

Master's thesis

LAPPEENRANTA UNIVERSITY OF TECHNOLOGY

School of Business

Accounting

APPLYING CUSTOMER VALUE MEASUREMENT

TO A CUSTOMER LOYALTY PROGRAM:

Case of implementing a key performance indicator based on customer value

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ABSTRACT

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In recent decade customer loyalty programs have become very popular and almost every retail chain seems to have one. Through the loyalty programs companies are able to collect information about the customer behavior and to use this information in business and marketing management to guide decision making and resource allocation. The benefits for the loyalty program member are often monetary, which has an effect on the profitability of the loyalty program. Not all the loyalty program members are equally profitable, as some purchase products for the recommended retail price and some buy only discounted products. If the company spends similar amount of resources to all members, it can be seen that the customer margin is lower on the customer who bought only discounted products. It is vital for a company to measure the profitability of their members in order to be able to calculate the customer value. To calculate the customer value several different customer value metrics can be used. During the recent years especially customer lifetime value has received a lot of attention and it is seen to be superior against other customer value metrics. In this master's thesis the customer lifetime value is implemented on the case company's customer loyalty program. The data was collected from the customer loyalty program's database and represents year 2012 on the Finnish market. The data was not complete to fully take advantage of customer lifetime value and as a conclusion it can be stated that a new key performance indicator of customer margin should be acquired in order to profitably drive the business of the customer loyalty program. Through the customer margin the company would be able to compute the customer lifetime value on regular basis enabling efficient resource allocation in marketing.

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Viimeisten vuosikymmenien aikana asiakasuskollisuusohjelmista tai kanta-asiakasohjelmista on tullut erittäin suosittuja ja lähes jokainen vähittäiskauppa käyttää niitä. Uskollisuusohjelmien kautta yritykset pyrkivät keräämään tietoa asiakkaiden käyttäytymisestä, ja käyttää tätä tietoa liiketoiminnan ja markkinoinnin johtamisessa, jotta päätöksenteko ja resurssien allokoiminen olisivat mahdollisimman tehokkaita. Kanta-asiakkaille suunnatut edut ovat usein taloudellisia, mikä vaikuttaa ohjelmien kannattavuuteen yrityksessä. Kaikki asiakkaat eivät kuitenkaan ole yhtä kannattavia kuin toiset, sillä toiset asiakkaat ostavat ainoastaan tuotteita alennetuilla hinnoilla. Mikäli yritys kohdentaa samanarvoisesti markkinointia ja resursseja kaikille ohjelman jäsenille, voidaan nähdä että toisten asiakkaiden kate on alhaisempi. On elintärkeää yritykselle mitata jäseniensä kannattavuutta voidakseen laskea asiakkaiden arvoa. Asiakkaan arvo voidaan laskea käyttämällä useita eri mittareita. Viime vuosien varsinkin asiakkaan elinkaariarvo on saanut paljon huomioita ja sen nähdään olevan ylivoimainen muihin mittareihin verrattuna.

Tämän pro gradun aiheena on toteuttaa asiakkaan elinkaariarvon mittaaminen kohdeyrityksessä koskien sen asiakasuskollisuusohjelmaa. Aineisto tutkimusta varten kerättiin asiakasohjelman tietokannasta ja kuvaa vuotta 2012. Yrityksen tiedot asiakkaista eivät olleet täydelliset ja siten tulokset eivät ole täysin tilannetta kuvaavat. Johtopäätöksenä voidaan todeta, että yrityksen kannattaa hankkia asiakaskatetta kuvaava mittari, jotta asiakkaan elinkaariarvo voidaan laskea säännöllisesti mahdollistaakseen tehokkaan resurssien allokoimisen markkinoinnissa.

FOREWORD

Although the master's thesis project took a year more than I thought in the beginning, completing the project was very intense. Through the year and a half I worked on the thesis the subject changed a few times yet staying in the field of customer profitability and customer loyalty the whole time. It has been and continues to be a great interest of mine and even after this work is done I will continue to develop myself on the field of customer value measurement.

A few special thanks are in order before this work can be finished. First and foremost, I thank my family who has supported me throughout my studies more than I could ever have hoped. My parents looked after my children while I was at the university, and my little girls and my husband were all very patient while I was busy with books and cooked *makaroonilaatikko* for dinner for gazillion times in a row.

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In Helsinki,

December 1, 2014

Kaisa Kuokka

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1. INTRODUCTION

Data and managing your business with the data seems to be the mantra of business corporations of our time; companies are doing it already, or they are finding out the ways to do it. The recent advantages in technology and database marketing are enabling companies to collect enormous amounts of data concerning their business, markets, and customers. It is relatively cheap and easy for retailers to collect and store customer level information in large quantities, and to use this information to market their products. The most common method to do so is through customer loyalty programs that serve both as a mechanism to collect this customer level information and as a means to reward and hence retain the best customers. (Kumar et al., 2006) The collection of the data is however a lot easier than taking the data in use in decision making. Storing the information in a cloud is inexpensive and easy, but having an efficient setup where the information is used actively in decision making in marketing, pricing policies, promotions, inventories or category management is a lot more difficult. (Cortiñas, 2008) The data acquired through loyalty programs should be used to strengthen store loyalty and to build stronger consumer relationships (Mauri, 2003).

The very reason for a company to build a customer loyalty program may in fact be to collect information. In recent years customer loyalty programs have become extremely popular and their existence is not depending on the industry. Through customer loyalty programs companies are trying to reach their most profitable customers, to create an inexpensive and direct way to communicate with them, and to collect information about their buying behavior to direct decision-making. Analyzing the customer relationships and strategies has been a great interest in academia in recent decades (Guilding & McManus, 2002; Lenskold, 2004; Miller, 2008; Raaij, 2002; Ryals, 2008) and in the business environment we often learn about new cases where managing your business with information has been taken to an extreme level, as in the case where an American retailer figured out that their teenage customer was pregnant before she had even told her parents. (Forbes, 2012)

Through the collected data the companies can also find out whether their initial idea about profitability of loyal customers is valid. Various customer metrics are available for analyzing the data and depending on the industry some might be more relevant than others.

This master's thesis will look into the customer selection metrics more closely and make a case of implementing one customer profitability measurement as a new key performance indicator to the customer loyalty program of Fiskars Home, called Myiittala. Throughout the existence of Myiittala, since 2007, Fiskars has collected all the purchase and online behavior information of its members, but only a fraction of that information has been used. Myiittala has been evaluated through normal retail key performance indicators such as average purchase, and purchase frequency yet the profitability of the loyalty program members has never been analyzed.

1.1. Motivation for this study

In a large corporate environment marketing initiatives that are created by a specific part of the organization can often be considered to be small and precise. In a corporation where most of the business is aimed at the wholesale sector, understanding the retail marketing strategy might be ignored. Launching a customer loyalty program is a fundamental part of retail strategy and seeing that the company gets all the benefits possible through the program should not be overlooked. The level of data knowledge and understanding on the top management level has a crucial role while deciding on the steps of how to utilize the data gained from customer loyalty program and especially on how to use it as insight guiding the business.

In the case company, Fiskars Home, the information gained through the customer loyalty program has never got an important role in decision making nor have the customers never been analyzed regarding to their profitability. I touched this topic on my bachelor's thesis in 2012 but findings of that research were never taken forward.

Myiittala, the customer loyalty program has been seen as a program for enthusiastic Iittala brand lovers who after receiving direct information from the program or our stores are willing to spend more. Some of the customers are understood to be eager to follow special offers and bargain prices. On the company level there has not been high enough knowledge to drive the business intelligence of Myiittala. The development of reporting and analytics has been seen as too big of an investment with too big of an ambiguity of the benefits gained through it. The

motivation for this study is to gain information through the Myiittala data that will help form the retail marketing strategy further and to ensure the profitability of the program. Aim is to introduce and implement a key performance indicator for customer profitability that will remain in use in the future too.

Why do companies initiate customer loyalty programs? The ultimate objective of CRM is the delivery of shareholder results (Payne & Frow, 2005). To achieve this goal, the organization should consider how to make customer acquisition, customer retention, customer loyalty and customer profitability better. (Swift, 2001) Customer loyalty can be seen as one of the objectives for customer relationship management. Customer loyalty can be reached through customer satisfaction, which is reached when customer repeatedly receives service that matches his expectations and when the value expectations and offering of the customer and the firm meet. Only very satisfied customers become loyal customers. (Berman & Evans, 2010; Arnould et al., 2004)

1.2. Theoretical motivation and background

Loyalty programs are defined as an integrated system of marketing actions that aims to make customers more loyal by developing personalized relationships with them (Meyer-Waarden, 2006). Sharp & Sharp emphasized the rewarding aspect in their definition of loyalty programs, as they saw that through rewards loyal behavior is encouraged (Sharp & Sharp, 1997). Loyalty programs are seen as marketing processes that reward customers based on their repeat purchase. They are often regarded as great tools for companies to build and maintain long-term relationships with their customers. Companies think that over time long-term customers spend more, cost less to serve, have greater propensity to generate word-of-mouth, and pay premium when compared to short term customers (Kumar, 2008; Rowley, 2005). Companies think that loyal customers are more profitable and that by cultivating loyalty, the company can increase its profitability.

One of the main theories linking customer loyalty and (firm) profitability is the “service profit chain” (Anderson & Mittal, 2000; Heskett et al., 1994; Oliver, 1997) (Figure 1). The service profit chain was originally introduced by Heskett et al. in 1994. It describes the continuum of

the quality of company's product or service all the way to the objectives of the company. While reason for existing for a company is to generate profits and create value, it can be seen that customer satisfaction and loyalty play a significant role in reaching that goal.



Figure 1. "The service profit chain", modified (Anderson & Mittal, 2000; Heskett et al., 1994; Oliver, 1997)

In 2000 Yeung & Ennew found in their research that there are a number of empirical studies that have documented a positive casual relationship between customer satisfaction and customer loyalty (Reichheld & Sasser, 1990; Fornell, 1992; Anderson & Sullivan, 1993; Taylor & Becker, 1994) or between service quality and customer loyalty (Boulding et al., 1993; Zeithaml et al., 1996; Mittal & Lasser, 1997 via Yeung & Ennew, 2000). Gómez et al. (2004) also researched how retailers in fact can affect store revenues by managing customer satisfaction through customer service, quality and value. (Gómez et al., 2004) There have also been studies that show how customer retention is a sign of loyalty and how there is a positive relationship between quality / satisfaction and retention. The retained customers have been found to be generally cheaper to service than new customers. So satisfaction can impact on business performance also by reducing the company's costs. (Yeung & Enneq, 2000)

As the service-profit-chain implies, customer retention and loyalty are seen as ways to achieve greater profits. The firms are trying to reach higher customer loyalty through customer loyalty programs or customer clubs. Through the programs they aim at more profitable customer relationships and to gain information about the buying behavior of the customers. It is generally thought, that the more satisfied the customers are, the more useful they are to the company because they are more likely to retain as a customer and to recommend the company to others too. Loyal customers are seen to spend more too. (Dowling & Uncles, 1997; Arnould at al., 2004)

Regarding loyalty, it is important to see what it means. In a business environment there are often as many definitions of customer loyalty as there are people. Academia is not far from that. In fact, customer loyalty as such has not been defined in a way that would satisfy everybody. (Jacoby & Chestnut, 1978; Dick & Basu, 1994, 99; Oliver, 1999, Uncles et al, 2003) There are however a few known ways to conceptualize customer loyalty and many quite similar points of view.

Dick and Basu (1994) saw customer loyalty as the strength of the relationship between an individual's relative attitude and repeat patronage where cognitive, affective and conative antecedents or relative attitude are identified as contributing to loyalty, along with motivational, perceptual and behavioral consequences (Dick & Basu, 1994). Also on a similar path were Uncles et al. (2003) on their attempt to explain customer loyalty as attitudinal loyalty, behavioral loyalty and situational loyalty.

