalty towards many different brands. Most consumers buy more than one brand in the category. Therefore, it is a challenge for brand managers to convince customers to reduce their repertoire of brands. (Uncles et al. 2003.) For example, the percent of Kraft

Food's loyal customers (someone who purchases 70% or more of the same brand within a category over three years) have decreased from 40 percent to 15 percent (Coil et al. 2007). Consequently, the concept of share of wallet is growing among researchers and managers (Keiningham et al. 2011; Zeithaml 2000). According to Jones and Sasser (1995) customer's share of purchases is an ultimate measure of customer loyalty. Share of wallet is linked to customer's current behavior and therefore represents the actual loyalty expressed in purchases, not emotional loyalty (Marinkovic & Senic 2012).

Additionally, improving customer's share of wallet is found to have a positive impact on firm's financial result (Coyle & Gokey, 2002). Several researchers have found the correlation between customer's share of wallet and profitability (Du, Kamakura & Mela 2007; Garland 2004). A small percentage of customer's share can account for a large portion of firm's transactions. Therefore, it is essential for companies to identify customers who have a small share but are transacting a large volume outside a company and induce them to switch. (Du et al. 2007.) Share of wallet can be measured by obtaining company's customer database or by acquiring self reported measures from customers (Chandon, Morwitz & Reinartz 2005). Keiningham et al. (2011) have also invented the Wallet Allocation Rule formula to calculate the share of wallet (Keiningham et al. 2011). In this research self-reported measures are used to calculate customers' share of wallet.

Customers who ignore deals and simplify their shopping have increased share of wallet. Hence, customer characteristics like variety-seeking and sensitivity to sales promotions influence customer's purchase behaviour. (Meyer-Waarden 2007.) The more the consumer makes price comparisons and the more he or she finds such comparisons worthwhile, the smaller the share of wallet of customer is (Mägi 2003). In addition, the distance from household to a store affects customer's share of wallet: the farther the household the smaller the share of wallet (Meyer-Waarden 2007). It has also been found that customers with higher incomes tend to balance their purchases across firms and have decreased share of wallet (Du et al. 2007).

The possession of loyalty card has a positive effect on SOW. Therefore loyalty programs can be seen as a tool for increasing customer's share of wallet. These programs create switching barriers to customers and enhance customer's commitment. Consequently, it seems that the members of the loyalty program concentrate a larger share of their purchases in a same company and are less likely to visit competitors. (Meyer-Waarden 2007.) By focusing their purchases in the same firm, customers might receive points, bonuses or discounts as a reward (Reinartz & Kumar 2012). Rewards creates customer an incentive to share information with firm. When joining in the loyalty program customers must be willing to be profiled and shared personal information. (Berman 2006.)

According to Berman many customers are willing to share demographic data as a part of their loyalty membership application in able to get more personalized rewards and communication. (Berman 2006.) However, consumers are more concerned about personal, not market-level information.

Phelps et al. (2001) claim that consumers are more protective for financial data and personal data since this kind of data is perceived more likely to lead to more marketing offers. Demographic and lifestyle related information is instead provided more willingly like information regarding customers' product purchases and media habits. (Phelps et al. 2001; Sheehan & Hoy, 2000.)

Despite the fact that some consumers are concerned for their privacy, most consumers are willing to give up some of their privacy for example in order to participate in a consumer society. Consumers accept information collection as an exchange for some economic or social benefit (Phelps et al. 2000). According to Goodwin (1991) some people would even be upset if they were declined the marketing opportunities available through the use of personal information. The purpose, for which the information will be used, as well as the potential gain to the consumer, may affect the consumer's willingness to provide information. (Goodwin 1991.)

Whereas Davis claims that compensation, for example monetary incentives, as tradeoffs for the company to have the right to use their personal information, is not the most important issue for most consumers. Instead, it is usually more important for the customer to have some control of the information given. (Davis 1997.) Peppers and Rogers (2011) also claim that only a few customers perceive a value exchange for sharing personal data. But some consumers are willing to share their information in exchange for example for receiving product samples, gaining entry in contests, receiving better products or services, receiving ads relevant to their needs or finding people with similar interests. (Peppers & Rogers 2011, 247.)

Subsequently, the interest in customer relationship management has shifted from firm-centric to customer-centric where customer information is given back to the customer and this way additional customer value is created. Hence, the important aspect in sharing information is a customer's belief that the information is used in a way that benefits the customer in the future. If customers lose trust in a firm and believe that the information given is used for purposes of taking advantage of them, they will keep their data private or even distort the information. If the company will not consider the value creation for both their customers and themselves, companies may lose access to the customer data required for customer relationship management. (Boulding et al. 2005.)

Meyer-Waarden (2007) suggests that an interactive relationship that increases a customer's trust and commitment can become an emotional choice factor and lead to high switching costs and therefore a higher share of wallet. Hence, taken the prior literature into account it can be considered that customers who are willing to share personal information as a part of a mutual relationship, are more willing to be profiled and receive rewards from repeat purchases, and therefore have a larger share of wallet. Consequently, the first research hypothesis suggests that:

H1. *Customer's willingness to share information with a firm has a positive effect on customer's share of wallet*

### **2.3.2 Repurchase intention**

Repurchase intention is a customer's self-reported likelihood to engage in future repurchase behavior (Seiders, Voss, Grewal & Godfrey 2005). It can be seen as a customer's willingness to buy the product or service from a same company (Hamza 2013). It is very important for firm to keep their customers coming back (Aksoy, Keiningham, Lariviere, Mithas, Morgeson & Yalcin 2012). Consequently, intention to repurchase is said to have the greatest value in predicting future business performance (Morgan & Rego 2006). There has been found a direct effect on repurchase intention to firm performance. Therefore measurement of customer satisfaction and repurchase intention has become critical to managers and researchers. (Aksoy et al. 2012.)

Customer repurchase intention tries to predict customer's future consumption. It is used to predict sales for instance in new product introductions, advertising effectiveness and demand forecasting. In addition it is used to indicate customer's loyalty. (Aksoy et al. 2012.) Usually it is more productive to make customers to come back than to having to deal with customer churn. Consequently, increasing customer retention can be seen as one of the main objectives in building customer relationships. Customer retention means that customers continue to buy from a company over time. (Peppers & Rogers 2011, 56.)

Many researchers have found a relationship between attitude and choice behavior. Therefore these self-reported intentions have been widely used in research to predict behavior. For example a positive link between repurchase intention and actual purchase has been found. (Perkins-Munn, Aksoy, Keiningham & Estrin 2005; Warshaw, 1980.) However, researchers have also found that the relationship between purchase intention and actual behavior depends on many factors and in many situations the behavior differs from intention (Bemmaor 1995; Mittal & Kamakura, 2001). Bemmaor claim that asking customers intentions may even affect their actual behavior in the future (Bemmaor 1995). In addition Mittal and Kamakura found that the relationship between satisfaction and repurchase intention is different related to the relationship between satisfaction and repurchase behavior which proves that the behavior can differ from intention (Mittal & Kamakura 2001). Despite these factors repurchase intentions have been widely used to forecast future sales with existing customers (Chandon et al. 2005).

According to Perkins-Munn et al. (2005) repurchase intention and overall satisfaction can be seen as predictors of purchase and share of wallet. Those attributes that affect to retention have also impact on share of wallet. Therefore actual repurchase and share of wallet are significantly correlated. (Perkins-Munn et al. 2005.) Also Zeithaml's model suggests that customer retention is resulting in increased share of wallet and hence increased profitability (Zeithaml 2000). Purchase history, or past purchase decision might affect

customers repurchase decision (Phelps et al. 2001). Satisfied customers will likely buy the product from the same supplier. Consequently, previous studies show a positive relationship between satisfaction and repurchase intention. (Hamza 2013; Anderson & Sullivan 1993; Jayasankaraprasad & Kumar 2012; Keiningham, Aksoy, Malthouse, Lariviere & Buoye 2014; Goncalves & Sampaio 2012.) Zeithaml, Berry and Parasuraman (1996) found also a positive and significant relationship between customer's perceptions of service quality and purchase intentions. Zeithaml also claims that (2000) customer satisfaction and service quality perceptions positively affect intentions to behave in positive ways for example preferring the company, increasing the volume of purchases and paying a price premium. According to the literature, the second hypothesis suggests that:

*H2. Share of wallet has a positive effect on customer's repurchase intention*

When considering the relationship between customer willingness to share information and customer's repurchase intention previous studies have suggested that offering customers more control of information has a major impact on consumers' purchase intentions. Because of the information collection people might make marketplace decision that otherwise would not have been made. For example, consumers might not respond to a marketing offer or use credit card in order to avoid giving information that can be used to identify them. The more control consumer had, the greater the consumer's purchase intention. In addition Phelps found that the purchase intention varied depending on the type of information requested. (Phelps et al. 2000.)

