Henrich Nyman

Service Profitability
An Augmented Customer Lifetime Value Approach

Helsinki 2013
Service Profitability: An Augmented Customer Lifetime Value Approach

Key words: service logic, value facilitation, value proposition, service sales, service provision

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Hanken School of Economics
ISSN-L 0424-7256
ISSN 0424-7256 (printed)
ISSN 2242-699X (PDF)

Edita Prima Ltd, Helsinki 2013
ACKNOWLEDGEMENTS

Finally, I am extremely happy and relieved to be at this point of my endeavour towards finishing my doctoral thesis. This challenging, but rewarding journey would not have been possible without support by a number of people to whom I would like to express my greatest appreciation. First of all, I would like to extend my deepest gratitude to Professor Tore Strandvik, my supervisor and teacher. I have enjoyed and benefitted from his guidance, immense knowledge and reassurance in frequent discussions during the entire journey. Thank you, Tore, for your patience and for pushing me until the sweet end. I have learned a lot from you.

I was privileged to have Professor Lynette Ryals from Cranfield School of Management at Cranfield University, UK and Professor Kent Eriksson from KTH Royal Institute of Technology, Stockholm, Sweden as pre-examiners of my dissertation. I am extremely grateful for your expertise, thoroughness and invaluable comments for improving the quality of my thesis during the review process. I am especially honoured to have Professor Lynette Ryals as the opponent during my doctoral defence. I very much look forward to an inspiring discussion.

There are several members of the faculty at the Department of Marketing at Hanken that I would like to express my warmest thanks to. I would especially like to thank Professor Christian Grönroos, who I had the privilege to work with as CERS Award Manager. Christian provided me with an office at CERS at an early stage of my doctoral journey, in addition to funding from the Göran Collert Foundation and CERS. Thank you, Christian; you have inspired me to deepen my understanding of service management and relationship marketing. I would also like to especially thank Dr. Pia Polsa for her warmest support during my research process. Thanks to Pia, I took a LISREL course that I have had great benefit from. I would also like to thank Professor Veronica Liljander, Professor Maria Holmlund-Rytkönen. I am especially grateful for your criticism, feedback and discussions at several research seminars.

I would especially like to thank Dr. Johanna Gummerus and Apramey Dube for insightful and supportive comments on an earlier draft of my manuscript.

To my closest colleagues and friends at Hanken and CERS, I would like to express my warmest appreciation: Mikael Vainionpää, Andreas Persson, Ivar Soone, Jonas Holmqvist, Pekka Helle, Anne Rindell, Åke Finne, Oskar Korkman, Jacob Mickelsson, Natasa Golik Klanac, Minna Pura, Catharina von Koskull, Anu Helkkula, Maria Ekström, Robert Wendelin and Gustaf Medberg. It has been great fun to learn to know you and experience the research journey with you; at Hanken, at conferences and at times outside academia. There are so many anecdotes from numerous cheerful moments, that could be disclosed, but I keep it short: Thank you all.

In addition, I would like to express my sincere gratefulness to my co-authors of several conference papers. Thank you, Jacob Mickelsson, Tore Strandvik, Robert Wendelin, Mikko Laamanen, Natasa Golik Klanac, Henrik Helenius, Jaakko Aspara and Henrikki Tikkanen.

I would also like to express my thanks to all other past colleagues at CERS and the Department of Marketing. Although not mentioned here by names, I still have you in mind and truly appreciate your companionship.
I am greatly thankful for the opportunity to have worked as a researcher in the Tekes funded research projects: StratMark and SEDiMENT. Especially, I would like to thank Professor Jaakko Aspara at Aalto University School of Economics for close co-operation on a couple of journal publications within StratMark. I would also like to express my warmest gratitude to Heikki Karttunen and Kari-Juhani Lehtonen at Suomen Myyntikonttori for a highly fascinating research journey within the SEDiMENT research project.

I am extremely grateful for all financial support during my years as a doctoral student. I would like to express my gratefulness to the following organisations for funding my research and for financing trip to research conferences: Svenska kulturfonden, the Göran Collert Foundation, the Hanken Foundation, Waldemar von Frenckell Foundation, Liikesivistysrahasto, Marcus Wallenberg Foundation, Finnish Foundation for Share Promotion and Centre for Service Management and Relationship Marketing (CERS).

I would also like to express my warmest gratitude for the support and encouragement from my friends and family.

Especially, I would like to thank my friend and former colleague Dr. Anna Ovanfors for encouraging me in the first place to start my doctoral journey. I would also like to express my warmest thanks to my colleague and friend Tuija Arola for a continuous vigorous support during my final stages in the research endeavour.

Above all, I would like to thank my brother Kenneth and closest friends Patrick, Roger, Peppe, Micke and Daniel, as well as their families for sharing numerous memorable moments with me and my son. Eventually, I would like to thank my parents for always supporting me in my efforts and escapades.

Espoo, November 25th, 2013

Henrich Nyman
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1 INTRODUCTION

This chapter starts by presenting the purpose of the thesis. Second, the research problem, including the rationale for studying service profitability, is discussed. Third, the research questions are put forward. To finish, delimitations, the positioning of the thesis and the key concepts are addressed.

1.1 Purpose of the thesis

The overall purpose of the thesis is to develop a theoretical framework for conceptualising and operationalising service profitability using an augmented customer lifetime value approach.