The attitudinal loyalty has to do with different feelings that create an individual's overall attachment to a product, service, organization, or brand (Fornier, 1994). These feelings define the individual's (purely cognitive) degree of loyalty. Behavioral loyalty on the other hand includes continuing to purchase services from the same supplier, increasing the scale and or scope of a relationship, or the act of recommendation (Yi, 1990) (Hallowell, 1996).

The behavioral conceptualization for customer loyalty often measures loyalty through business key performance indicators and loyalty can be defined as bluntly as repeated purchases of particular products or services during a certain period of time. (Yi & Jeon, 2003) This way to conceptualize customer loyalty ties it closely in with customer profitability measuring.

Kumar & Shah (2004) listed measures used in measuring behavioral customer loyalty and they are in fact similar and the same as used in measuring customer profitability.

- **Proportion of purchase** (Cunningham 1966)
- **Probability of purchase** (Farley, 1964; Massey, Montgomery & Morrison, 1970)
- **Probability of product repurchase** (Lipstein 1959; Kuehn, 1962)
- **Purchase frequency** (Brody & Cunningham, 1968)
- **Repeat purchase behavior** (Brown, 1952)

The following measures have been commonly applied as well:

- **Share of purchase (SOP)** that measure the relative share of a customer's purchase as compared to the total number of purchases and
- **Share of visits (SOV)** that measure the number of visits to the store as compared to the total number of visits (Magi, 2003).

Other commonly used measures in the industry include

- **Share of Wallet (SOW)** – that is expenditure at a specific store as a fraction of total category expenditures (Berger et al., 1998) which is analogous to share of purchase (SOP);
- **Past customer value (PCV)** – based on the past profit contribution of the customer;
- **Recency, Frequency and Monetary Value (RFM)** – measure of how recently, how frequently and the amount of spending exhibited by a customer (Hughes, 1996).

(Kumar & Shah, 2004).

The majority of existing loyalty programs follows these measures to reward behavioral loyalty. They help marketers to evaluate their success on building behavioral loyalty. That is the more you spend with the company, the more rewards you earn. The problem from the brand point of view is that the customer may sometimes end up associating their loyalty (as defined by purchase behavior) towards the rewards program rather than the brand (Kumar and Shah, 2004).

Attitudinal aspects of the customer are typically measured through surveys to obtain data at the customer level. Other methods include focus groups and customer feedback. While measuring attitudes through survey, only a sample of customer base may be selected for a particular timeframe, and a different sample for another timeframe. Attitudinal loyalty may often result as an outcome of a long fruitful relationship between the company and the

customer over time. Just as behavioral loyalty is important to companies for generating profitability, attitudinal loyalty helps companies to build an invisible exit barrier for their customers, especially in non-contractual situations where switching costs are low (Shapiro & Vivian, 2000). To be effective and selective in cultivating attitudinal loyalty, companies need to know their customers well, beyond the customers' purchase history. (Kumar & Shah, 2004)

Behavioral loyalty focuses on the "value of the customer to the brand" (Schultz and Bailey, 2000) For any firm, customer loyalty becomes more meaningful only when it translates into purchase behavior. Purchase behavior generates direct and tangible returns to the firm as compared to the effects of pure attitudinal loyalty (which may be commitment or trust that need not translate into actual purchase behavior). Therefore, it is imperative for a firm to build behavioral loyalty. Pure attitudinal loyalty of a customer without behavioral loyalty may provide only limited or no tangible returns to the firm. (Kumar & Shah, 2004)

1.3. Thesis outline and research questions

One of the pressing issues about loyalty programs is whether they are really working and do they enhance behavioral loyalty. Loyalty program members may have a higher share-of-wallet and spend more with the firm but that doesn't automatically say that loyalty programs are effective. Leenheer et al. (2003) saw that loyal customers themselves may select to become members in order to benefit from the program.

Another issue regarding the loyalty programs is profitability. Companies use their resources in marketing activities targeted to the loyalty program members. The members often receive special tactical offers such as price discounts and vouchers. Some members might only purchase products that are on sale as others buy products with the recommended retail price. This makes the customer margin of the customer very different and customer profitability is something that should be looked more closely.

The objective in this master's thesis is to find out how a key performance indicator can be conducted from customer value data. The aim is to find a metric that would remain in use with the company also after the master's thesis is done.

This should be done by answering to the following research questions:

- 1. How can key performance indicator be constructed from customer value data?**
- 2. How can customer value be defined?**
- 3. What are customer value metrics?**

In essence, the master's thesis seeks to find answers to the question how to manage the profitability of the customer loyalty program members and whether smart customer value metrics can be constructed based on the existing customer data of the case company.

1.4. Scope and focus of the study

This thesis combines literature from two different branches of science: accounting and marketing. Focus of the thesis is on customer performance measurement at the confluence of customer accounting, sales and marketing, and business intelligence. With customer performance in this work I refer to customer value aiming to gain insight for marketing strategy development and resource allocation. At the case company Fiskars Home there is no visibility to customer profitability nor is the concept of customer value used in the decision making. The target of the work is to bring these subjects closer to the decision making with easier access to the key performance indicators. Though the target is to create a usable metric for customer performance valuation it is understood that because of the complexity of the different information technology systems used in the corporate environment, it might be impossible to move ahead with the wanted metric. Should this be the case, then this study seeks to give a recommendation for the company to proceed with the customer value metric implementation.

The scope of the study does not include customer profitability in the business to business markets yet is concentrated on business to consumer markets. Also the concept of customer loyalty is not discussed further as it has been already defined on the level needed for this work. The study regards customer performance measurement as an action that gives insight to customer value. In the study customer value is regarded as “the value that the customer

provides to the firm” instead of “the value provided by the firm to the customer” as in traditional microeconomic theory (Berger et al., 2002). Customer value is seen as financial value and further conceptualizations of the customer value are not discussed.

1.5. Research data

One of the main reasons why Iittala Group (now Fiskars Home) decided to start with their own customer loyalty program was to have something to compete against other retailers carrying the same brand. Iittala has a store chain consisting of 30 stores throughout Finland. 19 of the stores are outlet stores selling also second quality goods and factory findings. Six of the stores are Iittala stores located in the greater Helsinki area at prime locations, either on a shopping street like Pohjoisesplanadi in Helsinki centre or at shopping malls. These stores carry only first quality products and already in the beginning of creating the store concept it was decided that the stores would not start competing with price. The Finnish market is over penetrated with Iittala goods as a consumer is able to get an Aalto vase from a close by Siwa grocery store. In that situation it was stated that Iittala will offer premium customer service and customer experience through a customer loyalty program called Myiittala. The purpose of Myiittala, was stated in 2009:

“Myiittala is a customer loyalty program with a key objective to foster true customer loyalty to our own retail channels.”

Through Myiittala, Fiskars Home has been collecting information of the members. The information that is collected includes all purchase information and some online behavior information including opening and clicking through the newsletters. This information is then enriched with demographical details of the members.

The collected information and data have never been analyzed for profitability or for marketing needs. Through the information Fiskars Home would be able to see how their members behave according to special discounts and new product launches. By finding similarities and differences in the way people behave, Fiskars would be able to gain useful information for example new product development and marketing campaign creation.

The purchase data of the Myiittala members is rich, but has its limitations. For example we are able to see when, for how much and what the members have bought throughout the years, but we are not able to link the member purchases to the store purchases – meaning that we don't see the member specific customer margin. We know the store margin on a monthly level but working with an average with all members doesn't give a full look on the actual figures. The nature of the data and the lack of specific information will have an impact on the actual results of the research.

The research data consists of 160,000 observations from 2012. These observations are those Myiittala members who have made purchases during that year. The research data will be presented more thoroughly in the section 3.2.

1.6. Research structure

This thesis is organized as follows. First the research literature on customer profitability is reviewed with a presentation of selected customer metrics. Then in section 3 the research data is introduced and customer profitability metric for analysis is chosen. In the last section the impacts of the analysis are discussed as well as recommendation for future metric development is given.

2. MEASURING CUSTOMER PERFORMANCE

As the importance of the customers in creating the firm result is understood, it is especially important to analyze the customer performance further. Not all the customers bring the same net result. (Foster et al., 1996) Some customers bring more profit, and in order to improve the overall productivity, it is necessary to recognize the most profitable customer relationships. Studying and understanding customer profitability enables increases in the productivity of the whole present and future customer base. (Ziethaml et al, 2001) At the simplest, customer profitability is defined as the difference between the profits brought by the customer and the costs used by the company for the customer during a certain period of time. (Horngren et al., 2006; Lee & Park, 2005; Pfeifer et al., 2005, Raaij et al., 2003) In this section the term customer value is defined and several metrics for measuring the customer value are introduced.

2.1. Literature review

The concepts customer performance and customer valuation fall under both accounting and marketing literature yet they have predominantly been written about in the marketing literature, and less in accounting, hospitality and banking literatures. (Weir, 2008) In the accounting literature, customer profitability metrics have been referred to as customer accounting (Guilding & McManus, 2002; Lind & Strömsten, 2006).

Weir (2008) examined the progress of customer valuation techniques and practices as they have been described and researched in the literature. In Tables 1-3 the literature used in the research are described in more detailed level. These charts are not explicit yet represent the literature Weir found relevant for his work in 2008.

Through his research, Weir found three different stages of customer valuation metrics development (Weir, 2008):

- 1) Customer Profitability Analysis**
- 2) Customer Lifetime Value**
- 3) Customer Equity**

The first stage of customer valuation metrics development consisted of Customer Profitability Analysis techniques within both accounting and marketing articles including Guilding & McManus, 2002, Lind & Strömsten, 2006 and Foster & Gupta, 1994. (Weir, 2008) The Customer Profitability Analysis has been covered a great deal in the literature (Table 1) and several approaches to calculate customer profits exist. Yet each of them follows the same simple calculation: (Weir, 2008)

Customer Revenues – Customer Costs = Customer Profit (Loss)

Or as Pfeifer et al. (2008) put it:

“Customer Profitability is the difference between the revenues earned from the customer and the costs associated with the customer relationship during a specific period.”

The differences that exist between varying papers stem from the type of costs that are traced to customers and the costing system that is used to do so. The types of costs that can be allocated to customers include discounts and commissions, packaging and documentation, marketing and sales support, inventory holding costs, delivery, handling customer inquiries, and customer service, technical and administrative support, quality control, credit terms, financing, accounts receivable days, collection costs and order entry processing (Bellis-Jones, 1989; Howell & Soucy, 1990; Smith & Dikolli, 1995; Foster et al., 1996; Pearce, 1997; Boyce; 2000; Van Triest, 2005). (Weir, 2008) In order to determine the customer profits, one has to first have clear visibility to the costs.

The more sophisticated Customer Profitability Analysis is usually done with Activity Based Costing (ABC). Proponents of ABC analysis claims it to make customer accounting more accurate by allocating overhead costs to specific customers based on activity information (Lind & Strömsten, 2006; Smith & Dikolli, 1995). As the costs are divided by a manager, there is always a possibility for that the costs are not actual costs yet they are what the manager or company wants them to be. (Weir, 2008) As in other cases of accounting, the human error is always a possibility also in customer accounting.

In the second stage of the metrics development the awareness turned to customer valuation metrics, especially Customer Lifetime Value. CLV enables computing the net present value of

the customer and as a customer metric it is the only one that is forward looking. As seen on the Table 2, CLV has been researched and written about greatly yet the Weir study (2008) only show a fraction of papers written about CLV and customer valuation metrics development in general.

The third stage of development in customer valuation metrics seeks to observe the impact of customer investment upon firm value. Customer Equity (CE) is commonly described as the sum of individual discounted lifetime values of both present and future customers for the duration of the time they continue to transact with the company (Blattberg & Deighton, 1996; Bayon et al., 2002; Rust et al., 2004 via Weir, 2008).