Milne and Boza claim that consumers share more willingly information that enable the firm to deepen the customer relationship and grow the level of trust though improved offers and targeted marketing communication. On the other hand both trust and concern affect the customer's intention to purchase. Trust is likely to increase, and concern is likely to decrease customer's purchase intention. So deeper customer relationships not only result in higher repurchase probability, but also better information exchange. (Milne & Boza 1999.)

As stated before, customers are usually more willing to continue in a relationship with a firm and allow the firm to collect and use information if it results from the relationship. Therefore the company can increase customer's willingness to provide information by developing information practices that address that perceived risk results in positive experiences with a firm over time. (Culnan & Armstrong 1999.) The collection of personal information has to be considered as a social contract where in addition to exchanging money the customer also makes non-monetary exchanges of personal information. Information is given in exchange for intangible benefits such as higher service quality. Customers will continue to participate in this social contract as long as they perceive that the received benefits exceed the risks. (Culnan & Armstrong 1999; Sheehan & Hoy 2000.) Once the customer receives personalized products

and communication he or she might be more motivated to give more information about herself (Chelappa & Sin 2005).

Having a mutually beneficial relationship with the firm will have an influence on consumers' concern for information privacy and therefore consumers' intention to share information. People will provide personal information to gain the benefits of a close relationship. (Sheehan & Hoy 2000.) Taken the prior literature into account it can be considered that customers who are willing to share information are considering the information exchange as a part of continuing and mutual relationship and are therefore more likely to repurchase. Consequently, the third hypothesis suggests that:

*H3. Customer's willingness to share information has a positive effect on customer's repurchase intention*

### **2.3.3 Recommend intention**

Many studies have shown that there is a correlation between firm growth and customer referrals (Peppers & Rogers 2011, 141). Firm profitability results from positive word of mouth because people talk about their good experiences to family, friends and co-workers influencing other possible customers to purchase. Willingness to recommend can be seen as a component of positive word-of mouth communication. Customers' word of mouth is an important force in the marketplace. It influences customers' attitudes, preferences, purchase intentions, and decision making. (Molinari, Abratt & Dion 2008.) Willingness to recommend has also been used as a measurement of customer loyalty (Zeithaml, Berry & Parasuraman, 1996). According to Reichheld recommend intention is a most important customer loyalty measure. He claims that only customers that are loyal would risk their own reputation when referring a company to their friends, family and colleagues (Reichheld 2003).

Friends' recommendations are often considered more trustworthy than company's own marketing actions. Usually a consumer who becomes a new customer through referral is likely to be more satisfied, more loyal and more valuable than a consumer who becomes a customer because of firm's normal marketing actions. Some customers are more intended to refer new customer than others and are therefore more valuable to the firm. Consequently, companies should measure customers' recommend intention. Customers who are more likely to recommend the company to others should be provided positive feedback that encouraged additional referrals. (Peppers & Rogers 2011, 141.)

Customers' recommend intention is usually measured with a Net Promoter Score. In this measure customers are asked to tell how probably in a score from 1-10 they would recommend the company to others. Customers who score 9 or 10 are considered as company's promoters. Instead number 7 and 8 represent customers who are satisfied but passive. Those customers who pick number 6 or less are considered as company's detractors. Net Promoter Score is calculated by subtracting the percentage of detractors from the percentage of

promoters. In this calculation customers who are satisfied but passive are not taken into account. (Reichheld 2003.) This measure is also used in this study to measure customer's recommend intention.

The results of the NPS are said to correlate not only with customer loyalty but also with firm's growth and financial profitability (Reichheld 2003). Additionally, if a customer is willing to recommend the company to others she or he is more likely to be satisfied and loyal and more valuable to the firm. (Peppers & Rogers 2011, 141.) Also Gupta and Zeithaml (2006) suggest that customer satisfaction and perceptions of service-quality affect customer's intention in positive ways. For example referring the firm and increasing the volume of purchases. It is important for managers to get their customers to spread the word about good experiences.

Service quality, price, image and satisfaction are found to be significant triggers of customer's willingness to recommend (Marinkovic & Senic 2012; Oh 1999; Zeithaml et al. 1996). Loyalty behaviors like recommendation result from customers' beliefs that the quantity of value received from one supplier is greater than that available from other suppliers (Hallowell 1996). In addition, customer satisfaction and share of wallet are suggested to have a link (Mägi 2003; Perkins-Munn et al. 2005; Cooil et al. 2007; Aksoy 2014). Customer satisfaction has an impact on customer retention and loyalty which in turn results in longer customer relationship and higher share of wallet (Keiningham et al. 2014). Therefore, it can be assumed, that customers who have larger share of wallet are more satisfied with the retailer and are therefore more likely to recommend. The fourth hypothesis suggests that:

*H4. Share of wallet has a positive effect on recommend intention*

When considering the relationship between customer's willingness to share information and customer recommend intention it has to be taken account that consumer's attitudes toward a company influences the level of privacy concerns related to exchanges with that company (Phelps et al. 2001). Customer's perception of firm's trustworthiness will affect customer's intention to share information (Schoenbachler & Gordon 2002). The more customers have negative experiences with information sharing, the more reluctant they may be to provide personal information (Campbell 1997).

Consequently, fair information practices are important when considering the relationship between customer's willingness to share information and customer's recommend intention. If firm's practices related to information collection and usage raise privacy concern, customers might be unwilling to provide personal information and even engage in bad word of mouth. Customers might have expectations and prior experiences in which they base their assessment of whether or not their personal information was used properly. If customers think that the information was used consistently, they are likely to stay in the relationship and attract new customers. On the other



hand, if the information is not used in a proper way, customers might defect or engage in bad word of mouth. (Culnan & Armstrong 1999.)

Consequently, taken the prior literature into account it can be assumed that fairness of company's information practices have a positive effect on customer's willingness to share information and therefore also a positive effect on customer's recommend intention. Hence, the fifth hypotheses suggest that:

*H5. Customer's willingness to share information has a positive effect on customer's recommend intention*

## **2.4 Customer's RFM value**

Customer lifetime value is a concept that has been increasingly considered in the field of marketing. It is a metric that represents an economic worth of a customer. (Berger & Nasr 1998.) According to Gupta et al. (2006) customer lifetime value is generally defined as a present value of all future profits obtained from a customer over the life of relationship with a firm. The objective of the metric has been to maximize the profits by analyzing customer behavior and recognizing customers that have the most potential return over time. Customer lifetime value is an important construct in designing and budgeting marketing decisions (Berger & Nasr 1998). According to Peppers and Rogers (2011) increasing a customer's value can be seen as the central mission of a company. The most valuable customers yield highest margins, do the highest volumes of business, stay more loyal, cost less to serve and refer the most additional customers. It is likely, that a small proportion of company's customers will account for a large proportion of its profitability. (Peppers & Rogers 2011, 135-139.)

Customer categorization enables companies to make tactical and strategic decisions related to customer relationship management. Strategic decisions concerns for example identifying who its customers are and which customers to focus in the long run. Tactical decisions concerns for example resource allocation among marketing variables. All in all, customer lifetime value models enable company to quantify the relationship with its customers and help the company to make more informed marketing decisions. Consequently, companies can for example observe in which level it is profitable to acquire or retain customers. (Jain & Singh 2002.)

Customer lifetime value can be calculated by measuring the net flows that the company expects to receive from the customer over time. However, estimating the net cash flows can be a challenging task while this kind of model is often difficult and expensive to create. (Berger & Nasr 1998.) Therefore marketers are using also other variables to rank customers in rough order of customer lifetime value. So called proxy variable is easy to measure but won't provide the same degree of accuracy of ranking customers. However, these models are implicitly linked to customer lifetime value. Many marketers use for

example so called RFM model to order their customers by their value. This kind of model is more of a representation of a customer's value than a quantification of it. It is however an efficient and easy tool to rank company's customer base. (Gupta et al. 2006; Peppers & Rogers 2011, 137.)

The basis of the RFM model is to create groups of customer bases based on three variables: recency, frequency and monetary value of customer's prior purchase (Gupta et al. 2006). Recency refers to time period since last purchase. The lower the value is, the higher the probability of customer making a repurchase. Frequency means number of purchases customer made within a certain time. Higher frequency value signifies higher loyalty. Monetary value refers to the amount of money customer spend during a certain time. (Shih & Liu 2003.)