1.2 Research problem

This section starts with a discussion on the rationale for adopting a service logic perspective on profitability and, thus, for studying ‘service’ (singular) profitability as a divergent concept from ‘services’ (plural) profitability. For the uninitiated into the recent theoretical development within service marketing (see e.g. Gummesson, Lusch, and Vargo 2010; Grönroos 2008; Heinonen et al. 2010; Maglio and Spohrer 2008; Normann 2001; Vargo and Lusch 2004a, 2008), the concepts of service and services might at a first glance appear indistinguishable. However, there is more to the concept of service in contrast to services and, hence, to the rationale for conceptualising service profitability as distinct from services profitability, than just omitting the letter -s from the word ‘service’ (e.g. Edvardsson, Gustafsson, and Roos 2005; Gummesson 2007).

In effect, a paradigm shift is taking place in the service marketing literature—“exiting services and entering service” (emphasis added), as Evert Gummesson (2007) expresses the transformation. Essentially, an increasingly growing body of the service marketing literature (e.g. Edvardsson et al. 2005; Lovelock and Gummesson 2004; Vargo and Lusch 2004b) challenges the traditional services paradigm, in which services have been characterised as different from goods by four distinguishing ‘IHIP’ characteristics: ‘intangibility’, ‘heterogeneity’, ‘inseparability’ and ‘perishability’ (e.g. Fisk, Brown, and Bitner 1993; Swartz, Bowen, and Brown 1992; Zeithaml, Parasuraman, and Berry 1985).

Specifically, Edvardsson et al. (2005) conclude that the definitions of the IHIP characteristics are too narrow and outdated as generic service characteristics. In addition, Lovelock and Gummesson (2004) conclude that the IHIP characteristics are not universally applicable to all services during all stages of the service process and fail to set apart services from goods in general. Similarly, Vargo and Lusch (2004b) argue that the IHIP characteristics are still based on the same goods- or manufacturing-centred logic that they are claimed to differ from.

In contrast to services (plural) as a distinct category of market offerings, the contemporary perspectives on service (singular) represent various ways of thinking and, thus, logics or mental models on value creation from the customer’s point of view, founded on ‘value in use’ (Edvardsson et al. 2005; Grönroos 2006; Gummesson 2007; Heinonen et al. 2010; Vargo and Lusch 2004a). However, in emphasising value creation from the customers’ perspective, the contemporary perspectives on service pay
considerably less attention, if at all, to the financial value of service from the service provider’s perspective and, as a result, to service profitability. A notable exception is Grönroos (2007), who calls for distinct profit logic in a service context compared to a manufacturing context.

Purposely, this thesis adopts a provider perspective on service by conceptualising service as consisting of two distinct processes: the service sales process and the service provision process. Nevertheless, the customer perspective on these processes is imperative for the financial consequences of the service. From the customers’ perspective, the service sales process deals with value propositions, which indicates that service offerings are not the final result of an economic activity but should add value for customers (cf. Gummesson 2007). Moreover, from the customers’ perspective, the service provision process comprises value facilitation, i.e. the facilitation of the customers’ value-creation activities (cf. Grönroos 2006, 2008; Woodruff 1997). Consequently, this thesis argues that the concept of service profitability could be characterised as the financial outcome of service sales and service provision, wherein the service provider’s facilitation and support of the customers’ value creation activities is paramount.

1.3. Research questions

Next, the specific research questions are presented. The research questions are addressed in one or several essays. The first research question is dealt with in all three essays. The second research question is addressed in essay 1. The third research question is covered in essay 2, and the fourth research question is the focus of essay 3.

1.3.1. How to conceptualise value facilitation

A fundamental tenet in the contemporary service marketing literature is the notion that service providers can facilitate or hinder their customers’ value-creation activities to different degrees (Grönroos 2006, 2008; Woodruff 1997). In view of that, the perspective on service offerings has shifted from being an output to being an input for the customers’ own creation of value (Grönroos 2008; Gummesson 1995; Lusch, Vargo, and O’Brien 2007; Normann 2001; Vargo and Lusch 2004a, 2008). Accordingly, several scholars argue that service offerings and service providers should support the customers’ creation of value (Grönroos 2006, 2008; Heinonen et al. 2010; Normann and Ramirez 1994; Lusch, Vargo, and Tanniru 2010). However, the notion of the service offering and the service provider as a support function of the customers’ value creation processes has only been presented as a general principle. As a result, the service marketing literature lacks specific conceptualisations of value facilitation as various forms of support provided by the service offering and the service provider.

To address this research gap, this thesis extends the value-facilitation concept to reflect the extent to which the service offering and service provider are perceived by the customers to facilitate or hinder their value creation (cf. Grönroos 2006, 2008; Woodruff 1997). More specifically, the value facilitation concept is, in this thesis, built on three forms of support provided by the service offering and on the customers’ perceived supportiveness of the service provider. The three forms of support of the customers’ value creation by the service offering are enabling support, enhancing support and economical support.
1.3.2. Could value facilitation be an effective strategy?

In view of the fact that the service offering and service provider as a support function of the customers’ value creation processes is put forward as a normative notion, it can be concluded that facilitating and supporting the customers’ value creation would be an effective strategy and lead to superior performance for service providers. However, there is overall a lack of research addressing the effects of facilitating and supporting the customers’ value creation activities. Above all, there is no prior research on the strategic fit between the facilitation of the customers’ value creation and customer-based financial performance, such as augmented customer lifetime value (ACLV). Consequently, the second research question examines whether value facilitation could be an effective strategy.