Customer lifetime value and customer equity will both be given a better look in the following sub sections.

CPA Literature

Study	Aim	Research Category	Model / Method	Outcome / Findings
Bellis-Jones (1989)	Discusses importance to managers of customer profitability	Theoretical	Engages with CPA by considering typical business situations	Introduces CPA model to a practical audience
Cooper & Kaplan (1991)	Synthesis case studies that authors have conducted	Theoretical and empirical	Kanthal "A" case study is of relevance as it examines CPA application	Case study demonstrates allocation of costs to customers; discusses CPA in practical situation
Foster et al. (1996)	Discusses modifying cost systems to provide measures for CPA	Theoretical and empirical	Uses ABC to illustrate customer costs and provides examples of how this cost info can be used with CPA models	Provides numerous managerial challenges faced when using CPA (eg estimation of future costs): future research opportunities and benefits of CPA usage are also debated
Guiding & McManus (2002)	Examines how customer valuation practices are used	Empirical	Survey data is used to test hypothesis relating customer valuation to two contingency factors: intensity of competition and market orientation	Only hypothesis relating to market orientation were supported by survey data, albeit only partially supported - namely usage rates are higher in companies with a higher market orientation, and perceived managerial benefits of customer valuation use is higher in similar companies
Helgesen (2002)	Focuses on profitability of holding and maintaining CP accounts	Theoretical and empirical	Uses data from four exporting companies	Introduces a market oriented accounting framework for managing customer accounts at a profit; managerial implications are also discussed.

Kaplan & Narayanan (2001)	Reviews literature on CPA and considers impact on customer relationship management	Theoretical and empirical	Considers CPA from a user perspective presenting typical usage problems and examples of customer cost assignment	Illustrates how and why CPA can be applied in practical situations; considers how CPA can be used in health care.
Lind & Strömsten (2006)	Develops a framework to explain a company's choice of customer accounting technique base on its customer resource interfaces	Theoretical and empirical	Explores two cases which ultimately support the framework	Main contribution is the framework
Noone & Griffin (1998)	Discusses a case study of CPA implementation	Theoretical and empirical	Case study is used to test the feasibility of CPA implementation in a hotel	Introduce a step system for the development of a CPA system
Rosiender & Hart (2004)	Provides a review and critique of customer valuation metrics	Theoretical	Takes the form of a literature review and suggests ways in which customer valuation, specifically CPA can be broadened	Suggests ways in which the focus of CPA can be broadened (eg by considering narrative aspects of customer relationships)

Table 1. CPA Literature, (Weir, 2008)

CLV Literature

Study	Aim	Research Category	Model / Method	Outcome / Findings
Andon et al. (2001)	Explore the economic value of customers to an organization	Empirical	Exploratory case studies of three organizations, examining CLV and CPA practices	Valuation changed existing management of customer relationships; concerns expressed over lack of management involvement with customers after valuation: customer reporting viewed by firm as stand-alone activity
Bauer & Hammerschmidt (2005)	Synthesis of CLV and shareholder value (SHV) approaches in order to develop a marketing based approach to firm valuation	Theoretical	Examines previous literature and models of CLV to guide the development of a new model	Authors seek to link the CE and the SHV approach to develop a new model and introduce scenarios and cases where their model may be beneficial; They find a CE-based valuation can guide marketing investments and can help to avoid misallocation of resources.
Berger & Nasir (1998)	Discuss CLV models	Theoretical	Reviews retention and migration models in CLV literature	Provides examples of CLV retention and migration models; suggests applications of CLV and possible directions for future research aimed at refining CLV models, to include repeat purchasing variables.
Berger et al. (2002)	Develops a framework for assessing how marketing actions affect a firm's CLV	Theoretical	Reviews CLV models and customer asset management literature	Develops a framework for managing customers: identifies future research directions

Boyce (2000)	Outline and expose some broad social and ethical implications of customer valuation practices	Theoretical	Reviews CPA and CLV models: engages with ideas from critical accounting literature to consider impacts of valuation upon customers and customer groups	Main finding is that less-valuable customer groups face marginalisation and ultimately alienation from firms as a result of valuation exercises; other ethical implications, such as managing customer relationships, are discussed
Dwyer (1997)	Demonstrates how CLV could be used to support direct marketing decisions	Theoretical and empirical	Two models were constructed for transaction relationships: retention model and a migration model	Several implications of CLV for managers were discussed: an implementation case was also used for illustrative purposes
Gupta & Lehmann (2003)	Argues that customers are important intangible assets that should be valued and managed	Theoretical and empirical	Using publicly available data, a model is developed to calculate average CLV	Discusses the limitations of previous CLV models; a CLV model is developed and instances where it could be used are suggested
Jain & Singh (2002)	Collate and review CLV research in marketing literature	Theoretical	Reviews and summarises CLV models	Limitations of CLV models are discussed: future research directions are sought and encouraged
Pfeifer et al. (2005)	Clarifies differences between CPA and CLV and offers definitions for both	Theoretical	Through a literature review, CLV models are compared with CPA models	Differences between CPA and CLV models are discussed, namely the treatment of acquisition variables; definitions of CLV and CPA are also refined; suggestions are provided regarding inclusion of additional variables

Reinartz & Kumar (2000)	Test the relationship between customer profitability and lifetime duration	Theoretical and empirical	Reviews literature on CLV and tests four emerging hypotheses from data gathered from a catalogue retailer over 3 years	Findings challenge formulated hypotheses for example data suggests that long life customers may not necessarily be profitable; marketing implications of the study are discussed; future directions of research are also considered
Van Tries (2005)	Explores the relationship between customer size profitable	Theoretical and empirical	Five variables are identified and tested using a database from a business-to-business setting	Customer size is not a driver of the profitability margin, but other variables (mainly exchange efficiency) can affect margins; Practical implications for managing customer relations are also offered

Table 2. CLV Literature (Weir, 2008)

CE Literature

Study	Aim	Research Category	Model / Method	Outcome / Findings
Bayon et al. (2002)	Reviews CE concept and models. In addition to redefine marketing from a shareholder's perspective	Theoretical	Reviews CE concept and CLV models in order to construct a CE model	Constuction of a CE models: Provide a summary of CE management
Berger et al. (2006)	Propose a framework for understanding how CE affects shareholder value	Theoretical	Reviews previous literature and models to elaborate their framework	Main contribution is their framework: future directions for research are also discussed
Blattberg & Deighton (1996)	Introduce concept of CE to managers to aid in decisions relating to customer retention and acquisition	Theoretical	Using decision calculus authors develop a model of CE and framework to determine retention / acquisition rates based on their model	Introduces concept of CE to wider audience; construct a model of CE
Gupta et al. (2006)	Reviews CLV models that can be implemented in practice and may be use in conjunction with CE	Theoretical	Reviews CLV models and various approaches taken to modeling	Highlights advances in CLV and CE research: suggests 11 possible areas/avenues for future research
Lemon et al. (2001)	Develops a strategic marketing framework which considers customer value and growth	Theoretical	Describes the key drivers of firm growth (value, brand and relationship equities) to show how CE can be increased	Drivers of growth are discussed and links with CE are suggested: considers situations where each driver and related marketing actions might be of relevance when trying to increase firm value
Richards & Jones (2008)	Examines espoused CRM benefits and their ability to increase CE	Theoretical	Reviews CE and drivers of CE value and formulate 10 propositions to explore the effects of drivers on firm performance and CE	Explores 10 propositions, which then form the basis a framework used to measure CRM

Rust et al. (2004)	Introduces a strategic framework to show how marketing actions can be traded off by considering impact on CE	Theoretical and empirical	Identifies drivers of CE which are then tested through Markov models in order to estimate switching patterns; CE models are then refined and applied in an airline context	Development of a model that includes info about the influence of competition on customer purchase patterns; authors tailor CE models to demonstrate how they can be used to show a return on investment on any marketing activity
Villaneuva & Hanssens (2007)	Provides a comprehensive review of existing CE literature	Theoretical	Literature review is used to discuss CE models	The study provides a detailed consideration of CE metrics and variables used in each model: directions for future research are also discussed, particularly on how to refine CE models

Table 3. Customer Equity Literature (Weir, 2008)

2.3. Customer value

In 1954 Peter Drucker said: *“It is the customer who determines what business is, what it produces, and whether it will prosper.”* Companies today have learned the mantra about being customer-centric, but in their actions they still often remain in their ideas of product centrality even though there is a lot of evidence on how customer centrality offers a way to profitability (Kumar et al. 2006)

In the Finnish StratMark project customer value was defined by Henrich Nyman as follows:

“The value the customer provides to the firm is the sum of the discounted net contribution margins over time of the customer, that is, the revenue provided to the firm less the firm’s costs associated with maintaining a relationship with the customer.”

Customer value can be measured or translated in numerous ways. Deciding which path and metric to follow begins from the firm strategy. The customer strategies are often created on the retail business management level and therefore they are lead by retail key performance indicators. Very strictly customer value can be seen as only the customer lifetime transaction value. Profitable customer lifetime duration has been found to be positively related to the customer’s spending level and to the degree of cross-buying behavior and also to the company’s customer loyalty program membership. (Reinartz & Kumar, 2003)

Through customer value analysis a company is able to pick out the most valuable customers out of the CRM database. According to a study by Niraj et al. (2008) improvement efforts and resources should be directed towards more profitable customers – and also to ones who are relatively highly satisfied with the product and service. Providing different service to customers depending on the level of their profitability is becoming an effective and profitable service strategy for companies like FedEx, Hallmark, and the Limited (Zeithaml et al., 2001; Miller, 2008). Some customers might be too costly to serve and have little potential for becoming profitable. In cases like this, the company needs to evaluate what kind of service to offer for these customers.

2.4. Selection of customer value metrics

A number of customer value metrics have been used in order to analyze the successful relationships with customers. As the target for building behavioral loyalty can be seen to increase customer value, the same metrics to measure behavioral loyalty can somewhat be used in measuring customer value. To mention a few, Share of Purchase (SOP), Share of Wallet (SOW), Past customer value (PCV), Recency, Frequency and Monetary Value (RFM), Customer Equity (CE) and Customer Lifetime Value (CLV) all give insight to customer value. Most of the customer value metrics are fairly easy to calculate. It is important to understand for whom the information is gathered, and how it will be used in order to find the most suitable metric for the given task. From the strategic perspective, the best customer value metric should be forward looking and aim to guide company decisions with the goal of maximizing long-term profitability of the customer base. (Zeithaml et al., 2006)

In the following subsections selection of customer metrics will be presented, including customer lifetime value, customer equity, past customer value and recency, frequency and monetary value metric. More emphasis will be given to customer lifetime value as it has been seen as a superior metric compared to others by several studies (Gupta, 2006). For example Reinartz and Kumar (2003) studied a catalogue retailer's data of over 12,000 customers for over 3 years to compare CLV and RFM models. They found that the revenue from the top 30 percent of customers based on the CLV model was 33 percent higher than the top 30 percent selected based on the RFM model.

2.4.1. Customer Lifetime Value

As mentioned earlier, several researches consider CLV to be the most appropriate and sophisticated metric for future customer value measurement. (Reinartz & Kumar, 2000) CLV is the measure of expected present value of all future profits obtained from a customer over his or her life of relationship with a firm. (Pfeifer et al., 2005; Gupta et al., 2006; Kumar, 2008; Kumar & Shah, 2004)

Kumar (2008) defined CLV as follows:

“The sum of cumulated cash flows – discounted using the weighted average cost of capital (WACC) – of a customer over his or her entire lifetime with the company.”