After the measurement of these three variables customers are categorized and ranked based on their purchase frequency, recency and monetary value. The higher the RFM value, the valuable the customer is. (Gupta et al. 2006.) In this widely-used method customers are classified into five groups based on each of these three variables. This gives  $5 \times 5 \times 5$  or 125 cells that are each weighted to create scores for each group. The latest purchase time of 20 % customers is set to 5, and derived to other customers. The score 5 indicates that the most recent transaction was recently. Other two variables are ranked using the same method. Finally scores are obtained as a whole for each customer. (Gupta et al. 2006; Shih & Liu 2003.) High RFM value represents future business potential because these customers are more likely to buy again and have a higher lifetime value. On the other hand customers who have low RFM value are less likely to buy again and something needs to be done in able to increase their value to the company. (Stone et al. 2004; 41.) Marketing decisions are then prioritized based on different RFM groups (Gupta et al. 2006; Shih & Liu 2003).

RFM-models have been criticized for predicting customer behavior in the next period only. Additionally these models don't take into account that customer's past behavior may be a result of company's marketing activities. (Gupta et al. 2006.) Stone et al. (2004) claim that RFM account for maybe 40 to 60 per cent of the explanation of a purchase. Consequently, it has been discussed how the customer lifetime value can be analyzed using RFM method. However, RFM value is still a good "lens" through which to analyze company's database and find the most valuable consumers. The RFM model is an efficient tool to immediately rank customers without any cost. It helps the company to avoid focusing on less profitable customers and enables the resources to be focused on more profitable ones. (Shih & Liu 2003; Stone et al. 2004, 45.)

In this research share of wallet, repurchase intention and recommend intention's relationship to customer's RFM value is investigated. Meyer-Waarden (2007) suggests that loyalty programs and share of wallet affects customer lifetime duration in grocery store. Hence, the more consumer purchase proportionally in a certain store, the longer he or she will remain customer of this store. In addition, the effect of share of wallet on customer

lifetime duration will increase with time. (Meyer-Waarden 2007.) In addition Reinartz and Kumar (2003) found that the level of spending is positively related to profitable lifetime duration. Consequently, the sixth hypotheses suggest that:

*H6. Share of wallet has positive effect on RFM value*

As stated before, self-reported intentions have been widely used in research to predict behavior. For example a positive link between repurchase intention and actual purchase has been found. (Perkins-Munn et al. 2005. Warshaw, 1980.) Customers, who are more likely to buy again, have higher lifetime value. On the other hand customer's who have low RFM value are less likely to buy again. (Stone et al. 2004, 41.) Therefore, the seventh hypothesis suggests that:

*H7. Repurchase intention has a positive effect on RFM value*

Additionally, if a customer is willing to recommend the company to others she or he is more likely to be satisfied and loyal and more valuable to the firm (Peppers & Rogers 2011, 141). Service quality, price, image and satisfaction are significant triggers of customer's willingness to recommend (Marinkovic & Senic 2012; Oh 1999; Zeithaml et al. 1996). In addition, there is a significant, positive relationship from satisfaction to repurchase (Molinari et al., 2008). Satisfied customers are likely to share their shopping experience with friends and relatives and become referrals (Jayasankaraprasad & Kumar 2012). As recommend intention and satisfaction are found to have a positive relationship and as satisfaction is positively related to the repurchase, the eight hypothesis suggests that:

*H8. Recommend intention has a positive effect on RFM value*

When examining the relationship between customer's willingness to share information and customer RFM value, it can be assumed that prior experience distinguishes customers who are willing to be profiled from those who are not willing. Culnan and Armstrong (1999) claim that customers who have more experience have a higher degree of trust and are more willing to be profiled (Culnan & Armstrong 1999). Consequently, consumers that have more catalogue shopping experience and higher RFM value are considered to be more concerned with the type of information they surrender than with the amount of control they can have over the information given to a company (Phelps et al. 2001).

Phelps claims that when people have good purchasing experiences they may not be as concerned about sharing personal information with that company. Consequently, customer's prior experience affects the tradeoffs they are making in the purchase situation. Consumers that have more experience may be more comfortable with the issue that the company they do business with collects and uses personal information (Phelps et al. 2001; Culnan & Armstrong 1999.) Consumers are more positive about being contacted by the

firm with whom they already do business with. People are more likely to for example look mails sent by a company they are already familiar with. Consequently, familiarity with the business is related to the customers' willingness to respond. Customer's intention to respond is seven times higher when they know the data-gathering entry. Consequently, customers are less concerned about privacy in situations which they are familiar and with which a relationship has already been established. (Sheehan & Hoy 2000.)

Phelps (2001) used RFM approach when investigating the effect of privacy concern to customer purchase behavior. They asked respondents questions concerning the recency, frequency and monetary value of their catalog purchasing. This kind of self-report purchase behavior data is also used in this study to measure customer RFM value. Phelps found that people who are more concerned about information privacy have lower RFM value. In other words, customers' concern for information privacy affects their purchase behaviour and consumers that are highly concerned about privacy exhibit lower recency, frequency, and monetary value of purchases. Asking certain type of information in the purchase decision might even become an important factor in deciding whether or not to make a purchase, if customers are unwilling to give up that type of information. (Phelps et al. 2001.) Also Milne and Boza (1999) claim that concern for information privacy is negatively related to usage. They found that trust has a positive effect and concern a negative effect on self-reported purchase level.

Taken the prior literature into account it can be assumed that customers who are more willing to provide information have higher usage level and therefore higher RFM value. Therefore the last research hypothesis suggests that:

*H9. Customer's willingness to share information with firm has a positive effect on RFM value*

## **2.5 Hypotheses and a research framework**

The purpose of this chapter is to introduce the research model of this study. Figure 2 presents the framework of this study and table 1 summarizes the hypotheses. The model suggests that customer's willingness to share information has a positive effect on customer's repurchase intention, recommend intention, share of wallet and RFM value. In addition share of wallet, repurchase intention and recommend intention are assumed to have an positive effect on customer's RFM value. The model is controlled for gender, age, income level and relationship length.

Table 1 Hypotheses

H1.	Customer's willingness to share information has a positive effect on share of wallet
H2	Share of wallet has a positive effect on repurchase intention
H3	Customer's willingness to share information has a positive effect on repurchase intention
H4.	Share of wallet has a positive effect on recommend intention
H5	Customer's willingness to share information has a positive effect on recommend intention
H6.	Share of wallet has a positive effect on RFM value
H7	Repurchase intention has a positive effect on RFM value
H8	Recommend intention has a positive effect on RFM value
H9	Customer's willingness to share information has a positive effect on RFM value

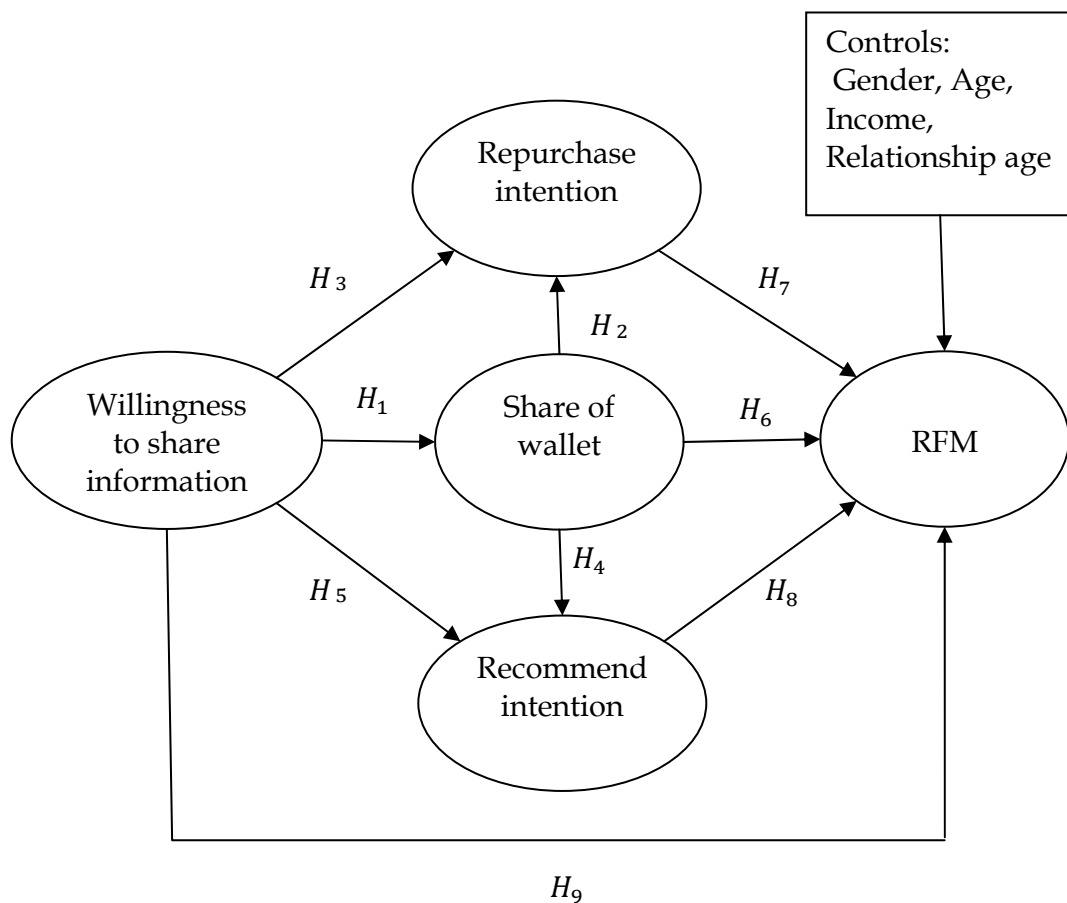


Figure 2 The research model

### **3 METHODOLOGY**

The objective of the following chapter is to discuss the research strategy used in this research, as well as observe the data collection process and analysis of the data. This study is explanatory because this study seeks to find explanation to certain phenomena in form of causation among different constructs (Hirsjärvi, Remes & Sajavaara 1997, 129).