To address this research gap, the strategic fit is assessed by applying fit as profile deviation from a value facilitation benchmark profile, implying systematic effects on superior ACLV (cf. Van de Ven and Drazin 1985; Venkatraman 1989). There are essentially two alternative paths for reaching superior augmented customer lifetime value of current customers in a customer base (cf. Gupta, Lehmann, and Stuart 2004; Gupta and Zeithaml 2006; Hogan et al. 2002). One path is through customer profit maximisation and the other through retention maximisation. Therefore, an additional research question concerns which of the two alternative paths to superior ACLV has a stronger link to value facilitation. The ACLV approach differs from the typical CLV measures in that individual propensity-to-stay rates are taken from a survey as a replacement for retention rates based on mathematical or statistical estimations.

1.3.3. How to examine the added value of service provision

For the most part, studies in the contemporary service marketing literature have adopted a customer perspective on service by focusing on the service experience as an indication of value in use (e.g. Edvardsson, Gustafsson, and Roos 2005; Helkkula and Kelleher 2010; Heinonen et al. 2010; Holbrook 2006; Sandström et al. 2008; Schembri 2006; Vargo and Lusch 2008a). Thus, the focus in the contemporary service marketing literature has been set on service consumption from the customer’s point of view rather than on the financial consequences of the service from the service provider’s perspective.

However, this thesis argues that conceptualising service from the service provider perspective consists of two distinct processes such that both the service sales process and the service provision process have an effect on the financial value of customers. Accordingly, the third research question concerns examining the value of service sales and the added value of service provision as distinctive parts of augmented customer lifetime value.

The ACLV value model was developed based on the more common customer lifetime value (CLV) model proposed by Gupta and Lehmann (2003) with the integration of transaction data and individual propensity-to-stay data into the ACLV equation. The propensity-to-stay rates are applied as indicators of the retention rate instead of the more commonly assumed or estimated retention rates (e.g. Blattberg, Getz, and Thomas 2001; Gupta and Zeithaml 2006). This thesis argues that, by using the propensity-to-stay rates in the ACLV equation, it is possible to link the customers’ perceptions of the value facilitation and thereby the service provision to the financial value of customers. Thus, the financial effect of the service provision process can be
separated from the financial effect of the service sales process. In the ACLV equation, the outcome of the service sales process is denoted by the profits generated by customers, while the added value of the service provision process is reflected by the change in the financial value of customers ($\Delta FV$).

1.3.4. **Can service logic extend the perspective on value capture?**

In emphasising value creation, the contemporary service marketing literature has paid considerably less attention to value capture. Consequently, value capture is dealt with mostly in the strategic management (e.g. Bowman and Ambrosini 2000; Lepak, Smith, and Taylor 2007; Priem 2007) and the marketing-finance interface streams of literature (e.g. Blattberg, Getz, and Thomas 2001; Rust, Zeithaml, and Lemon 2000). In these streams of literature, value capture is, for the most part, set as equivalent to the financial value of customers. The financial value reflects the exchange value, which is realised through the price that customers pay at the point of purchasing an offering (Bowman and Ambrosini 2000). However, Priem (2007) extends the value capture concept by arguing that retaining cash flows from customers (value in retention) is also crucial. Nevertheless, the financial value is seen as the main source of value captured from the customers.

This primary attention on financial value is shared by the retrospective approach on customer profitability analysis (Mulhern 1999; Storbacka 1994, 1997; van Raaij 2005) and the prospective approach with forecasts of customer lifetime value (CLV) (e.g. Donkers, Verhoef, and de Jong 2007; Gupta and Lehmann 2003; Hogan, Lemon, and Rust 2002; Venkatesan and Kumar 2004). The main difference between these two approaches comes from the time perspective; the retrospective approach is based on historical transaction data only (value in exchange), while the prospective approach in addition is based on predictions on retention rates (value in retention) and estimations of future profits discounted to the present value (value in time).

Furthermore, Ryals (2002, 2008) points out that there is another dimension of value capture in addition to the value generated by the cash flow from customers. This dimension of value capture is the relationship benefits, which are a source of hidden value. There are four main sources of relational benefits: references, referrals, learning and innovation. The first two are related to the reduction of customer acquisition costs, while the latter two are related to efficiency improvement. However, among these four forms of relational benefits, only (value in) referrals is relevant from an augmented customer lifetime value perspective.

Traditionally, the value of referrals, i.e. positive word of mouth, has been connected to the cost efficiency of customer acquisition, to the cash flow generated by additional sales to these new customers and to the improved effectiveness of advertising and promotion campaigns (e.g. Ryals 2002, 2008; Stahl et al. 2003). However, this thesis argues that the value of referrals goes beyond the sole effect on cash flow related to the acquisition of new customers. In particular, this paper argues that an overlooked value of referrals comes from moderating the link between value facilitation and the augmented customer lifetime value (ACLV).

Consequently, none of these traditional perspectives on value capture and customer profitability analysis incorporates the link to value facilitation and the support of customers’ value-creation activities. Accordingly, these perspectives are one-sided in their views in leaving out the customers’ perspective on value. Therefore, these
perspectives fall short of a service logic perspective on value capture and customer profitability analysis.

1.4. Research scope and aims of the essays

This thesis consists of three separate essays that each contributes to the development of the theoretical framework for conceptualising and operationalising service profitability. The three essays as building blocks of the thesis are illustrated in Figure 1. Each of the essays draws on the augmented customer lifetime value approach proposed in this thesis.

![Figure 1 The research scope](image)

The main aim of essay 1 is to examine whether facilitating customers’ value creation activities would be an effective strategy and lead to superior augmented customer lifetime value (ACLV). A further aim is to determine whether customer profit maximisation or retention (propensity to stay) maximisation has a stronger link to value facilitation and thus superior ACLV.