CLV has been used in several American companies, such as Harrah’s, IBM, Capital One, LL Bean and ING to manage and measure the success of their business. (Gupta et al., 2006) CLV permeates several customer relationship management approaches, as one-to-one, loyalty, and database marketing (Blattberg et al., 2009). As a customer value metric it has been researched a great deal during the recent decade from both business to consumer and business to business point of view (e.g. Mulhern, 1999; Reinartz & Kumar, 2000, Rust, Lemon & Zeithaml, 2004, Kumar et al., 2008). It is seen to be a more superior metric while compared to other traditional metrics, such as RFM or PCV, both of which will be discussed further in this chapter. (Reinartz & Kumar, 2000)

The recent popularity of CLV has to do with the fact that as a customer value metric, CLV is the only forward looking metric that incorporates all the elements of revenue, expense and customer behavior into one while driving profitability. According to Kumar & Shah (2004), it is also seen to be consistent with the customer-centric paradigm of marketing. CLV can also be used to guide customer acquisition and retention processes. Naturally it provides a good insight on the value of the customers and therefore has an impact on firm value. (Blattberg et al., 2009)

CLV is similar to the discounted cash flow approach used in finance. There are however two key differences. First, CLV is typically defined and estimated at an individual customer or segment level. This allows us to differentiate between customers who are more profitable than others rather than simply examining average profitability. Second, unlike finance, CLV explicitly incorporates the possibility that a customer may defect to competitors in the future (Gupta et al., 2006).

CLV can simply be calculated as follows:

$$CLV_i = \sum_{t=1}^n \frac{(\text{Future contribution margin}_{it} - \text{Future cost}_{it})}{(1+r)^t},$$

Where

i = customer index

t = time index

n = forecast horizon (number of time periods considered for estimating CLV)

r = discount rate

Equation 1. Customer Lifetime Value (Venkatesan & Kumar, 2004; Kumar, 2008; Weir, 2008)

Calculating CLV includes determining the future contribution margin and future costs, both of which are adjusted for the time value of money. The components needed to compute CLV are marketing cost, discount rate and time period. The marketing cost refers to all marketing activities focused on specific customers, and in general it includes development and retention costs as well. The discount rate is needed on the formula because the value of money is not constant across time and money received today is more valuable than money received in the future. The discount rate is calculated by dividing the cash flow in time period t by $(1+d)^t$ where d is the discount rate. The discount rate depends on the general rate of interest and it usually is the same as the cost of capital for the company. It should be noted, that the term “lifetime” refers to the foreseeable future with the customer depending on the type of the industry. For example in the retailing industry, the prediction is usually done for the next three years which makes the time period three. (Kumar, 2008; Kumar et al., 2006; Kumar & Shah, 2004)

Kumar et al. (2000) see that for successful CLV calculation, the following inputs are needed:

- **Time period chosen for analysis**
- **The company's discount rate (cost of capital)**
- **The company's planning horizon (how many periods)**
- **They customer's frequency of purchase in each period, in the product category**
- **The average contribution from a purchase of a given brand**
- **The customer's most recent brand chosen**
- **The customer's estimated probabilities of choosing each brand on the next purchase**

Customer satisfaction, marketing efforts, cross-buying and multichannel purchasing have all been seen to have a positive relationship with CLV. Also the frequency and monetary value of previous purchases both generally have a positive effect on CLV, though there have been some contradictory findings on it. (Blattberg et al. 2009)

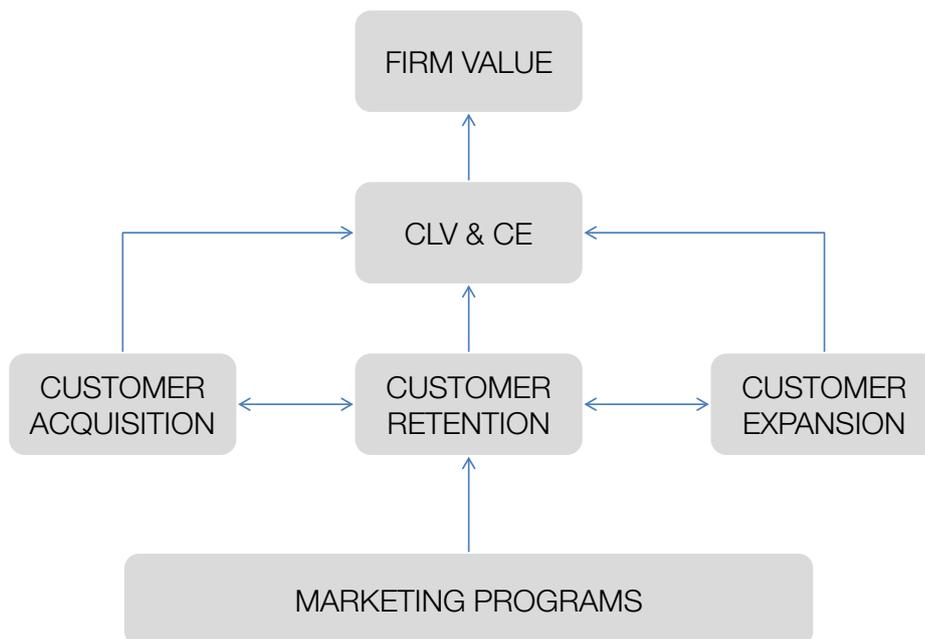


Figure 2 Conceptual framework for modeling Customer Lifetime Value (Gupta et al., 2006)

Gupta et al. (2006) created a conceptual framework for modeling CLV (Figure 2). Variations of the framework have previously been used by many researchers (Gupta & Lehmann, 2005; Gupta and Zeithaml, 2006; Kumar & Petersen, 2005; Rust et al., 2004). The purpose of the framework is to show that the actions by the firm influence customer behavior (acquisition, retention, cross-selling) which in turn affects customers' CLV or their profitability to the firm. CLV of current and future customers form Customer Equity, CE, which then eventually forms a proxy for firm value or its stock price. (Gupta et al., 2006)

The customer's relationship with the firm is not only formed through marketing actions or communication by the company. The customer is an active subject and exogenous customer characteristics such as demographics also affect the customer relationship. The relationship between a customer and a company is dynamic, where they both interact over the time. In Figure 3, Blattberg et al. (2009) attempted to create a conceptual framework for showing the antecedents of Customer Lifetime Value.

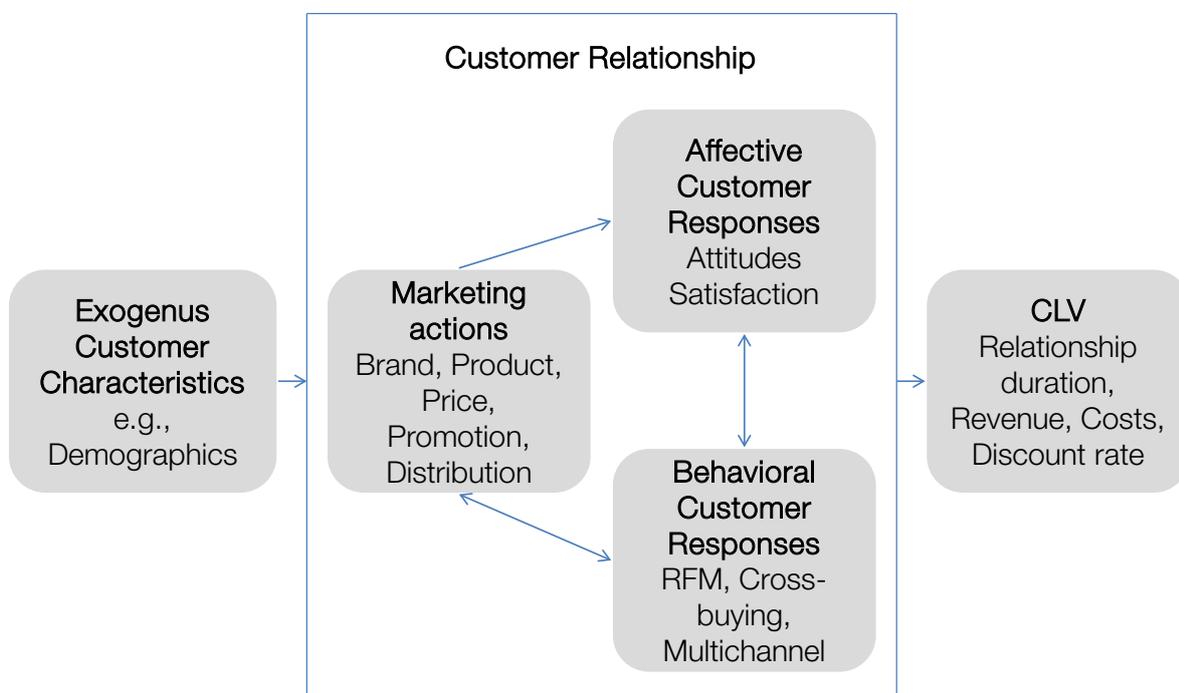


Figure 3. Conceptual framework of CLV's antecedents (Blattberg et al., 2009)

As showed in the framework, the company performs marketing activities, such as creating a brand concept, developing the products and designing the marketing mix. The marketing activities cause affective customer responses, such as the customer developing attitudes towards the brand or the product. Both marketing and affective responses lead to behavioral responses meaning purchasing the product. According to Blattberg et al. a behavioral experience can change affect (e.g. a lousy experience could change attitudes, beliefs and satisfaction) and future marketing (e.g. a response to a direct marketing contact usually prompts a series of future contacts). These interactions produce the series of cash flows that determine CLV (Blattberg et al., 2009).

The higher the CLV is, the more customers shop in multi-channel, does cross-purchasing, purchases special product categories, buys more frequently with the firm and the longer the customer stays with the firm. Kumar et al. (2006) found that the CLV follows an inverted U relationship with increase in return of prior purchases. Interesting is also the surprisingly low correlation between customer loyalty and future profitability and low correlation between stores' historic revenues and future profitability (Kumar et al., 2006) Intuitively one would expect a strong positive relationship between measures of customer loyalty and profitability, meaning that the more loyal customer was in the past, the more profitable they would be in the future. Yet the results of the Kumar et al. (2006) research show that a retailer cannot afford to use the traditional loyalty metrics to manage customer relationship, while using a traditional backward-looking metric may cause the retailer investing time and resources to cultivate relationship with the wrong or non-profitable customers. In order to manage both loyalty and profitability simultaneously, the retailer needs to select a forward looking metric, such as CLV to identify loyal customers who also show the promise of being profitable in future.

2.4.2. Customer equity

Customer equity is the sum of the customer lifecycle values of the company (Gupta et al., 2004). It can be calculated for example from customer acquisition, retention and gross margins (Zeithaml et al, 2006). Customer equity may be a useful tool in determining the value of the company, which can be done in many different ways. Typical during the recent years

has been to favor the shareholder's perspective in the valuation, where the value of the company is tied to stock performance. Customers can be considered as the most important intellectual property of the company, as it is the company's customers who generate the cash flows. The economic value of the company therefore depends on an intangible asset outside the balance sheet, the customers. (Gupta et al., 2004)

Customer equity is an interesting way to look at the customers, but it gives more insight to the top level management of how the business is doing rather than to the operational level where the decisions regarding the resources and profitability are made. It would be a great tool to have after the CLV measurement would be in place but without a more practical profitability KPI it doesn't serve its purpose in this case.

Through the customer equity measurement the company is able to get a clear picture of the size and value of their customers. Sometimes in a large corporate environment the end user can be forgotten and measuring the customer equity can give perspective for decision making and marketing activity planning.

2.4.3. RFM model

Recency, frequency and monetary value model has been used in direct marketing for more than 30 years. Given the low response rates (typically 2 percent or less) the model was created to target marketing activities at specific customers in order to improve the response rates (Gupta et al., 2006). It is a widely used customer selection metric. The RFM model has been very popular among the mail-order and catalog industries, where predicting the future purchase behavior of customers is crucial, and it has been estimated that 71 percent of the firms use RFM in their direct marketing efforts (Kumar, 2008). Through RFM segmenting the database is easy and as a metric it offers some sophistication and complexity as it combines different behavioral measurements of the customer.