#### **3.1 Quantitative research**

This research is a quantitative study and it is executed by using an electronic survey. In quantitative study conclusions are made from previous studies, former theories are described, hypothesis are introduced, concepts are defined and the data is collected in a statistically handled form. Additionally, conclusions are made based on statistical analysis (Hirsjärvi et al. 1997, 131). Quantitative research starts off with theory from which the hypotheses are deduced. Next the research design is selected after which the data is collected. Information must be prepared so that it can be quantified. After the collection the researcher will analyze the data. The connection between findings and implications are discussed. The findings of quantitative research should be able to generalize in various situations and context. In addition the study should be able to replicate to prove the validity of the findings. (Bryman & Bell 2011, 163.)

#### **3.2 Data collection and practical implementation**

The survey was released in the Prisma Kuopio Facebook-page, as well as Osuuskauppa PeeÄssä's web page. This type of survey has a numerous advantages: quickness effortless data access and the possibility to gain large amount of data. Quantitative survey is used to obtain information about facts, behavior, information, values, attitudes, beliefs, impressions and opinions. In this research the objective was to get information about customer behavior and attitudes. Therefore the qualitative study suited well for obtaining data needed in this research. (Hirsjärvi 1997, 186.)

Before inviting respondents to the survey, it was tested with 10 respondents and some questions were modified to a form that was easier to understand. The study was implemented during time 18.12.2014-7.1.2015. Additionally, fans from PeeÄssä's other Facebook-pages (Rosso, Amarillo, etc.) were invited to take the survey. People were encouraged to take the survey by raffling a gift voucher worth of 50€ to Kuopio's Prisma store. Each respondent

was able to take the survey once. Answering the questions took about 15 minutes. Overall 429 customer took the survey in the given time period.

### 3.2.1 The questionnaire

The questionnaire used in this research is given in Appendix 1 and briefly discussed below. All of the questions in this research were taken from prior studies. Consequently, all of the used measures have been previously tested and validated. The survey consisted of overall 15 questions or statements. In addition the survey had four demographic questions asking about respondent's gender, age, income and relationship length.

Customer lifetime value was measured using RFM model. The questions were adapted from the study of Phelps (2001) where also self-reported measures were used to examine customers RFM value. Three RFM model questions measured the recency, frequency and monetary value of customer's purchase. The respondents were asked the following questions: "How much money would you estimate you spent on purchases in Prisma store in previous month?" "How many days have passed since you made a previous purchase in a Prisma?" and "How many times you have made a purchase in Prisma in a previous month?"

Repurchase intention was defined as a customer's likelihood to continue doing business with the retailer in the future as in the study of Parasuraman et al. (1994). Repurchase intention was measured with five items. Recommend intention was asked using the same questions as the Net Promoter Score as well as word of mouth intentions. (Reichheld 2003). In these questions customers had to evaluate on a scale from 0 to 10, how likely they would recommend the company to others.

Share of wallet was measured with two questions adapted from the study of De Wulf, Odekerken-Schröder and Iacobucci (2001). The first question asked how many percent of customers' overall consumption is used in Prisma among retailers in the grocery industry. The second question asked how many times the customer chooses Prisma of ten times she purchases groceries. Customer's intention to share information were examined with eight different questions concerning customer willingness to provide personal, product, demographic and lifestyle information to firm (Ward et al. 2005). Questions concerning repurchase intention and willingness to provide information used a 10 point scale.

Table 2 Measures

RFM MODEL	Phelps et al.(2001)
REPURCHASE INTENTION	Parasuraman et al. (1994)
RECOMMEND INTENTION	Rechheld (2003)
SOW	De Wulf et al. (2001)
WILLINGNESS TO SHARE INFORMATION	Ward et al. 2005

### 3.3 Data analysis

The research data was taken from Webropol software to SPSS Statistics for data analysis. Using the SPSS Statistics the raw data was prepared and the exploratory factor analysis was made as a pre-analysis for the confirmatory factor analysis. Finally, the confirmatory factor analysis was made by using PLS 3.0 software (Ringle, Wende & Becker 2014).

As all the questions were mandatory, there were no missing values. The correlation matrix between single items was measured for too high or low correlations while Blaikie (2003) claims that too low or high correlations could disturb further analysis. After data preparations, an exploratory factor analysis was performed. With the help of factor analysis the underlying factors or latent variables can be identified. Factor analysis identifies clusters of high correlation coefficients between subsets of measures and establishes how much variance they have in common and the extent to which each measure contributes to this variance. This way a large amount of different measures can be reduced to a small set of factors. (Blaikie 2003, 220.)

After the exploratory factor analysis, confirmatory factor analysis was performed. Confirmatory factor analysis, or commonly named structural equation modelling (SEM), is used when the researcher has an understanding of the factor structure based on theory. The purpose of the confirmatory factor analysis is then to either confirm or abandon this conception based on empirical data. (Karjaluoto 2007; Metsämuuronen 2008, 59.) The confirmatory factor analysis was executed with PLS-SEM using SmartPLS-3.0. Structural equation modelling (SEM) is a term that describes a family of statistical methods for modelling the relations between variables (Hoyle 2011, 3). With the help of structural equation modelling, the measurement, functional, predictive and causal hypothesis can be tested (Bagozzi & Yi 2012).



## 4 RESULTS

The following chapter presents the results found by using the methods mentioned in the previous chapter. First the demographic and background information of data is presented after which the phases of exploratory factor analysis, the measurement model and the structural model explained.

### 4.1 Demographic and background information

Of all the 429 respondents that took the survey 69% (297) were female and 31% (132) were male. Most of the respondents (23%) were 18-25 years old, followed by the age group 26-35 (22%) and 46-55 (21%). Only 6% of the respondents were under 18 or over 65 years old.

Most of the respondents yearly income was between 20 000-50 000 € (43%). The second largest (35%) income group was under 20 000 €. Less than fifth (17%) of the respondents reported a yearly income between 50 0001-80 000€. Only 1% of the respondents had a yearly income of 110 001 € or more. Vast majority (74%) of the customers had been Prisma's customers for over 3 years, while only 2% of the respondents considered themselves as a new customer.

Table 3 Demographic and background information

<b>Gender</b>	<b>%</b>	<b>N</b>
Male	31	132
Female	69	297
<b>Total</b>	<b>100</b>	<b>429</b>

<b>Age</b>	<b>%</b>	<b>N</b>
Under 18	3	15
18-25	23	97
26-35	22	93
36-45	17	75
46-55	21	90
56-65	11	44
66 and over	3	15
<b>Total</b>	<b>100</b>	<b>429</b>

<b>Income</b>	<b>%</b>	<b>N</b>
Under 20 000€	35	149
20 000-50 000€	43	183
50 001-80 000€	17	73

80 001-110 00€	4	18
110 001€ or more	1	6
<b>Total</b>	<b>100</b>	<b>429</b>

<u>Relationship age</u>	<u>%</u>	<u>N</u>
New customer	2	9
6-12 months	3	13
1-3 years	10	43
Over 3 years	74	315
Cannot say	11	49
<b>Total</b>	<b>100</b>	<b>429</b>

## 4.2 Factor analysis

Before the exploratory factor analysis, the matrix of correlation coefficients between single items was inspected. Thus items that correlate very low with most of the other items can be found and excluded. Also items that correlate very high (0.9 or above) may cause problems for future analysis and should be excluded. (Blaikie 2003, 220.) The correlation coefficients in the matrix of 24 items have a range from 0.947 (WILLING11 with WILLING12) to 0.110 (RFM1 with WILLING11). However the majority of item's correlations varied between 0.201 and 0.867 and showed thus good results. The correlation exceeded (>0.90) only between those items that measure the same factors: REPINT3 and REPINT4 (0.941), RECINT1 and RECINT2 (0.936), WILLING7 and WILLING8 (0.965), WILLING11 and WILLING12 (0.947). While none of the items has consistently low coefficients with one other, any of the items did not have to be eliminated.