The overall aim of essay 2 is to present a framework for examining the value of service sales and the added value of service provision as distinctive parts of augmented customer lifetime value (ACLV). An additional aim is to examine the effect of value facilitation on the change in the financial value of customers as a result of the service provision within a customer portfolio.

The aim of essay 3 is to introduce a service logic perspective on customer profitability analysis and to test empirically the proposed framework in a retail-banking context.

1.5. Delimitations

The empirical data in this thesis comes from a large data set consisting of more than 20,000 high-volume customers representing a prioritised customer segment in a retail bank (B2C). This business setting corresponds to a contract-based and continuous business context. Furthermore, the customer profitability data is based on a 12-month period, and the survey data characterises the customers’ perceptions based on their aggregate experiences from their relationship with the retail bank in question.

Originally, the data was collected in a customer satisfaction survey, but in addition to the responses to the survey, the database contains financial data on an individual
customer level. A delimitation of the database is that losses are not reported in figures; rather, a loss-generating customer is merely marked as loss-generating. In other words, financial data is only reported for each individual profit-generating customer. Therefore, this study excludes unprofitable customers from the analysis. Nevertheless, omitting unprofitable customers is not necessarily problematic from a financial perspective because profit generation is a necessary but not a sufficient condition for creating financial value. This is due to the cost of capital, illustrated by the discount rate. Therefore, only profit-generating customers have the potential to create financial value, which is a focus of this study.

1.6. Positioning of the thesis

This thesis draws on multiple concepts in three literature streams within marketing and two particular concepts in the strategic management literature. The marketing literature streams are service marketing, relationship marketing and the marketing–finance interface. The positioning of the thesis is depicted in Figure 2.
The contemporary service marketing literature is the main stream of literature applied in this thesis. Service marketing comprises the different perspectives on service logic: the service logic advocated by Normann and Ramirez (1993, 1994) and Normann (2001), the service logic advocated by Grönroos (2006, 2008), the service dominant logic advocated by Vargo and Lusch (2004a, 2006, 2008) and the customer-dominant logic advocated by Heinonen et al. (2010). Taken as a whole, the service marketing literature advocates value in use as the primary perspective on customer value (Edvardsson et al. 2005).

The second stream of literature is the relationship marketing literature with its focus on long-term relationships. Moreover, referrals and the retrospective approach to customer profitability analysis are considered as part of this stream of literature.

The third stream of marketing literature is summarised as the marketing-finance interface literature and covers customer lifetime value (CLV), which is the most important metric in this stream of literature. CLV represents the prospective approach to customer profitability analysis. A third central concept is customer portfolio analysis, which turns the focus to the financial value of groups of customers.

The fourth stream of literature is strategic management. The relevance of strategic management in this thesis comes from examining whether value facilitation could be an effective strategy for service providers and from examining whether service logic can...
extend the perspective on value capture. Accordingly, the concepts of strategic fit as profile deviation and value capture represent this stream of literature.

1.7. Key concepts

In this section, the key concepts of the theoretical background are introduced. The key concepts are listed in alphabetical order and elaborated on in Table 1. The new key concepts introduced in this thesis are presented in Table 2.

Table 1 Key concepts of the theoretical background

<table>
<thead>
<tr>
<th>Key Concepts:</th>
<th>Explanation:</th>
<th>Stream of Literature:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer lifetime value (CLV)</td>
<td>CLV is generally defined as the present value of all future profits from a customer over his or her life of relationship with a firm (e.g. Blattberg and Deighton 1996; Gupta and Lehmann 2003).</td>
<td>Marketing–finance interface</td>
</tr>
<tr>
<td>Customer portfolio analysis</td>
<td>The customer base or any particular segment of the customer base can be examined as a customer portfolio (Elliot and Glynn 1998). The objective of customer portfolio analysis is to analyse the financial value of existing customers to the service provider (Elliot and Glynn 1998; Terho and Halinen 2008; Yorke and Droussiotis 1994).</td>
<td>Marketing–finance interface</td>
</tr>
<tr>
<td>Customer relationship profitability</td>
<td>The customer relationship profitability reflects value in exchange. This retrospective approach is based on historical transaction data subtracted by relationship costs (Mulhern 1999; Storbacka 1994, 1997; van Raaij 2005).</td>
<td>Relationship marketing</td>
</tr>
<tr>
<td>Strategic fit as profile deviation</td>
<td>Fit as profile deviation is the degree of adherence to an externally specified 'ideal' profile, which is anchored to a specific criterion, typically performance. In other words, this perspective allows a researcher to specify a ‘benchmark’ profile and to demonstrate that adherence to such a profile has systematic implications for performance (Venkatraman 1989).</td>
<td>Strategic management</td>
</tr>
<tr>
<td>Referrals</td>
<td>Referrals correspond to the propensity to spread positive word of mouth, which is argued to be the single most important customer metric for growth (Reichheld 2003).</td>
<td>Relationship marketing</td>
</tr>
<tr>
<td>Service logic</td>
<td>The contemporary perspectives on service (singular) represent a way of thinking, logics or mental models, on value creation from the customers’ point of view, in contrast to services (plural) as a distinct category of market offerings (Edvardsson, Gustafsson, and Roos 2005; Grönroos 2006; Gummesson 2007; Heinonen, Strandvik, Mickelsson, Edvardsson, Sundström, and Andersson 2010; Vargo and Lusch 2004a).</td>
<td>Service marketing</td>
</tr>
<tr>
<td>Service offering</td>
<td>The service offering should be considered an input for the customers’ resource-integration and value-creation activities (Gummesson 2007; Normann 2001; Vargo and Lusch 2008a).</td>
<td>Service marketing</td>
</tr>
<tr>
<td>------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>Service sales</td>
<td>From the customer perspective, the service sales process deals with value propositions, which indicates that service offerings are not the final result of an economic activity but should add value for customers (cf. Gummesson 2007).</td>
<td>Service marketing</td>
</tr>
<tr>
<td>Service provision</td>
<td>Service provision can be characterised as a process in which the service provider facilitates the customers’ value-creation activities by providing service offerings (cf. Grönroos, 2008; Normann 2001; Vargo and Lusch 2006).</td>
<td>Service marketing</td>
</tr>
<tr>
<td>Value capture</td>
<td>Value capture is conceptualised as value in exchange, value in retention, value in time and value in referrals, which all equal the value outcome to the service provider (e.g. Bowman and Ambrosini 2002; Priem 2007; Ryals 2002, 2008; Srivastava, Shervani and Fahey 1998)</td>
<td>Strategic management</td>
</tr>
<tr>
<td>Value formation</td>
<td>The customer’s value-generating process (Korkman 2006; Voima et al. 2010).</td>
<td>Service marketing</td>
</tr>
<tr>
<td>Value facilitation</td>
<td>The term value facilitation is defined here as the extent to which the service offering and service provider are perceived by the customers to support or hinder their value creation activities (see Grönroos 2008; Woodruff 1997).</td>
<td>Service marketing</td>
</tr>
<tr>
<td>Value in use</td>
<td>The value in use notion stresses that value emerges for customers when using the service offerings provided to them (cf. Edvardsson et al. 2005; Gummesson 2007; Vargo and Lusch 2004a).</td>
<td>Service marketing</td>
</tr>
<tr>
<td>Value proposition</td>
<td>The term value proposition underlines the distinction between embedded value in service offerings and the value in use notion (cf. Gummesson 2007; Vargo and Lusch 2004a).</td>
<td>Service marketing</td>
</tr>
</tbody>
</table>
### Table 2  Key concepts introduced in this thesis