The technique utilizes past customer information to evaluate and predict customer behavior and customer value, as follows: (Kumar, 2008; Kumar & Reinartz, 2012)

1. **Recency** is a measure of how long it has been since a customer last made a purchase with the company.
2. **Frequency** is a measure of how often the customer buys from the company in a certain time period
3. **Monetary value** is the amount that a customer spends on an average transaction.

The basic idea of RFM is to classify customers based on their RFM measure. To compute this score, it is necessary to first determine values for each of the different variables for each customer and then add them together based on the relative weights of the metrics. The relative weights can be decided by the manager or by using regression techniques. (Kumar, 2008)

In practice, the RFM analysis uses the customer database to create scores of how likely customers are to respond to an offer. RFM is often included in CRM platforms used by marketers which enables effortless and fast usage of the metric.

Kumar et al. (2006) pointed out several limitations to RFM model. First, it predicts behavior in the next period only. Second, RFM variables are imperfect indicators of true underlying behavior. This aspect has been ignored in RFM models. Third, RFM ignores the fact that customers' past behavior may be a result of firm's past marketing activities but this fact applies to other customer value metrics too.

2.4.4. Past Customer Value

Past Customer Value (PCV) model is built on the assumption that the past profitability of the customer indicates the level of profitability in the future too. The amount of purchases made in the past, determine the current value of the customer. Because the products and services have been bought at different times in the past by the customer, the adjustments to the current value of money have to be made. The cumulative contributions from past transactions represent the PCV of a customer (Kumar, 2008).

PCV can be computed using the following formula:

$$\text{Past Customer Value (PCV)} = \sum_{t=1}^T GC_{it} \times (1 + r)^t$$

Where:

i = number of representing the customer

r = applicable discount rate (for example, 15 percent per annum or 1.25 percent per month)

T = number of time periods prior to the current period when the purchase was made

GC_{it} = gross contribution of transaction of the i^{th} customer in time period t

Equation 2. Past Customer Value (Kumar, 2008)

The challenge in using past customer value is definitely in the way that it's backward looking. Some specific markets, such as real estate or car dealerships rely on big purchases done by the customer scarcely. This fact is however known in the field of business, and there past customer value can give insight to what level of purchases the company is able to predict from the customer in the future, but the metric is not able to give advice to who the marketing activities should be targeted during this time.

2.4.5. Share of Wallet

No matter to how many customer loyalty clubs they belong, customers don't always make their purchases in the same store, yet they typically patronize multiple stores. Share of Wallet (SOW) indicates the degree to which a customer meets his or her needs in the category with a focal brand or firm. SOW is used widely in retail businesses such as supermarkets and in financial companies mainly to identify whether consumers are loyal to a specific store or whether they shop around at different stores. For example, one consumer might shop 100 percent of the time at the same grocery store, whereas another consumer might choose to shop equally across four different stores, giving each store a 25 percent SOW. SOW can be

estimated either at the individual level or at the aggregate level. With respect to a customer scoring metric, it is almost exclusively measured at the individual level because measures at the aggregate level do not give managers enough information about the individual customers to make actionable strategies. At an individual customer level, SOW indicates the degree to which a customer meets his or her needs in a specific category with a focal brand or firm. (Kumar, 2008)

In retailing, there are two aspects of customer share: share of purchase (SOP) and share of visits (SOV) which although being highly correlated, are not necessarily interchangeable. Also in retailing it is commonly thought that through customer satisfaction and loyalty we are able to influence customer share of wallet, yet Mägi (2003) showed in her research that customer satisfaction only explain a fairly modest share of why customers patronize multiple stores. One of the big reasons behind this is that not all customers respond to the feeling satisfied or dissatisfied the same way. Loyalty program members are seen to have a higher share-of-wallet with the company than non members (Leenheer et al., 2007). Research shows that a higher the share of consumer spent is in a store, the longer the lifetime duration will be (Meyer-Waarden, 2007).

2.4.6. Comparison of selected customer value metrics

Each of the selected customer value metrics has positive traits to it although some of them are inherently backward-looking. CLV is been seen as a superior metric as it incorporates all the elements that drive profitability: revenue, expense, and customer behavior (Kumar, 2006), but it is not necessarily the most usable metric for all markets. It can be seen to work well for instance in fast moving consumer goods markets, where people buy another product to replace the one they have used but is it really invertible to describe the lifetime value of for example real estate customers? Once the house is bought, the customers are less likely to buy another one in recent years. Obviously while analyzing this kind of customers the time span of lifetime e.g. observation period, should be changed according to the business.

RFM on the other hand has been very useful and insightful in the catalogue markets. The customers who buy from catalogue on regular basis are more likely to respond positively for another postal mailing of a catalogue. In a business like this where the expense of marketing

actions per customer is significant, it is important to carefully segment and to analyze the behavior of the segments in order to get the most beneficial outcome of the marketing activity.

Past customer value gives us a look at what the customers have been worth for the company in the past. It can be seen as good metric too, but it does not give us the same view to the customers as using customer lifetime analysis would. A usable part of the PCV metric is the customer margin, which really forms the basis for analyzing the customer profitability. Especially while building segments of the customer base it is very useful to look at the customer margin and to see which ones of the customers are the most profitable ones.

Share of wallet is more difficult to calculate and not so relevant in all the markets. It has a significant competitive edge to it, as it compares the success and customer value against other retailers. In a way SOW is very different from the other customer value metrics presented in this chapter as it is more outside looking and inside. Also given the limited resources often faced in companies, calculating SOW as the first customer value metric might not be the most relevant metric to choose.

Customer equity as mentioned is the sum of customer lifecycle values of the company. In a way, it is not a KPI on its own, but a way to value intangible assets of the company. If a company proceeds with CLV measurement it can easily get the CE as a by-product.

2.5. Perceived benefits of customer performance measurement

Through customer performance measurement companies are able to achieve two types of additional information: the degree of profitability of individual customers and the distribution of profitability among the customer base. This additional information can be used to make further analysis regarding the costs and returns, risk and strategic positioning. (Raaij, 2005)

The benefits achieved through customer profitability calculations are many. The analysis allows using the obtained data in, for example, cost management and strategic marketing management. Analyzing the profitability of the customers reveals the connections between

functions and the use of resources as well as provides information for decision-making in the pricing and on concrete level in the customer loyalty program and planning the discounts. Through the analyses you are able to see why some customers are more expensive to serve than others. (Raaij et al., 2003)

A substantial risk in creating a model for customer profitability accounting is that it will become too complicated and the people who are going to use it see it only as adding to their work load, not making it easier. In a case like this the model might end up totally unused and it does not offer needed help for decision making process.

While analyzing customer value it is important to consider also the acquisition costs of the customer. If the customer acquisition cost is very high and the customer is not retained after the first purchases, it is clear that the customer lifetime value cannot be positive. (Jain & Singh, 2002 via Pfeifer et al.,2005). According to Pfeifer et al. (2005) it is important the customer acquisition costs are included to the customer life cycle value.

Through customer value measurement the company is able to find out which customers or customer groups are in fact unprofitable for the company. This enables the companies to make decisions about how to proceed with the customer. The fact that the customer is unprofitable to the company at the moment does not directly indicate that the client should be given up. Some customers hold potential and are valuable for the company in other ways than direct monetary value like new customers, opinion leaders and pioneers.

3. EMPIRICAL RESEARCH

Because implementing customer profitability metric can end up being a very large activity based costing exercise within a company, it is imperative that it is not only about building the model and filling in the data. Already in the beginning of the analysis it is important to bear in mind for what reason the information is produced and who in the company will use it and find it beneficial. Just as important is that the results will be analyzed and used in decision making.

Raaij et al. (2003) introduced a six phase model for implementing the customer profitability analysis (Figure 4).

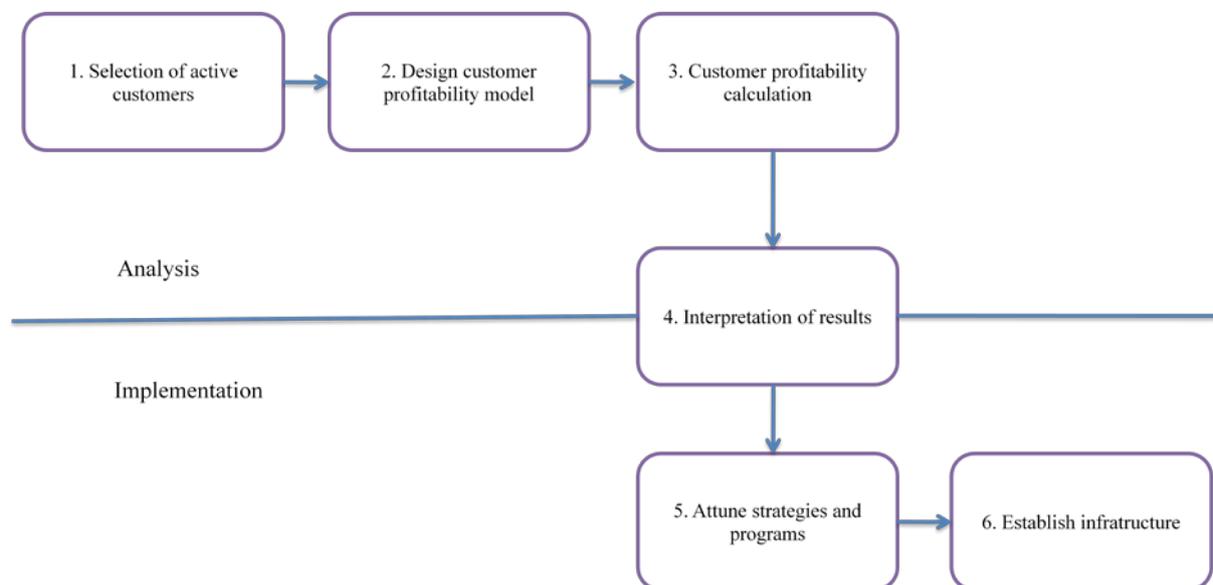


Figure 4. An overall implementation approach for customer profitability analysis (Raaji et al., 2003)

Selection of active customers: The customer databases are often full of customers, who no longer buy the products of the company. When the active customers are selected from the database, it is made sure that the costs are divided only among the active customers. Active customers are such that have made at least one purchase from the company during the period under consideration.

Designing the customer profitability model: In this step, the firm's activities are defined with according cost drivers for these activities. All the costs have to be divided to activities, and each of the activity needs to have a cost driver.

Customer profitability calculation: The actual implementation of customer value metric is the most time consuming part of the analysis because the information needed might be scattered around the company. It is however important to be able to include all the costs and information of each customer.

Interpretation of results: The profitability measures created through the analysis are very much dependant on the decisions that were made in the model design phase.

Attuning strategies and programs: The results from the analysis help in decision making in CRM strategy development work and also in pricing. Profitability measures can show that the service level of some customer segments might need be lower and that for some more resources can be used.

Establish infrastructure: To make sure that the customer profitability analysis is not left as a one-time accounting exercise or that the metric will all together be left unused, it is imperative to create infrastructure for successful future analysis. The people implementing the analysis and the ones using the information are often different people. The end user point of view needs to be considered when designing the analysis. By implementing a customer value metric and really taking the customer profitability into an active role, a company can achieve significant benefits. The success of the project is dependent on careful planning, precise calculation and analyzing the results.

The model presented here is not used in detail in this analysis as a full customer profitability analysis based on activity based costing will not be executed. This analysis focuses on implementing a relevant customer value metric in order to encourage the company to proceed with more detailed analysis and actions.

3.1. Research method

The CLV metric was chosen for analyzing the data. The actual analysis was done using both Excel and SAS Eg programs. In order to function in both of the programs, a random sample of 10 000 was taken of the whole population. Should the sample have been bigger, the analysis would not have worked properly due to the size.