Next, the Kaiser-Meyer-Olkin (KMO) test was used to measure the sampling adequacy of the items. The test establishes whether the set of items chosen are suitable for the exploratory factor analysis. If results from the KMO test are over 0.90, conditions to continue the analysis are considered to be excellent. On the other hand, if the value is under 0.60, the conditions to continue are poor. The KMO value in this research was 0.922, indicating that preconditions to continue the analysis was excellent. Consequently, the Bartlett's test showed that the preconditions were good (sig. <0.1) indicating that there was enough correlation between the variables. (Karjaluoto 2007.)

Next, the communalities of each item were inspected. Communality is the proportion of item's variance that is explained by the factors that are present (Blaikie 2003, 221). All of the communalities in this case exceeded the satisfactory level and were between 0.372-0.870, thus fitting well in the factor analysis. According to Karjaluoto (2007), when variables have communalities below 0.3, the researcher must consider whether or not the variable should be excluded from further analysis.

The exploratory factor analysis completed overall three different factors based on the initial eigenvalues and principal axis factoring. The eigenvalue

indicates how much a factor explains the total variance (Blaikie 2003, 223). Only factors that have eigenvalues over 1.0 should be considered. Combined, the three factors explained 72,0% of the total variance. The first factor included WILLING8, WILLING7, WILLING4, WILLING11, WILLING12, WILLING9, WILLING6, WILLING5, WILLING10, WILLING3, WILLING1 and WILLING2 and it explained 38,4% of the total variance. The second factor (REPINT4, REPINT3, REPINT5, NPS, WOM, REPINT2) explained 18,0% and the third (SOW2, SOW1, RFM1, REPINT1, RFM2, RFM3) 15,6% of the total variance.

Table 4 The rotated factor matrix

ITEM	FACTOR1	FACTOR2	FACTOR3
WILLING8	0.915		
WILLING7	0.912		
WILLING4	0.898		
WILLING11	0.894		
WILLING12	0.882		
WILLING9	0.870		
WILLING6	0.865		
WILLING5	0.853		
WILLING10	0.833		
WILLING3	0.793		
WILLING1	0.768		
WILLING2	0.750		
REPINT4		0.848	
REPINT3		0.840	
REPINT5		0.763	
NPS		0.761	
WOM		0.753	
REPINT2		0.485	
SOW2			0.860
SOW1			0.832
RFM1			0.772
REPINT1			0.666
RFM2			0.591
RFM3			0.578

As can be seen from the exploratory factor analysis, NPS and WOM loaded on the same factor with REPINT4, REPINT3 and REPINT5. In addition SOW2 and SOW1 loaded into the same factor with RFM, RFM3 and RFM2. Also REPINT1

loaded into this same factor. However, while the purpose is to investigate repurchase intention, RFM-value and share of wallet as individual factors, these constructs were separated in three different factors for the confirmatory factor analysis to better fit the theory. Overall five different factors were constructed. Consequently, this factor structure was used in confirmatory factor analysis with some modifications.

### 4.3 Confirmatory phase: the measurement model

In this research both measurement model and a structural model is used to link path analysis with factor analysis into a comprehensive methodology called structural equation modelling (SEM) (Kaplan 2000, 54). Path models consist of structural models and measurement models. The measurement model depicts the relationships between constructs and their variables (Hair et al. 2013, 26; 47). The evaluation of the measurement model was done by inspecting the model's internal consistency, indicator reliability, convergent validity and discriminant validity (Hair et al. 2013, 100).

The factor structures from the exploratory factor analysis were modified to better fit the theory. The second factor (Table 5) that included four variables measuring repurchase intention (REPINT2, REPINT3, REPINT4, REPINT5) and two variables measuring recommend intention (NPS, WOM), were separated in two different factors according to the framework. Additionally, the third factor that included two variables measuring share of wallet (SOW1, SOW) and three variables measuring RFM value (RFM1, RFM2, RFM3) was changed into two different factors. Also one variable measuring repurchase intention (REPINT1) was moved from third factor to the factor representing customer's repurchase intention.

The final factor structure consisted of five factors, which were named accordingly: 1) willingness to share information (WILLING1, WILLING2, WILLING3, WILLING4, WILLING5, WILLING6, WILLING7, WILLING8, WILLING9, WILLING10, WILLING11, WILLING12), 2) repurchase intention (REPINT1, REPINT2, REPINT3, REPINT4, REPINT5), 3) recommend intention (NPS, WOM), 4) share of wallet (SOW1, SOW2) and 5) RFM value (RFM1, RFM2, RFM3).

Willingness to share information factor was modelled into formative factor where latent construct is formed and determined as a combination of its indicators. Other factors were modelled into reflective factors where latent construct exists independent of the measures used. (Coltman, Devinney, Midgey & Veniak 2008; Hair et al. 2013, 57.) The evaluation of this formative measurement was done by inspecting the measurement's collinearity among indicators, significance and relevance of outer weights (Hair et al. 2013, 111). Next, the evaluation of this formative variable is inspected after which the evaluation of other constructs is done.

First, the high correlations, also called collinearity, among indicators were examined. Unlike in reflective indicators, in formative models, high correlations are not expected between items. Collinearity was measured with the variance inflation factor (VIF). VIF value of 5 and higher indicates a potential collinearity problem. The VIF value was high in most of the variables regarding willingness to share information. The VIF value ranged from 3.605 to 18.259. Thus, collinearity among the items is present to some extent. In addition, the significance and relevance of the formative indicators was inspected with outer weights and outer loadings (Table 5). As the WILLING factor is formative, the statistical significance of factor loadings was explained by inspecting the outer weights and outer loadings of the items. Almost all of the outer weights were nonsignificant ( $t < 1.96$ ) but as the outer loadings were high (above 0,5) and significant ( $t > 1.96$ ) the indicators are retained and interpreted as absolutely important but not as relatively important. (Hair et al. 2013, 144.)

Table 5 Standardized loadings, outer weights and outer loadings

FACTOR	ITEM	OUTER WEIGHTS	OUTER LOADINGS
<b>Intention to share information</b>	WILLING1	0,340	0,896
	WILLING2	0,179	0,888
	WILLING3	-0,021	0,812
	WILLING4	0,222	0,823
	WILLING5	0,157	0,855
	WILLING6	0,358	0,887
	WILLING7	-0,508	0,738
	WILLING8	0,248	0,789
	WILLING9	-0,093	0,780
	WILLING10	0,299	0,841
	WILLING11	-0,345	0,747
	WILLING12	0,224	0,788

Research model's internal consistency reliability was measured by using Cronbach's alpha and factor loadings. The higher the internal consistency values, the more reliable the measure is. In this research all of the factor loadings exceeded the satisfactory level (0.60) and showed thus good reliability. The  $t$ -values explain the statistical significance of factor loadings.  $t$ -values should be higher than 1.96 to be considered statistically significant. All of the  $t$ -values exceeded the required 1.96 value indicating thus good reliability of the measurement. High Cronbach's alpha value indicates that a large proportion of variance can be attributed to a factor. According to Metsämuuronen values over 0,60 are considered to be acceptable. (Metsämuuronen 2008, 70; 452.) In this research all alpha values can be considered to be relatively high as the values range from 0,762 to 0,967.

Table 6 Factor loadings, composite reliability and t-values

FACTOR	CRONBACH'S ALPHA	ITEM	STANDARDIZED LOADINGS	t-VALUES
<b>Repurchase intention</b>	0.904	REPINT1	0,847	58,671
		REPINT2	0,737	25,057
		REPINT3	0,890	61,171
		REPINT4	0,907	62,746
		REPINT5	0,861	40,625
<b>Recommend intention</b>	0.967	NPS	0,984	370,111
		WOM	0,984	326,621
<b>Share of wallet</b>	0.904	SOW1	0,957	199,438
		SOW2	0,953	180,784
<b>RFM</b>	0.762	RFM1	0,859	29,720
		RFM2	0,780	45,577
		RFM3	0,828	67,366

Convergent validity of the model was established by examining the outer factor loadings and average variance extracted (AVE). AVE values less than 0,5 indicate that the validity of individual indicators and constructs fails. In addition, to enable the determination of whether factors are independent from another, the square root of AVE should exceed the value of correlation between factors. In this study all AVE values and all the squared AVE values are at an acceptable level and therefore the discriminant validity is achieved. (Fornell & Lacker 1981.)