<table>
<thead>
<tr>
<th>New Key Concepts:</th>
<th>Explanation:</th>
<th>Source:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Augmented customer lifetime value (ACLV)</td>
<td>The augmented customer lifetime value is an extension of common CLV approaches in that transaction data and survey data are integrated into the ACLV equation.</td>
<td>Introduced in this thesis</td>
</tr>
<tr>
<td>Economical support</td>
<td>Economical support stands for the competitiveness of the service offering in relation to the customers' consideration sets (cf. Bowman and Ambrosini 2000; Hauser and Wernerfelt 1990; Normann and Ramirez 1993; Kenyon and Mathur 2002).</td>
<td>Introduced in this thesis</td>
</tr>
<tr>
<td>Enabling support</td>
<td>Enabling support refers to support of the service offering that makes it possible for the customers to use the service offering and thereby to create value in the first place (cf. Grönroos 2007; Normann and Ramirez 1994).</td>
<td>Introduced in this thesis</td>
</tr>
<tr>
<td>Enhancing support</td>
<td>Enhancing support corresponds to support of the service offering that helps the customers to increase their value creation (cf. Grönroos 2007).</td>
<td>Introduced in this thesis</td>
</tr>
<tr>
<td>Essential support</td>
<td>Essential support is directed toward the customers' reasons for buying and using a service offering.</td>
<td>Introduced in this thesis</td>
</tr>
<tr>
<td>Supportiveness</td>
<td>Supportiveness refers to the degree to which the service provider supports or hinders the customers' creation of value in general.</td>
<td>Introduced in this thesis</td>
</tr>
<tr>
<td>Service profitability</td>
<td>Service profitability is characterised as the financial outcome of service sales and service provision, wherein the service provider's facilitation and support of the customers' value creation activities is paramount.</td>
<td>Introduced in this thesis</td>
</tr>
</tbody>
</table>
2 SERVICE PROFITABILITY

This chapter presents a literature review on service profitability. First, previous approaches to linking service and profitability are presented. Second, three layers of profitability are discussed. Third, the augmented customer lifetime value (ACLV) approach is presented. After that, four contemporary perspectives on service representing different ‘service logics’ are presented. Finally, as a synthesis of the literature review, an underlying service profitability framework is posited.

2.1 Previous approaches to linking service and profitability

The link between service and profitability has generated considerable attention in a large number of previous studies (for an extensive review, see Zeithaml 2001). Despite that, none of these earlier approaches for linking service to profitability is anchored in the contemporary perspectives on service. Thus, the facilitation and support of customers’ value-creation activities are not on the agenda in these earlier approaches. Therefore, only some examples of previous approaches on linking service to profitability are presented here.

First, the service-profit chain (SPC) framework by Heskett et al. (1994) argues for a link between service and customer profitability. The SPC framework proposes relationships between profitability, customer loyalty, customer satisfaction, customer value, employee productivity, employee loyalty, employee satisfaction, internal quality and leadership.

In the empirical research applying the SPC framework, service has been conceptualised as perceived service quality (e.g. Hallowell 1996; Kamakura et al. 2003; Larivière 2008). This perspective on service is anchored in the SERVQUAL—the service quality framework introduced by Parasuraman, Zeithaml and Berry (1985, 1988), which in turn is rooted in the expectancy–disconfirmation paradigm (Churchill and Suprenaut 1982; Oliver 1980). Thus, drawing on the expectancy–disconfirmation paradigm, service quality is argued to be a result of the customers’ service expectations in comparison with their perceptions of the service performance. Also, the perspective on customer value posited in the original SPC framework by Heskett et al. (1994) is based on the disconfirmation paradigm, where customer value equals perceived service quality relative to perceived price and other costs or sacrifices to customers in acquiring the service (cf. Zeithaml 1988).