The first research question in this thesis was how a key performance indicator can be constructed from the customer value data. To answer to this question, the customer value is first calculated through CLV implementation. Then the results are analyzed in smaller segments and an action plan for KPI implementation for the company is given.

3.2. Research data

The data has requirements for the results of the analysis to be relevant and for the company to be able to use the obtained new data to implement a customer-level strategy to guide decision making. Kumar & Petersen (2006) listed requirements for data and according to them, the data need to have four characteristics:

- 1) **The data need to be at the customer level.** Without a customer-level data, a firm cannot create a customer level strategy
- 2) **The data need to contain detailed information,** e.g. recency, frequency, past customer value, contribution margin, etc.
- 3) **The data need to span across a sufficient period of time,** meaning that at the minimum, the firms should use at least two to three years worth of customer information.
- 4) **The data need to contain marketing touch information,** including the type of marketing used, e.g. e-mail, postal mail, and the date it occurred.

The research data for this master's thesis is collected from the Myiittala customer loyalty program database. The requirements listed by Kumar and Petersen are somewhat met by the data. The data is at the customer level, and it is detailed. The data can easily be collected throughout the whole history of the loyalty program but given the scale of this analysis, it is not used here. Lastly, the data contains the marketing information on the customer level. The only limiting factor when comparing to these listed requirements is the lack of customer level margin that we are not able to draw from the database at this time.

The data used in the thesis represents the year 2012. In the following subsections the data will be described more in more detail.

3.2.1. Background

At the end of the year 2012 Myiittala concluded of 697,668 members. Roughly 53 percent of them came from Finland, 40 percent from Sweden, 5 percent from the Netherlands and 1 percent from Germany and Belgium (Chart 1). For this masters' thesis the research data consists only of the Finnish members as all markets act very differently and the member base would not be able to be used as one entity. The aim is to use the Finnish members as an example for analysis to be conducted throughout the member base.

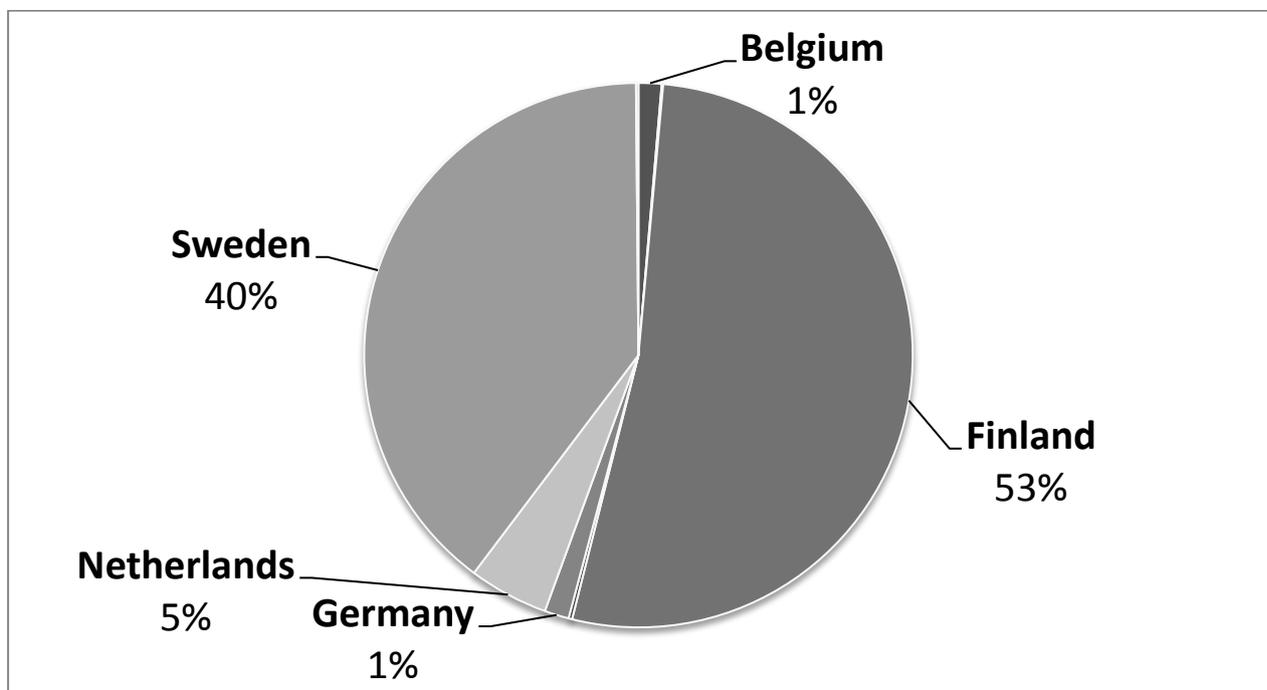


Chart 1. Myiittala members by markets, 2012.

To give insight to the background of Myiittala, it was started at the end of 2006, but officially kicked off at 2007. Fiskars has three different own retail channels, Iittala concept stores, Iittala outlets and Iittala webstore. In the beginning the program was available only for customers in Iittala stores, not at the outlet channel or the webstore. The aim was to recruit true Iittala lovers, those members who would not be sensitive to prices and would see the program benefits, the inspirational content for example, adding value to their everyday lives, in other words it was intended to create and preserve the attitudinal loyalty of the members.



Chart 2. Recruitment of new Myiittala members on yearly basis.

In 2009 (Chart 2) we can see an immense growth on the amount of the members. That is when the strategy changed and the loyalty program became available for all channels, including the outlets. The outlets differ from the stores as channel mainly on the offering. The outlets sell discontinued products and second quality, both on discount. The stores concentrate on premium goods and maintain a higher price level than outlets. In 2009 as the strategy changed, the loyalty program was not only offered at the outlet channel but also the benefit of the month was introduced to the members. There is no visibility to the figures, but the conclusion can be drawn from the actions that the change in the strategy must have affected the customer margin within the Myiittala program.

The change in retail strategy also affected the target of the loyalty program. As the benefits to and communication towards the members became more tactical, also the target to preserve the attitudinal loyalty changed into behavioral loyalty of the members. This change turned the loyalty program into a sales tool.

3.2.2. Retail key performance indicators

The work to create and maintain a group of relevant key performance indicators started in 2005 as the chain of Iittala stores and outlets grew. At the moment in Fiskars Home, the basic key performance indicators used to follow the performance of the stores include naturally sales, sales per square meter, gross margin, number of visitors, conversion rate (the number of receipts divided by the number of visitors), number of receipts, average purchase, and contact rate (the contacted visitors divided by the number of visitors).

To follow the performance of the Myiittala members a few more KPIs are introduced:

- **All members per primary location**

The number of members who have this specific store as their primary shopping location (store, outlet or webstore), all recruited members since the beginning of the program.

- **New members per recruitment location**

The number of members the location recruited during the past month.

- **Members who made purchases**

The number of members, who made purchases during the past month.

- **Myiittala receipts**

The number of Myiittala receipts acquired in the location during the past month.

- **Myiittala sales**

The amount of sales brought by Myiittala members during the past month.

- **Quantity of goods sold**

The quantity of products sold to Myiittala members.

- **Average item quantity per receipt**

The average quantity of products on a Myiittala member receipt.

- **Myiittala sales percent**

The portion of Myiittala sales versus anonymous sales within a location.

- **Myiittala average receipt**

The amount of an average Myiittala receipt within a location.

These KPIs are counted and analyzed on monthly basis. They are compared on three different levels: store to store with in a market, market to market, and Myiittala members to anonymous shoppers. For example it is known, that according to the location of the store, the

portion of Myiittala sales can vary from 20 percent to over 85 percent. The reason behind this fact is that some of the stores are located on touristic areas, where the share of anonymous sales is far larger than in areas where the store personnel are acquainted with most of their customers.

The biggest variation with different markets is with the average receipt. For example in Belgium the average Myiittala receipt is 80-90 Euros depending on the season and in Finland the average receipt is 45-55 Euros. The reason behind this is mainly cultural, but also has to do with the frequency of the store visits. In Belgium the shoppers visit the store a little more seldom than in Finland. In fact, the average purchasing frequency in Belgium in 2012 was 1.9 while in Finland it was 2.3.

Within markets the most interesting comparison is done between Myiittala members and the anonymous shoppers. We see that the average purchase of the Myiittala members is higher and also that per item the anonymous shoppers buy less. The share of Myiittala member sales and anonymous sales varies as mentioned. Some stores have recruited less new members than others. It is often discussed how big of a difference can the store personnel make on the sales just by recruiting more members as we see that their receipts are higher.

3.2.3. Member benefits

The Myiittala members receive monthly benefits through the loyalty program. The benefits can be a right to pre-order a product that is not yet available for everybody, but usually the benefits are monetary. From the member point of view, they receive one benefit per month which is usually a 20 percent discount of a selected item (Figure 5). In addition the members have member shopping days twice a year, when they receive 10-20 percent discount of the whole collection.



Benefit of the month.

Kaasa
 Helder of grijs € 295 € 369
 Rood € 375 € 469 ➔

Kaasa is een moderne haard, geïnspireerd op een oud baken. 'Kaasa', ooit een belangrijk referentiepunt voor Finse zeelieden, vormde de inspiratie voor deze traditionele en tegelijk moderne haard die doet denken aan een open vuur.

Figure 5. Benefit of the Month, Myiittala. Example from the Dutch market.

The success of the benefits is followed on country level. The stores have goals for sales and it is measured how well they achieve those goals. The success is very top line driven though, meaning that it has not been seen significant enough to measure a campaign specific margin or ROI, Return On Investment. Recently the retail marketing department started calculating the marketing ROI for campaigns but it has not been taken to a Myiittala member benefit level.

The biggest benefit the members get are the vouchers that are sent out twice a year. The vouchers are created according to the member purchases and shopping at any Iittala store, outlet or webstore will increase the amount of the voucher.

The vouchers have four limits:

- **6 month purchases 150 Euros – Voucher 10 Euros**
- **6 month purchases 250 Euros – Voucher 20 Euros**
- **6 month purchases 500 Euros – Voucher 50 Euros**
- **6 month purchases 1000 Euros or more – Voucher 100 Euros**

The vouchers are written in February and August and they are usable in all stores, throughout Europe. As the maximum amount of a voucher is 100 Euros, it means that at highest one is able to make purchases at 10 percent discount at the stores. What has not been regulated regarding to the vouchers is what they are spent on and for what they are earned. A horror

scenario from the loyalty program management point of view would be a member, who would buy only highly discounted products, get a voucher according to the purchases, and then use the voucher on highly discounted products again.

The members vary a great deal within the program. It is known from the store practice that some members are not sensitive to price, and they purchase products when they need them, not when they are on sale. On the other side are the members who only purchase products that are discounted. Two members might have the same high yearly purchases, yet the other one could've bought all on special offer and the other one on normal price. To the customer loyalty program these two members are equal as we have no visibility to the member specific customer margin.

3.2.4. Data description

The data used for analysis exists of Myiittala member purchase history from 2012. The reason for using data from 2012 is because at the beginning of the analysis newer data was not available whilst Fiskars had just recently acquired SAP ERP-system and not all of the data warehouses or POS systems were compatible with it right in the beginning.

The original data had 165 000 observations with the following information about the members:

- identifier
- sex
- age
- postal number
- city of residence
- total purchases 2012
- online purchases 2012
- number of receipts
- targeted marketing activities
- year of joining the program
- largest bought category
- largest bought category in Euros

- earned vouchers
- used vouchers
- average margin in brick & mortal
- average margin online
- marketing expenses for activities

As already mentioned, a random sample of 10,000 observations was taken. Of the 10 000 52 negative outliers were deleted straight from the beginning. Those were observations where the customer had not bought anything yet for some reason some activity had been marked on their information. As these customers do not count as active customers, they were deleted as outliers.