Table 7 Average variance explained, construct correlations, square roots of AVE (on the diagonal), means and standard deviations

	AVE	1	2	3	4	5	6	7	8	9
AGE (1)	n/a	<b>n/a</b>								
GENDER (2)	n/a	-0,125	<b>n/a</b>							
INCOME (3)	n/a	0,240	-0,032	<b>n/a</b>						
RECINT (4)	0,968	-0,082	0,280	0,114	<b>0,984</b>					
RELAGE (5)	n/a	0,202	-0,067	0,136	-0,032	<b>n/a</b>				
REPINT (6)	0,724	-0,057	0,182	0,081	0,740	-0,099	<b>0,851</b>			
RFM (7)	0,677	0,183	0,024	0,222	0,367	-0,012	0,498	<b>0,823</b>		
SOW (8)	0,912	0,043	0,009	0,056	0,350	-0,095	0,611	0,690	<b>0,955</b>	
WILLING (9)		-0,076	0,184	0,063	0,053	-0,093	0,497	0,226	0,214	
Mean	-	3,747	1,692	1,949	8,129	3,890	7,046	3,001	5,778	5,778
St Deviation	-	1,520	0,462	0,900	2,178	0,716	2,479	1,455	3,103	3,103
Com. reliab.	-	n/a	n/a	n/a	0,984	n/a	0,929	0,863	0,954	-

## 4.4 The structural model

The hypotheses developed in previous chapter were tested by structural model evaluation which describes the relationships or paths between the latent variables. The evaluation of the structural model was done by inspecting the coefficients of determination and size and significance of path coefficients (Hair et al. 2013, 26; 111).

### 4.4.1 Direct effect

First, the direct effects were examined. Path coefficients represent the relationships between the variables in the structural model. Path coefficients close to +1 indicate a positive relationship, or close to -1 a negative relationship. The closer the values are to 0, the weaker the relationships. However, in addition to examining the path coefficients, it must be determined if they are statistically significant. As Hair et al. (2013) suggests, the structural path significances were tested by calculating the *t*-values using bootstrapping procedure with 5000 subsamples (Hair et al. 2013, 144).

In addition the coefficient of determination ( $R^2$  value) of latent variables was calculated to measure the model's predictive accuracy. The  $R^2$  values range from 0 to 1. The closer the value is to 1, the better the construct is explained by the latent variables that are related to it through the path relationships. In this research customer's willingness to share information explained 34,3% ( $R^2=0,343$ ) of the variance of recommend intention, 51,5% ( $R^2=0,515$ ) of the variance of repurchase intention and 4,7% ( $R^2=0,047$ ) of the variance of share of wallet. Customer's willingness to share information, repurchase intention, recommend intention and share of wallet explained 54,6% ( $R^2= 0,546$ ) of the variance of RFM. Usually  $R^2$  values of 0.75, 0.50 or 0.25 can be described as substantial, moderate and weak (Hair et al. 2013). In this research the predictive accuracy of repurchase intention and RFM is moderate and rather weak for recommend intention.

Table 8 The direct and total effects

	$\beta$	Total effects
H1: Willingness to share information → SOW	0,217 ***	
H2: SOW → Repurchase intention	0,531 ***	
H3: Willingness to share information → Repurchase intention	0,381 ***	0,497 ***
H4: SOW → Recommend intention	0,243 ***	
H5: Willingness to share information → Recommend intention	0,482***	0,535 ***
H6: SOW → RFM	0,631***	0,659 ***
H7: Repurchase intention → RFM	-0,004 ns	
H8: Recommend intention → RFM	0,124**	
H9: Willingness to share information → RFM	0,043 ns	0,244 ***
Gender → RFM	-0,002 ns	
Relationship age → RFM	0,009 ns	
Income → RFM	0,136 ***	
Age → RFM	0,134 ***	
	$R^2$	
RFM	0,546	
Repurchase intention	0,515	
Recommend intention	0,343	
SOW	0,047	

Notes: \*\*\*  $p \leq 0.01$ ; \*\*  $p \leq 0.05$ ; ns - not significant

Next, the hypotheses and path coefficients are individually observed in a more detailed manner.

*Hypothesis 1: Customer's willingness to share information has a positive effect on share of wallet*

As can be seen from table 8, the first hypothesis (H1) considering the path between willingness to share information and SOW was found to be significant, thus being supported ( $\beta=0.217$ ,  $p \leq 0.01$ ,  $t$ -value 4.444).

*Hypothesis 2: Share of wallet has a positive effect on repurchase intention*

The path coefficient between share of wallet and recommend intention ( $\beta=0.531$ ,  $p \leq 0.01$ ) showed strong support also for the second hypothesis. In addition, the  $t$ -value was 16.850 indicating good statistical significance.



*Hypothesis 3: Customer's willingness to share information has a positive effect on repurchase intention*

The results from the structural model evaluation show clear support also for the third hypothesis. The significant path coefficient ( $\beta=0.381$ ,  $p \leq 0.01$ ) and  $t$ -value of 9.620 indicates that the willingness to share information has a positive effect on customer's repurchase intention.

*Hypothesis 4: Share of wallet has a positive effect on recommend intention*

The fourth hypothesis, suggesting that share of wallet has a positive effect on recommend intention, was also supported. The path coefficient between share of wallet and recommend intention was 0.243 ( $p \leq 0.01$ ) and  $t$ -value 4.941.

*Hypothesis 5: Customer's willingness to share information has a positive effect on recommend intention*

The path coefficient between willingness to share information and recommend intention ( $\beta=0.482$ ,  $p \leq 0.01$ ) showed strong support for the fifth hypothesis. Additionally, the  $t$ -value was 10.048 indicating good statistical significance.

*Hypothesis 6: Share of wallet has a positive effect on RFM value*

The strongest path coefficient existed between share of wallet and RFM ( $\beta=0.631$ ,  $p \leq 0.01$ ,  $t$ -value 14.548), thus supporting the sixth hypothesis (H6). Hence, according to this research the greater customer's share of wallet the greater is the customer's RFM value.

*Hypothesis 7: Repurchase intention has a positive effect on RFM value*

The seventh hypothesis was not supported. The path coefficient between repurchase intention and RFM value was weak and the  $t$ -value was under 1.96 ( $\beta=-0,004$ , ns,  $t$ -value 0.062). Hence, this research suggests that repurchase intention does not have a direct influence on RFM-value. The results are in line with previous research thus questioning the relationship between purchase intentions and purchase behaviour.

*Hypothesis 8: Recommend intention has a positive effect on RFM value*

The eight hypothesis suggesting that recommend intention has a positive effect on customer's RFM value was supported with the path coefficient of 0.124 ( $p \leq 0.01$ ) and  $t$ -value of 2.247. Although the eighth hypothesis (H8) was supported the relationship was found to be relatively weak.

*Hypothesis 9: Willingness to share information has a positive effect on RFM value*

The last hypothesis, suggesting that customer’s willingness to share information to a firm has a positive effect on customer’s RFM value, was not supported. The path coefficient between willingness to share information and RFM was weak and *t*-value was under 1.96 ( $\beta=0.043$ , ns, *t*-value 1.004). Consequently, according to this research, customer’s willingness to share information does not have a direct influence on customer’s RFM-value.

Although no separate hypothesis was made on the possible effects of gender, age, income or relationship age to RFM, the research model also included these variables as control variables. Customer’s age ( $\beta=0.134$ ,  $p \leq 0.01$ , *t*-value 3.700) and customer’s income ( $\beta=0.136$ ,  $\leq 0.01$ , *t*-value 3.956) both had statistically significant impact on RFM, while customer’s gender and relationship age showed non-significant paths. The empirical model and the path coefficients as well as the *t*-values can be seen in figure 3.