It is noteworthy that some scholars prefer to talk about the satisfaction-profit chain instead of the service-profit chain (e.g. Anderson and Mittal 2000). Drawing on the customer satisfaction literature (e.g. Anderson et al. 1994; Anderson et al. 1997), the satisfaction-profit chain gives emphasis to the links between service attribute-level performance and customer satisfaction, customer satisfaction and customer retention and customer retention and profits. However, both the satisfaction–profit chain and the service–profit chain are anchored in the same basic principles.
Furthermore, a comparable approach for studying the linkage between service and profitability is the return on quality (ROQ) approach proposed by Rust, Zahorik and Keiningham (1995). The ROQ approach aims to make quality expenditures financially accountable and comparable with other investments. In essence, the ROQ approach provides a net present value (NPV) framework for assessing the financial effect of quality improvements. In a subsequent article, Rust, Moorman and Dickson (2002) assess whether revenue expansion, cost reduction or both is most effective for obtaining financial return from quality improvements. The results indicate that revenue expansion through customer satisfaction may the most effective quality profitability emphasis for service providers (Rust et al. 2002).

2.2 Three layers of profitability

The existing conceptualisations of profitability in the marketing literature are based on either ‘products’ (goods or services) or ‘customer relationships’, which are both significant but not sufficient for the conceptualisation of service profitability. The reason is that product profitability and customer relationship profitability are both related to perspectives on marketing other than the contemporary perspectives on service marketing. These perspectives on marketing are sometimes referred to as distinct paradigms (e.g. Grönroos 1997; Sheth & Parvatiyar 2002).

However, this thesis adopts a ‘pluralistic perspective’ (cf. Brodie, Pels, and Saren 2006; Demirdjian 1976; Pels, Coviello, and Brodie 2000) and argues that these different perspectives on marketing and, hence, the conceptualisations of profitability, complement each other despite their distinct units of analysis. Thus, this thesis proposes that the concept of service profitability should be an extension of the concepts of product (services) profitability and customer relationship profitability. Accordingly, this thesis argues that three layers of profitability can be identified, as illustrated in Figure 3. The first profitability layer is based on product (services) profitability, while the second layer corresponds to the profitability of customer relationships, which is ultimately followed by the third layer of service profitability.

Figure 3 Three layers of profitability
The conceptualisation of product profitability is based primarily on the price paid by customers for their purchases of offerings (cf. Bowman and Ambrosini 2000) and on the cost-efficiency of the product development, production, distribution and sales processes (e.g. Turney 2005). Thus, the concept of services profitability corresponds to the financial outcome of a category of market offerings (cf. Edvardsson et al. 2005). In the marketing literature, the product profitability perspective corresponds to the Four Ps (product, price, place and promotion) of the ‘marketing mix’ paradigm first introduced by McCarthy (1960).

The conceptualisation of ‘customer relationship profitability’ is an extension of the product profitability concept and draws from the ‘relationship marketing’ paradigm (e.g. Berry 1983; Grönroos 1997; Sheth and Parvatiyar 2002). In essence, there are two main approaches to customer relationship profitability analysis, the accounting-based retrospective approach and the finance-based prospective approach (Gleaves et al. 2008; Jacobs, Johnston, and Kotchetova 2001; van Raaij 2005).

Both these traditional approaches to customer relationship profitability analysis aim to identify and allocate revenues and costs to individual customers, ideally by applying the activity-based costing (ABC) technique (e.g. Cooper and Kaplan 1991; Gleaves et al. 2008; Turney 2005). On the other hand, the main difference between these two approaches comes from the time perspective. The retrospective approach is based mainly on historical transaction data (value in exchange) (e.g. Mulhern 1999; Storbacka 1994, 1997; van Raaij 2005), whereas the prospective approach is also based on forecasts of customer lifetime value (CLV), including predictions on retention rates (value in retention) and estimations of future profits discounted to the present value (value in time) (e.g. Donkers, Verhoef, and de Jong 2007; Gupta and Lehmann 2003; Hogan, Lemon, and Rust 2002; Venkatesan and Kumar 2004).

Nevertheless, neither of these traditional approaches to customer relationship profitability analysis can be linked directly to the facilitation of customers’ value-creation activities. The reason is that both the retrospective and prospective approaches are based mainly on transactional data. Thus, factors that drive customer behaviour are beyond the scope of these models (cf. Gupta et al. 2006). Consequently, this thesis argues that there is a call for an ‘augmented customer lifetime value’ (ACLV) approach to customer relationship profitability analysis.

### 2.3 Augmented customer lifetime value

In this thesis, the financial value of customers is assessed by the ‘augmented customer lifetime value’ (ACLV). The ACLV makes it possible to separate the profits (value in exchange) generated by the sales process from the added value generated by the service provision on the financial value of customers.

Overall, a plethora of alternative customer lifetime value (CLV) models of various complexities has been published in the academic literature (e.g. Donkers, Verhoef, and de Jong 2007; Gupta et al. 2006; Jain and Singh 2002). Since the early present value-based models, researchers have developed more mathematically advanced CLV models.
Gupta et al. (2006) identify six modelling approaches: RFM models (recency, frequency and monetary value of previous purchases), probability models, econometric models, persistence models, computer science models and diffusion/growth models. However, in a study on how well CLV models of different complexities perform, Donkers, Verhoef and de Jong (2007) find that more complex models do not lead to substantially better CLV predictions. On the contrary, they found that simple models perform relatively well, though the more complex models allow for changes in customer behaviour over time. In summary, they conclude that there is no best model for the prediction of individual CLV levels. However, for segmentation purposes, the simple status quo model performs best.