On average the remaining 9 948 customers had total purchases of 131.84 Euros on yearly basis and 64 percent of those purchases they spent on one single product group, for example Aalto or Teema. The average purchase of these customers was 48.10 Euros and the average purchase frequency was 2.7. Only 6.7 percent made purchases online at our webstore. On average, the customers were contacted with a marketing message 3.5 times. The average age of the members was 48.4

Duration of the memberships was over 18 months for 53 percent of the members. 32 percent had been in the program for 12-18 months and 15 percent less than 12 months and regarded as new in that sense. 53 percent had had purchases within last 12 months and 32 percent had not had any purchases at all and were regarded as passive. 14 percent were about to fall passive, with no purchases within 24 months.

61 percent of the members had given marketing permission for email and 99 percent for postal mail. 18 percent had permitted mobile phone marketing.

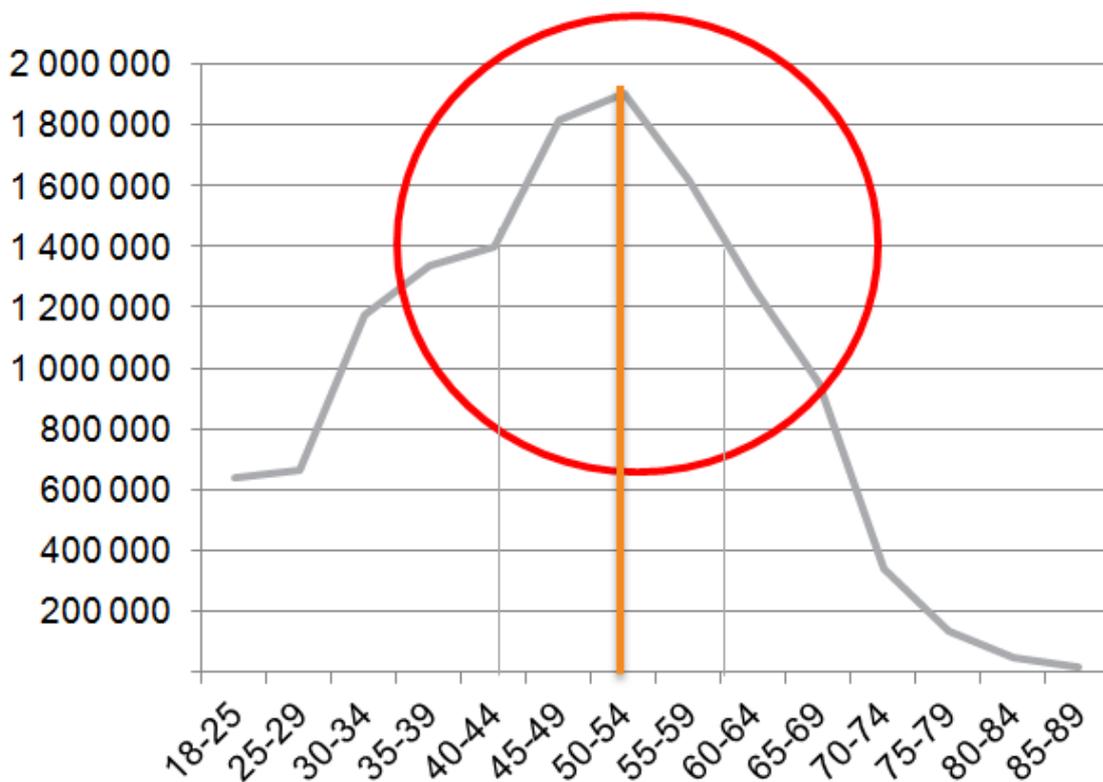


Chart 3. Distribution of Myiittala member sales according to different age groups in Finland in 2012.

Chart 3 shows how sales are distributed through age groups in Finland. We see that the largest customer group is the middle-aged and, we also know they are mainly women.

3.3. Customer value metric implementation

The data acquired from the CRM system is not solid for every kind of customer profitability metric implementation. In the literature review we learned how superlative CLV is compared to other metrics. Myiittala data does not however offer all the needed information for customer lifecycle value measurement. Ideally, we would be able to obtain a customer level margin from the data knowing the true return of the customer, yet during this time we are only able to use the market level average sales margins. Despite this fact, the CLV measurement will still be implemented even though the results will not give as truthful picture as

anticipated. Through the exercise we hope to be able to influence the company to get the customer margin report in place in their cash register system.

Before being able to implement the CLV measurement to the data, some minor calculations had to be made. First, the marketing costs were divided to the marketing activities in order to show the actual cost of the action. The marketing costs included all the expenses related to postal mailings, but did not consider the internal worked hours. Then, the customer margins were calculated by using two average sales margins: 61 percent for brick and mortar, and 55 percent for the webstore. The margins were used according to the share of purchases in-store and online.

Measuring the CLV is possible with a number of different equations, which are all more or less the same yet others more complex than the others: for Myiittala database purposes the equation 1 already presented in section 2.4.1 was used.

$$CLV_i = \sum_{t=1}^n \frac{(\text{Future contribution margin}_{it} - \text{Future cost}_{it})}{(1+r)^t},$$

As literature suggested, the CLV was counted for three years period for each customer. The discount rate used in Fiskars Group was 7.9 percent in 2012.

For customer x the calculation was conducted as follows:

$$\frac{(\text{Contribution margin} - \text{cost})}{1,079^1} + \frac{(\text{Contribution margin} - \text{cost})}{1,079^2} + \frac{(\text{Contribution margin} - \text{cost})}{1,079^3}$$

This calculation was executed for 9 948 observations and the data was then analyzed in SAS Eg by describing the CLV variable. From Chart 4 in Distribution of CLV 1 it can be seen that most of the observations fall close to the right side and the curve is decreasing strongly. By further analyzing the distribution of the CLV, we see that it is not according to the Pareto

principle, according to which 20 percent of the customers bring 80 percent of profits. In the Myiittala CLV data, 40 percent of the members bring 80 percent of the profits.

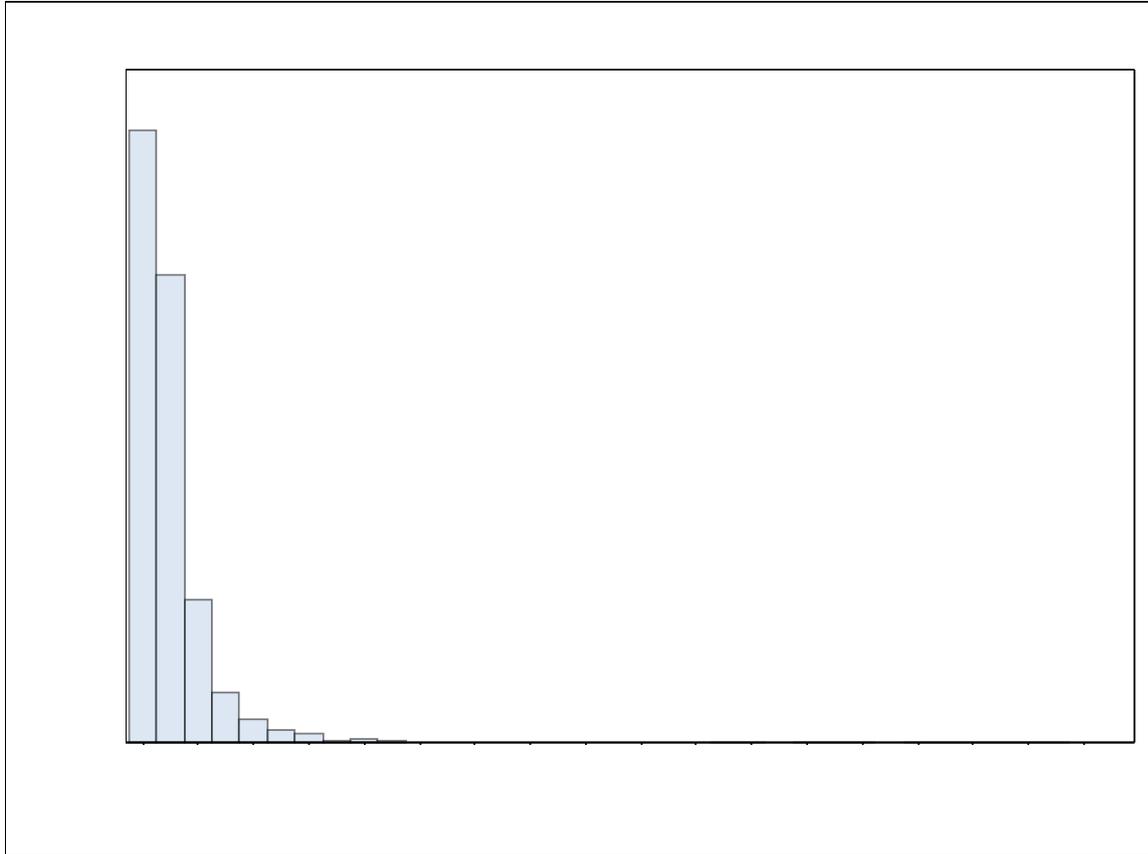


Chart 4. Distribution of CLV 1.

The observations on the right side are the most profitable customers (Chart 4). They are an interesting group to analyze. As the equation used in this analysis does not take the retention rate in consideration, we cannot really know how these people will act in the future. In any case, they are a group that should be kept an eye on and given special services in order to keep them as customers.

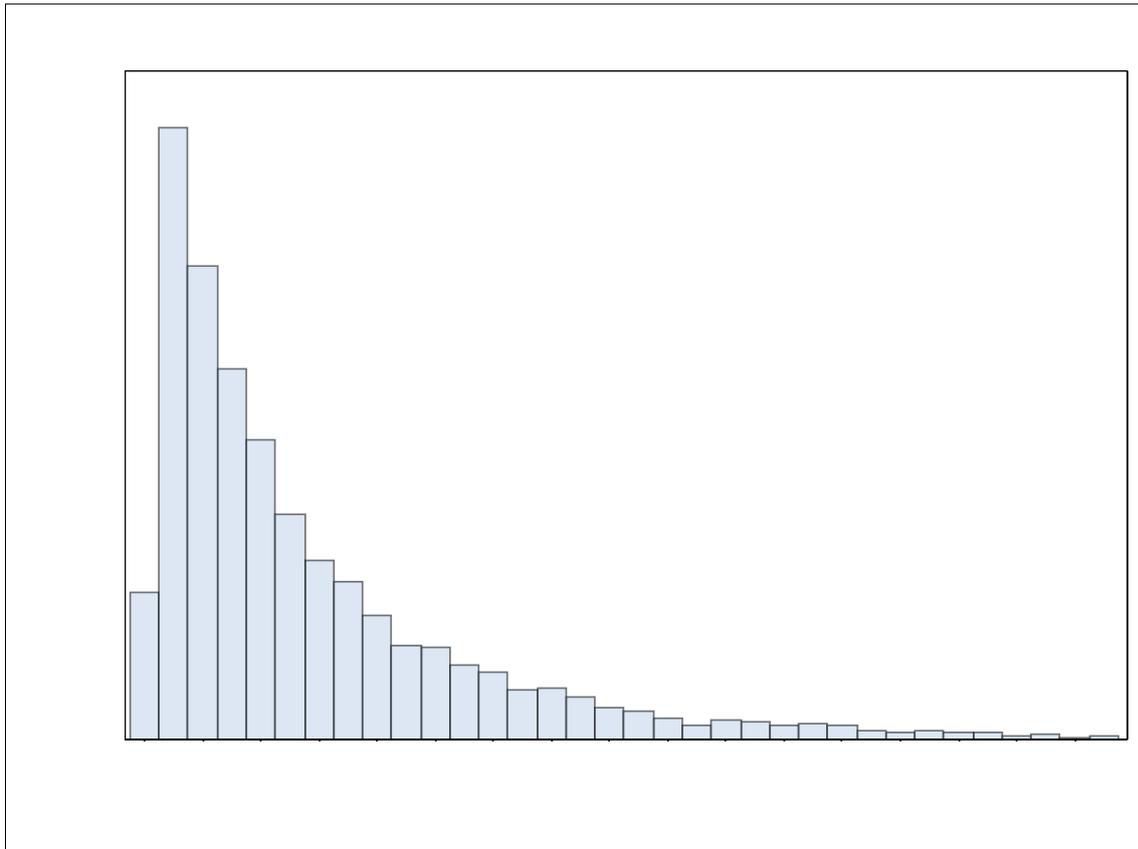


Chart 5. Distribution of CLV 2.