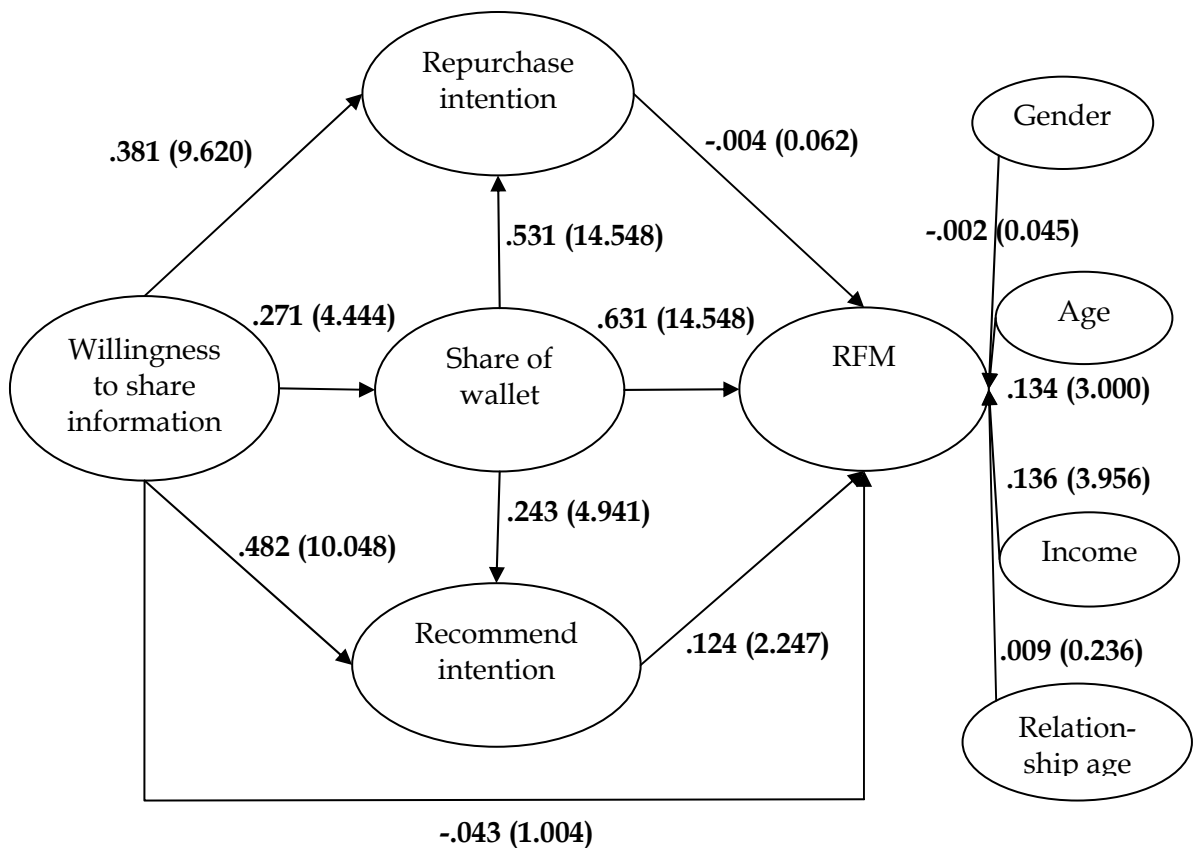


Figure 3 The structural model

#### 4.4.2 Total effect

Total effect is the sum of direct and indirect effects (Hair et al. 2013, 188). As can be seen from the table 8, in this study willingness to share information had a significant total effect on recommend intention, repurchase intention and RFM value. In addition share of wallet had a significant total effect on RFM.

Even though willingness to share information does not have a direct impact on RFM value, the research model suggests that it does affect RFM via share of wallet, recommend intention and repurchase intention. The total effect of willingness to share information on RFM was significant ( $\beta=0.244, p \leq 0.01, t$ -value 5.050).

The total effect on RFM is larger by share of wallet than of willingness to share information. Hence, in addition to the direct effect, share of wallet affects RFM value via recommend intention and repurchase intention. The strongest total effect existed between share of wallet and RFM value ( $\beta=0.659, p \leq 0.01, t$ -value 20.333).

The strong total effect is also exhibited by willingness to share information on recommend intention ( $\beta =0.535, p \leq 0.01, t$ -value 12.929) In addition willingness to share information has a significant total effect on repurchase intention ( $\beta=0.497, p \leq 0.01, t$ -value 11.825)

## 5 DISCUSSION

This chapter concludes the discussion of empirical findings and draws the theoretical contributions and managerial implications from the results in relation to the theoretical background. In addition the purpose of this chapter is to evaluate the reliability and validity of the research. Finally, this chapter introduces the limitations as well as discusses the possibilities for further research

### 5.1 Theoretical contributions

The main purpose of this study was to investigate the customer's willingness to share information and how it affects the level of customer RFM value, share of wallet, recommend and repurchase intention. The topic is justified as customer information and customer's loyalty are the most important constructs of successful customer relationship management. It has been said that marketers, who are able to build trust and mutually beneficial customer databases are able to foster greater customer loyalty and therefore firm profitability (Schoenbachler & Gordon 2002). Consequently, this research tries to gain more insight of how the willingness to share information affects customer's loyalty behaviour. As customer loyalty is also an important constructs in customer relationship management and has major impact on company's financial results (Reichheld 2003), it is essential to find out how the increase in customer's willingness to provide information affects the level of the customer's loyalty.

Previous studies have tried to gain information on issues related to customer's concern for information privacy. However, recent research has started to question whether customer's willingness to share information could be better improved by increasing customer's trust towards the company than decreasing information privacy concerns. Consequently, customer's willingness to rely on firm can be seen as an outcome of trust: a firm cannot be considered trustworthy if customer is not willing to take actions that would otherwise entail risk (Morgan & Hunt 1994).

Based on these research problems, the following research questions were applied:

*-Does customer's willingness to share information has a positive effect on commonly used loyalty metrics (share of wallet, repurchase intention and recommend intention)?*

*-Does customer's willingness to share information has a positive effect on customer's RFM value?*

*-Which of the commonly used loyalty metrics (share of wallet, repurchase intention, recommend intention) best explain customer's RFM value?*

The results indicate that customer's willingness to share information does have a positive relationship to customer's share of wallet, recommend intention and repurchase intention. Willingness to share information had the most powerful direct effect on recommend intention when compared to the other loyalty metrics. These results are in line with previous literature as it has been suggested that customer's willingness to share information can affect the level of recommend intention. For example when information is not used in a proper way, customers might engage in bad word of mouth (Culnan & Armstrong 1999). In addition an interactive relationship where customer information is collected can lead to high switching costs and therefore higher share of wallet (Meyer-Waarden 2007). Additionally, previous studies have found that control of information and also deeper customer relationships have a major impact on consumers' purchase intentions (Phelps et. al 2000; Milne & Boza 1999). All in all, the results in this study show clear support for previous literature concerning the relationship between customer's willingness to share information and commonly used customer loyalty metrics.

RFM was the only construct that willingness to share information didn't have a direct impact to. The results are controversy with Phelps (2001) and Milne and Boza's (1999) findings suggesting that higher RFM value result in increased willingness to share information. They found that trust has a positive effect and concern a negative effect on self-reported purchase level. However, in this research customer's willingness to share information had a positive total effect to the RFM value via share of wallet and recommend intention. The results from this research suggest that there is no direct impact on customer's willingness to share information to RFM value but the willingness to share information construct does have an impact to RFM via other loyalty metrics. So, in line with Schoenbachler and Gordon (2002) the results of this study indicate that trust and mutually beneficial customer databases can result in customer loyalty and therefore firm profitability.

Hence, share of wallet and recommend intention positively affects the level of customer's RFM value. The relationship to RFM is stronger by share of wallet compared to recommend intention. These results are consistent with previous research where customer's willingness to recommend the company is said to correlate with customer's satisfaction, loyalty and value (Reichheld 2003; Peppers & Rogers 2011, 141). In addition customer's share of wallet and level of spending are found to affect customer lifetime duration (Meyer-Waarden 2007; Reinartz & Kumar 2003).

The results also gain insight of background variables affecting the customer's RFM value. This study suggests that customer's income and age have an effect on customer's RFM value. These results are in line with Reinartz and Kumar (2003) who found that customer's income has a positive effect on customer lifetime duration. The higher the income, the greater is the likelihood

of being a long time customer. They also found that customer's age does not have an impact on customer's lifetime duration. However Campbell and Frei (2004) argue that in the retail banking industry customer's age has an impact on customer's profitability. In this research customer's age was found to affect customer's RFM value. Additionally, customer's gender and relationship age showed non-significant paths, thus showing support for results gained from previous research. Consequently, Jain and Singh (2008) found that both genders have similar frequency of purchases, even though in their research women seem to spend less than men. In addition they found that longer customer relationship age does not necessarily result in higher customer lifetime value. (Jain & Singh 2008.)

The result gained from this research also show support for the relationship between share of wallet and repurchase intention. This result is also in line with literature assuming that customers make repurchase decisions based on their prior purchase experiences. In addition, customers that are members of loyalty programs, and hence, have increased share of wallet, are more likely to make favourable repurchase decisions (Bolton & Bramlett 2000). Perkins-Munn (2005) has also found a relationship from repurchase intention to share of wallet so these constructs are found to correlate significantly. In addition, this research revealed that share of wallet positively affects customer's recommend intention.

When examining the information people are willing to share, the results in this research indicate that people are most unwilling to provide information related to their profession and the ownership of their home. On the other hand people are most willing to share information about the products they would need, their household size and their age. Previous studies have also found that consumers are more concerned about personal, not market-level information. Consumers are more protective for financial data and personal data. Demographic and lifestyle related information is instead provided more willingly like information regarding customers' product purchases. (Phelps et al. 2001; Sheehan & Hoy 2000.)