Consequently, this thesis draws on the simple CLV equation proposed by Gupta and Lehmann (2003, 2005), in which ‘m’ equals profit from a customer, ‘r’ equals the retention rate, which in this paper is measured by the customer’s stated propensity to stay, and ‘i’ equals the discount rate. The margin multiple \( \left( \frac{r}{1+i-r} \right) \) multiplied by the profit figure ‘m’ equals the lifetime value; see Equation 1.

\[
ACLV = m \times \left( \frac{r}{1+i-r} \right)
\]

A margin multiple higher than one corresponds to an increase in the financial value of customers, whereas a margin multiple lower than one characterises a decrease in the financial value of customers. Correspondingly, the lifetime value in the latter condition would be lower than the customer profits (value in exchange), and in the former situation, the lifetime value would be higher than the customer profits.

According to Gupta and Lehmann (2003), the retention rate is one of the trickiest metrics to estimate empirically. Typically, CLV equations either assume or estimate a constant retention rate over time (Blattberg et al. 2001). Many different mathematical and statistical methods of various complexity have been developed in the literature for estimating retention rates in non-contractual settings (Gupta and Zeithaml 2006; Neslin et al. 2006; Villanueva and Hanssens 2007).

However, in contractual service settings, e.g. retail banking, mobile subscriptions and insurance policies, customers have to notify the service provider to terminate their relationships (cf. Gupta and Zeithaml 2006). In a similar manner, this thesis argues that, in contractual service settings, the retention rate can be inferred by simply asking customers about their propensity to continue their relationships. The use of surveys to estimate the drivers of customer lifetime value has been proposed by Rust, Zeithaml, and Lemon (2000) and followed up by Rust, Lemon, and Zeithaml (2004) in an empirical study. However, instead of using the survey data to infer the retention rates, Rust et al. (2004) use a Markov switching matrix to model customer retention.

Consequently, the ACLV approach differs from the typical methods for estimating retention rates in that individual propensity-to-stay rates are used for each customer as an indication of the retention rate (cf. Keiningham et al. 2007; Ranaweera and Prabhu 2003). The propensity-to-stay figures are based on the customers’ answers to a single item in the survey (cf. Bergkvist and Rossiter 2007; Keiningham et al. 2007; Reichheld...
Thus, the lifetime value is based on the integration of survey data with transactional data. Therefore, the term ‘augmented customer lifetime value’ is preferred over the more commonly used term ‘customer lifetime value’.

2.4 Perspectives on service

The contemporary service marketing literature is fuelled by a conceptual debate on various service logics or perspectives on service. According to Edvardsson et al. (2005), the perspective depends on who is portraying the service and on the purpose. The service can be portrayed from the customer’s point of view, the provider’s point of view, or from both the customer’s and the provider’s perspective in a dyad. Consequently, at least four contemporary perspectives on service can be identified in the current service marketing literature; see Table 3. Each logic or perspective emphasises different angles of the service concept and consequently characterises the concept of service in various ways. It is noteworthy that each of the four contemporary perspectives on service argues against some other prevailing marketing perspective. However, despite the differences, all four perspectives on service share the notion of value creation from the customer’s point of view based on ‘value in use’ (Edvardsson et al. 2005; Grönroos 2006; Gummesson 2007; Heinonen et al. 2010; Normann 2001; Vargo and Lusch 2004a).
### Table 3  Four contemporary perspectives on service

<table>
<thead>
<tr>
<th>Author(s), year</th>
<th>Perspective</th>
<th>Characterization of service</th>
<th>Argues against</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grönroos (2006, 2008)</td>
<td>Service logic</td>
<td>A process where a set of resources interact with each other and with the customer aiming at supporting the customer’s processes in a value-generating way.</td>
<td>Exchange paradigm</td>
</tr>
<tr>
<td>Heinonen, Strandvik, Mickelsson, Edvardsson, Sundström and Andersson (2010)</td>
<td>Customer-dominant logic</td>
<td>A framework to think of service from the customers’ point of view, which contains three types of elements: outcomes of the service providers’ internal activities, co-creation processes and their outcome elements, as well as process and outcome elements of the customers’ own activities.</td>
<td>Provider-dominant logics</td>
</tr>
<tr>
<td>Normann (2001); Normann and Ramirez (1993, 1994); Ramirez (1999)</td>
<td>Service logic</td>
<td>A framework to think in terms of value creation and value-creating systems with a focus on utilisation instead of production, process instead of product and relationship instead of transaction.</td>
<td>Value-chain logic</td>
</tr>
<tr>
<td>Vargo and Lusch (2004a,b)</td>
<td>Service-dominant logic</td>
<td>The application of specialised competencies (skills and knowledge) through deeds, processes and performances for the benefit of another entity or the entity itself (self-service).</td>
<td>Goods-dominant logic</td>
</tr>
</tbody>
</table>

First, the service logic proposed by Grönroos (2006, 2008) is rooted in the research tradition of the Nordic School of service marketing (e.g. Grönroos 1978; Grönroos and Gummesson 1985), which has been recognised as one of three major research streams
The service logic by Grönroos advocates a resource- and interaction-based view that can be applied either from the customer’s or the provider’s perspective. Accordingly, the service logic by Grönroos adopts a relationship perspective and argues against the exchange paradigm in marketing.