However in order to draw a better picture and to gain deeper understanding of the distribution of the CLV, all the members who bought for more than 1000 Euros were taken out. There were 204 observations removed at this point. By removing the observations the result becomes more relevant and easier to analyze (Chart 5). We see that a very large number of observations fall to the lower end of CLV. In Table 4 we see the simple summary of statistics concerning the distribution of CLV. The mean is 169,64 and standard deviation, which tells us how much the members of the group differ from the mean value of the group, is 173,86.

Analysis Variable : CLV				
Mean	Std Dev	Minimum	Maximum	N
169.6438412	173.8574146	-2.8584460	998.5582018	9743

Table 4, Analysis Variable: CLV

As seen in the Table 4, some members have a negative CLV. This is due to the fact that they have not bought anything during the year yet marketing activities have been targeted to them creating costs. Members might also have only used vouchers created according to the purchases of previous year and therefore no actual sales have been created.

The customers were then divided into four groups according to their value:

High group: value between 6966 – 1000 Euros

High middle group: value between 999,99 – 169,70 Euros

Low middle group: value between 169,60 – 61,06 Euros

Low group: value between 60,99 – -2,86 Euros

The high group had 3568 observations and the middle group 3349 and the low one 3032, so they were all pretty much similar in the size. After making this deviation the three different groups were looked at on their own. While seeing how the marketing budgets are divided for these groups an index of marketing resources was created by dividing the total amount of marketing allocations

High: $523 / 204 = 2,56$

High middle: $7357 / 3364 = 2,19$

Low middle: $5826 / 3348 = 1,74$

Low: $4195 / 3031 = 1,38$

The high group had had the highest portion of marketing allocations, even more than triple when compared to the low group. We can see that even though Iittala does not have a RFM or CLV analysis in place, the marketing department is still working with segmenting according to the purchases. The low segment really did have a low CLV. 61 Euros for three years means approximately 40 Euros of sales each year while the average purchase of a customer within Myiittala is 48 Euros. The low segment is not worth the marketing resources but it should be activated somehow for example e-mail marketing is fairly low in cost. The matter to think thoroughly in advance though is the relevancy of the subject of marketing to these members in the low group. This offers a new path for research, mainly from the marketing point of view.

If the low segment offers challenges to the marketing department, so does the High group too. How to keep the big spenders active? What are the reasons behind their high spending? According to Reinartz and Kumar (2003) the profitable customer lifetime duration is positively related to the customer's spending level. ...

Table 5 shows the key performance indicators for each of these groups that were formed by their lifetime value measurement. It can be seen that the High group has a remarkably high average purchase compared to the other groups. The high group is active on the receipt level too, but the average margin is comparably low. This has to do with the fact that the High group earns vouchers for its purchases more often than the other groups, in fact only customers in the High group and some in the High middle group are eligible for the vouchers. In the High group 87 percent of the vouchers (worth of 13,580 Euros) are used while in the High middle group the percentage is only 65 (of 30,250 Euros).

	Average purchase	Average number of receipts	Average number of marketing activities	Average margin
High	176,05	10	10,4	55 %
High middle	71,2	4,3	8,3	58 %
Low middle	42,73	2	6,8	58 %
Low	19,8	1,2	5,7	53 %

Table 5. Key performance indicators per CLV groups.

The High group definitely represents the active customers, who not only buy a lot but are also aware of their benefits. Proportionally the high group is very small, representing only 2 percent of the whole customer base. The other groups are fairly equally sized, where the High middle group represents 34 percent, Low middle also 34 and the Low group 30 percent of the customers.

The High middle and Low middle group both have same average customer margin, even though the average purchase of the High middle group (71,20 Euros) is higher than the Low middle group (42,73 Euros). This is due to the fact the marketing efforts towards the Low group were lower and also because the purchases in that group were not high enough to be entitled for a voucher.

It is important for the company to actively follow these different segments and also to combine them with other segmentation criteria they have in place. Following the customers' age within the company accompanied with the profitability development would be very interesting and eye opening. By customer age I mean the time the customer has been with the company, not his or her literal age. For example from other analysis done with the Myiittala database we see that the average purchase of the customer changes throughout the years and it is generally higher in the beginning. To follow this kind of information for several years would definitely give good information for marketing strategy development.

In a large business corporation like in Fiskars development cases do not move forward very quickly. In order for Fiskars to continue with the customer value metric implementation the first step would be to clearly state the definition for the KPI needed and then to create a mock up of the report wanted. This information would be used as basis for creating a business case for acquiring the new customer metric. Through the information gathered in this master's thesis it is strongly recommended that the customer margin report is acquired and included in the daily dashboard that guides the business. Only this way Fiskars is able to dig into the possible problematic customer segments and to proceed accordingly.

4. CONCLUSIONS

The customer data collected from the Myiittala customer loyalty database is a great source for information to be used to drive the business and to develop marketing resource allocation strategies. However in order to manage the customers profitably, three rules need to be followed according to Ryals (2008):

- 1) Understand the profitability of customers
- 2) Manage the customer portfolio for profit
- 3) Acquire more profitable customers

Although the calculations itself might be easy to execute, the actual measurement of profitability of customers is a lot more difficult than the profitability of products. Especially while keeping in mind that people are active subjects and the products, services and stores they favor might and will change through time. Because of this fact, the customer lifecycle value might be difficult to calculate for a very long time ahead. Especially according to product areas, which are not fast moving consumer goods like Fiskars products.

Important is also to define the profile of a profitable customer and try to acquire more of these customers in the future too. On a store level it is done the easiest by demographic variables, such as age and sex. In Finland we know that our most active customers are women in their 50s and therefore the recruitment of these customers should be emphasized on the store level.

Some of the stores that Fiskars has are in prime locations, such as the Iittala Flagship Store on Pohjoisesplanadi in Helsinki. These stores can serve as the means to entice new customers and an anchor to hold the existing ones. Importantly, Kumar et al. (2006) pointed out that the stores can never be more important itself than the type of customers they reach when it comes to managing store profitability. And when the customers are reached and in the store, it is the staff who are responsible for daily contact with customers and whose attitude towards the loyalty program is constantly communicated onwards to the customers. (Smith et al., 2003) With this point of view, the importance of staff and their attitude cannot be emphasized enough. It is the staff that helps to build both the attitudinal and behavioral loyalty and it is the staff who in the end create the relationship with the customers and communicate the brand message.

The results of the analysis are as expected yet surprising. The program has been seen as a successful marketing initiative but looking at the results we can see that there is a lot to be done. A very little amount of members are really performing well and a big portion of them do very poorly. It is imperative to carefully consider from both business management and marketing management point of view how to allocate the resources of Myiittala in the coming years and how to keep on recruiting new customers.

Because only a sample of the data was used we don't get a full picture of the situation as analyzing the whole data might effect on the result by making the segments not so clear. It is recommended to run the analysis by using the whole data.

Email marketing is fairly cheap an for a while in business environment it was considered even free, but when the customer base reaches a certain critical limit, even storing the information has a price tag and following the principals of activity based costing, nothing is really free. Even though the resources allocated for e-mail marketing are usually significantly less than for postal mailings, creating the email through the CRM system acquired for that purpose does not come for free. These are costs that are often left if not unnoticed then rather unconsidered. In a big corporation they often fall under some other costs and are rarely allocated to the customers. It is recommended that also these costs are looked into more closely and woven in to the calculations. This way a fair picture and understanding of the actual costs can be reached.

What is highly recommended through this master's thesis project is that the company acquires a new KPI for its cash register system. It was understood early on that in order for the CLV measurements to be correct, and for the analysis really to give insight for decision making within the company, the customer margin KPI is needed. After that, Fiskars is truly able to use its customer profitability data for segmentation, targeting, and positioning. Through the new KPI Fiskars is also able to compare the profitability of the anonymous customers with the Myiittala members. This should over all give a very good insight on how the whole program is doing.

According to a yearly study run in Australia regarding Loyalty programs, program features and benefits that consumers prefer are financial, although the customers consider surprise and delight also very positive (Posner & Noble, 2013). Another way to move forward and develop the Myiittala program for profitability could also be through customer delight. The road for giving discounts has been seen and as the results showed, it is not the most profitable path to stay on. New marketing initiatives, that are relevant for the customers are needed for loyalty programs to survive in the fierce price competition. What they are, is a subject of a new investigation.

4.1. Limitations of this research

Among the main limitations to this work is the fact that the customer lifetime values calculated for the customers are not precise as discussed earlier because of the lack of the customer level margin. Another limitation to the analysis is that only one equation was used for the calculation. Using several versions of the CLV equation would have given a larger picture and better understanding of the situation.

Also in order to gain deeper analysis of the reasons behind the customer value distribution among the Myiittala members, it would have been useful to run the measurement using another metric, such as RFM. Through comparing these two metrics a good insight to the customer value would have been gained in order to guide the marketing resources allocation. It is recommended for the company to run the RFM analysis also.

Using the random sample of 10,000 instead of the full data limits the results and it is to be taken in consideration that the results using the whole data might differ from this result. However in order for the analysis programs to work, it was needed to limit the number of observations.

Despite these limitations we see that the results help decision making and show that Fiskars is on the right path while wishing to have a new key performance indicator for customer value to drive its business profitably.

4.2. Future research directions

In the case of implementing a customer value metric to the Myiittala customer loyalty program, it became evident already in the beginning how vital and imperative it is for a company to have visibility to the customer level margins. All calculations executed in this masters' thesis rely on the average sales margin of the retail chain and webstore. This leads to a misleading end result: we are not able to pin point those customers, who only buy discounted products, nor are we able to see what the real reason to join the program is for the customer.

A number of research directions rose during the master's thesis project. First, it is highly recommended that as soon as the new KPI for customer specific margin is in place, Fiskars runs another analysis regarding customer lifecycle value and customer profitability. The same analysis should be done in other markets as well in order to gain a full picture of the whole program and how the profitability falls into different markets and countries. As different markets have different pricing policies, it can be seen that comparing the profitability between the different markets would be a very interesting and insightful exercise.

Secondly, as Kumar (2006) pointed out, the relationship between loyalty and profitability is much weaker and more nuanced as claimed; it would be interesting to study this relationship within Myiittala too. The last time the Myiittala members were asked about their preferences or ideas was when the program was in the designing phase. It would be good to interview some members in order to find out more about the relationship between loyalty and profitability. Through this exercise the company would gain information on how to develop the program further and what benefits the customers really value other than the monetary ones..

Thirdly, once the data is in for individual customer profitability and value, and the relationship between loyalty and profitability is analyzed, it would be interesting to have insight into the financial situation and personal preferences of various customer segments. This could be done by enriching the existing data with for example Fonecta's customer behavioral data. Through enriching the data the company would be able to see where their most profitable customers live, what are their interests and values, where do they shop and how do they behave online. However, before doing this it should be determined for what this

information is needed for and how would the company use it in the decision making. Managers often wish to have more information and through customer loyalty programs a big amount of data is already collected and not used. This is an important matter to keep in mind while designing new ways to gather and maintain information. The first question should always be that what you would do differently if you had this information.

Fourth research path and a place for improvement within Fiskars can be seen in category management, where the Myiittala database can help to improve the inventory policy, as well as guide the pricing and promotion policy. The need for the category management within Fiskars retail is evident and also advocates the investment in the customer margin report acquisition in the cash register system.

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