## **5.2 Managerial implications**

Besides the theoretical contributions, this research had also managerial implications that may be presented. The managerial purpose of this study was to give managers insight on how customer's willingness to share information explains customer's loyalty. The second purpose was to find out which of the commonly used loyalty metrics best explain the recency, frequency and monetary value of customer's purchases. The knowledge concerning these issues is important as it is crucial to get customers comfortable with sharing their information. On the other hand it is important to understand that customer's willingness to share information affects also the level of share of wallet, recommend intention and repurchase intention, as these loyalty metrics have an effect on firm's overall success.

When managers want to personalize their services and serve their customers better they have to ensure that customers are willing to be profiled. The cost of not addressing the issue of information sharing is high. For instance, inaccurate data of the U.S economy result in unnecessary postage, printing and staff overhead and costs about six hundred billion dollars per year. In addition, most companies that use CRM systems can't create accurate profile of customers due to the insufficient data, which result in their ability to personalize their services. (Poddar et. al. 2009.) However, to be able to ensure the quality of the database, companies must build trust to increase customer's willingness to share information (Schoenbachler & Gordon 2002).

In addition, one important managerial implication gained from this research concerns the support for the customer's willingness to share information → customer loyalty metrics (share of wallet, repurchase intention, recommend intention) → RFM value relationship, as it shows that commonly used loyalty metrics are important factors for customer's value. Therefore, enhancing customer's willingness to share information should be an important goal for managers, as it acts as an important antecedent for customer loyalty.

On the basis of the results organizations should consider the information sharing more customer-centric way. Hence, it is important that customers believe that the information is used in a way that benefits the customer in the future, as if the company will not consider the value creation for both their customers and themselves, companies may lose access to the customer data required (Boulding et al. 2005). Consequently, the results of this research indicate that when a customer is more willing to share information he or she is thinking information exchange as a part of the existing relationship as when a customer has a positive attitude toward information sharing he or she is more likely to be loyal and valuable to the firm.

### 5.3 Evaluation of the research

In able to evaluate the quality of this research the reliability and validity is examined. First, the reliability of the research is observed after which the validity is taken a closer look. The reliability and the validity of the measurement model were analyzed by using PLS 3.0.

The reliability of the research concerns whether or not the result of the study are repeatable and stable (Bryman & Bell 2011, 158). The reliability of this research was increased by using measures that had already been tested in previous researches and peer reviewed journals. As this research was conducted in Finland, the questions and measurement scales were translated from English to Finnish. The conducted survey can be found in the appendix so that other researchers can replicate this survey in similar way. All in all, consistent documentation of the research process enables different researchers in a different period to conduct the research in exactly the same manner.

Internal reliability was measured with Cronbach's alpha values and composite reliability. The reliability of the model was found to be good as the values ranged from 0,967 (RECINT) to 0.762 (RFM), thus exceeding the preferable value of 0.7 (Bryman & Bell 2011, 159.)

The research validity indicates whether or not a measure is measuring what it is supposed to. Research validity is usually divided into external and internal validity. Internal validity relates to the causality of the variables. External validity instead is concerned with the question of whether or not the results are generalized beyond the specific context. (Bryman & Bell 2011, 41.) The generalization of this research is limited considering the whole Finnish populations as the respondents of this research were Finnish consumers. The limitations regarding the generalization are further discussed in the following chapter. However, the validity of this study was improved by achieving as much respondents as possible. All together 429 respondents took the survey, which can be considered as a good sample size.

The validity of the research model was analyzed by examining the outer loadings of the model, the average variance expected (AVE) and square roots of (AVE) (Bagozzi & Yi 2012; Fornell & Lacker 1981). All of the outer loadings exceeded the required level of 0.7 and also the AVE values were above the suggested limit of 0.5. Hence, the model indicates good validity. In addition, the square roots of AVE values exceeded the level of AVE values, thus offering support for the discriminant validity of the model.

## **5.4 Limitations of the research**

As every research, also this includes many limitations. First, the purpose of quantitative research is to enable generalization from a research sample to the whole population the sample represents (Bryman & Bell 2011,163). So the first limitation concerns the generalization of the results. The data was collected by an electronic survey that was released Prisma Kuopio's Facebook-page as well as Osuuskauppa PeeÄssä's web page. As the sample was collected only by using Internet channels it is possible that the sample involves only certain types of respondents and therefore cannot be generalized to whole population of Finland. As the relationship between customer's willingness to share information and customer's loyalty metrics is studied in the Finnish grocery industry, customer's willingness to share information might depend significantly on the studied industry and firm as well as the personal characteristics.

Additionally, when using an electronic survey it is impossible to know how a respondent has taken the survey, has the respondent been honest or has he or she misunderstood some of the appointed questions. The questions and scales used in this survey were originally in English and needed to be translated into Finnish. Although the questions were translated carefully and the survey was tested before releasing the translation process always involves pitfalls.



One limitation of this research concerns the self-reported measures used for gaining information of the recency, frequency and monetary value of customer's purchases, share of wallet as well as recommend and repurchase intention. However, when self-reported measures are used, it is impossible to know how accurately they stand for reality. Differences may exist between intentions and actual behavior and asking customers intentions may even affect their actual behavior in the future (Bemmaor 1995).

## 5.5 Future research

Customer's willingness to share information is relatively new topic in marketing literature and it needs more investigation. Prior research has concentrated on this topic quite company-centric way. The objective has been to improve the company's information resources by diminishing the concern for information privacy and increasing the customer's willingness to share information. However, as customer relationship marketing and data usage is evolving, deeper understanding of the customer perspective is needed.

This research studied customer's willingness to share information and its relationship on customer's loyalty and value. The relationship was found to be positive, but this research doesn't explain why customer's willingness to share information affects customer's loyalty behavior and value. More research is needed on how this relationship exists and what are the moderating effects of the relationship. Besides the quantitative research, also qualitative research could be justified to better understand the consequences of customer information sharing. The research model used in this research should also be tested in different industries and contexts.

In addition, future research should give more managerial implications and information on how customer's willingness to provide information could be better used to increase customer loyalty and value. When the relationship exists it is essential to investigate how customer's willingness to share information results in increased loyalty and value and what are the different variables affecting this relationship. This research suggests that customer's willingness to share information affects customer's RFM value only indirectly, through different loyalty metrics. Thus, potential further research objectives could consider how customer's value could be improved by focusing on issues related to information sharing and mutual relationship building.

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## APPENDIX

### APPENDIX 1. SURVEY QUESTIONNAIRE

<b>Willingness to share information</b>	
WILLING1	I am willing to share personal information to Prisma*
WILLING2	I am willing to share information to Prisma about my product needs and preferences*
	How willing are you to share the following information to Prisma?*
WILLING3	Name and address
WILLING4	Profession
WILLING5	Age
WILLING6	Family size
WILLING7	The ownership of the home (owner-occupied flat, rented flat)
WILLING8	The form of housing (apartment, terrace house, detached house)
WILLING9	Product level information about your purchases
WILLING10	Information about the products you would need
WILLING11	Hobbies
WILLING12	Interests
	<i>* Scale from 1-10</i>
<b>Repurchase intention</b>	
REPINT1	If I had to choose a domestic grocery store, I would consider Prisma as my first choice *
REPINT2	I will continue purchasing groceries from Prisma *
REPINT3	I will increase the frequency of purchasing at Prisma *
REPINT4	I will increase the amount of purchases at Prisma *
REPINT5	I will spend more money in groceries at Prisma in the future *
	<i>* Totally disagree=1, Totally agree= 10</i>
<b>Recommend intention</b>	
NPS	How likely it is that you would recommend Prisma to a colleague or a friend?*
WOM	How likely it is that you would say positive things about Prisma to a colleague or a friend?*
	<i>* Not all likely=0, Extremely likely= 10</i>



<b>Share of wallet</b>	
SOW1	What percentage of your total expenditures for groceries do you spend in Prisma?*
SOW2	Of the ten times you select a store to buy groceries, how many times do you choose Prisma? * Scale from 0-100%
<b>RFM</b>	
RFM1	How many days have passed since you made a previous purchase in Prisma
RFM2	How many times you have made a purchase in Prisma in a previous month
RFM3	How much money would you estimate you spent on purchases in Prisma in a previous month
<b>Age</b>	
	Respondent's age* *Scale: 1= under 18, 2= 18-25, 3=26-35, 4=36-45, 5= 46-55, 6=56-65, 7= 66 years or more
<b>Gender</b>	
	Respondent's gender *Scale:1=male, 2= female
<b>Income</b>	
	Household's yearly income * *Scale: 1= under 20 000e, 2=20 001-50 000e, 3=50 0001-80 000e, 4=80 001-110 000e, 5= 110 001 or more
<b>Relationship lenght</b>	
	How long have you been the customer of Prisma store?**Scale: 1=New customer, 2=6-12months, 3=1-3 years, 4= over 3 years