Second, the customer-dominant logic advocated by Heinonen, Strandvik, Mickelsson, Edvardsson, Sundström and Andersson (2010) takes a stance for a customer perspective on service in contrast to a provider perspective. In particular, the customer-dominant logic of service positions the customer’s logic in the centre and introduces a new perspective on the roles of customers and providers in value creation. Moreover, the customer-dominant logic argues that both the goods- and service-dominant logics are provider-dominant.

Third, the service logic advocated by Normann and Ramirez (1993, 1994) and Normann (2001) takes a view on service as a framework for value creation in value constellations, contrary to value creation in value-chains (Ramirez 1999). Consequently, the service logic by Normann and Ramirez advocates a strategic logic for business design beyond production and relationships. Moreover, customers are seen as co-producers and co-designers of value creation, not just as passive receivers and as a source for trade. (Normann 2001, pp. 24-25)

Fourth, the service-dominant logic introduced by Vargo and Lusch (2004a) and followed up on and further developed in a number of articles (e.g. Lusch and Vargo 2006; Vargo and Lusch 2004b, 2006, 2008a, b, c) challenges the established goods-dominant logic. The goods-dominant logic, they argue, is inherited from economics and based on the exchange of manufactured goods and focused on tangible resources, embedded value and transactions. Conversely, the service-dominant logic focuses on intangible resources, co-creation of value and relationships. (Vargo and Lusch 2004a)

### 2.5 The underlying service profitability framework

This section presents an underlying service profitability framework, illustrated in Figure 4, as a synthesis of the literature review on the contemporary perspectives on service.

The two main processes by the service provider are proposed to be service sales, which result in value in exchange, and service provision, which reflects the margin multiple in the ACLV model. In effect, the service provider can only make and sell value propositions (Gummesson 1995; Vargo and Lusch 2004). According to Gummesson (2007), the term ‘value proposition’ emphasises that customers buy something they perceive to be of value for them. Consequently, service offerings should add value to customers and service offerings are only value propositions, not the final result of an economic activity (Gummesson 2007).

Service provision can be characterised as an input by the service provider for the customers’ resource integration and value-creation activities (Normann 2001; Vargo
and Lusch 2006). Hence, from the service provider's perspective, the service provision can be considered the process wherein the service provider can facilitate and influence the value outcome to the customer (cf. Grönroos 2008; Gummesson 2007; Vargo and Lusch 2004).

The notions of both value proposition and value facilitation underline the distinction between embedded value in service offerings and the value-in-use notion, stressing that value emerges for customers when using the service offerings provided to them (Edvardsson et al. 2005; Grönroos 2006, 2008; Gummesson 2007; Heinonen et al. 2010; Normann and Ramirez 1994; Vargo and Lusch 2004; Woodruff and Gardial 1996).

Figure 4  The underlying service profitability framework

The centre of the framework illustrates the links between the concepts of value proposition, value facilitation and value formation. The value proposition reflects the service sales process (cf. Gummesson 2007), while the value facilitation is an integral part of the service provision process (cf. Grönroos 2008). Both value proposition and value facilitation have an influence on the value formation. Value formation is defined as the customer's value-generating process (Korkman 2006; Voima et al. 2010). The customers’ value generating-process reflects the individual customer’s logic and is a
result of complex interdependencies and interactions among various other actors (cf. Heinonen et al. 2010; Korkman 2006; Voima et al. 2010).

A customer is any person with experience in buying and/or using a service offering (Grönroos 2006; Heinonen et al. 2010; Normann 2001; Vargo and Lusch 2004a). The customer’s logic is defined as the customer’s cognitive, mental and emotional experiences and sense-making from actions and interactions in relation to subjective goals in a context (Heinonen et al. 2010; Huffman et al. 2000; Woodruff 1997).

Interactions are defined as a two-way form of action where two or more parties have an effect upon one another (Grönroos and Strandvik 2008; Normann and Ramirez 1993, 1994; Vargo and Lusch 2004a; Wikström 1996).

Other actors are all other essential actors in addition to the focal service provider in the customer’s value constellation (Grönroos 2006; Heinonen et al. 2010; Normann 2001; Vargo and Lusch 2008b). One type of other actors is rival service providers and their competing service offerings. These competing service offerings represent any alternative in the customer’s consideration set to the service offerings in use (Grönroos 2006; Hauser and Wernerfelt 1990; Kenyon and Mathur 2002; Normann and Ramirez 1993; Shocker, et al. 1991).

Another type is complementing service offerings, which represent any supplementary service offering used by the customer to accomplish a task or reach a goal (Heinonen et al. 2010).

A third type of other actors comes from indirect representations of the service offerings. Indirect representations of the service offering are any offering related communication in the form of word-of-mouth recommendations or criticisms, advertising, news reports, reviews and so forth (Meyer and Schwager 2007).

In summary, the proposed underlying service profitability framework represents a complex set of core processes between a number of actors in addition to the focal service provider and customer. This complex set of core processes has an influence on the service profitability, which is beyond the control of the service provider. However, this thesis argues that the service provider can manage service profitability to a large extent through the service sales and service provision processes. Thus, central to the service profitability are value propositions and value facilitation.
3 METHODOLOGY

In this chapter the methodology applied in the thesis is presented. The chapter starts by sharing my view on philosophy of science. Next, alternative research processes and approaches are discussed. Then the research process employed in the thesis is presented. This chapter concludes with a discussion of the research approach in each of the three essays.

3.1 My view on philosophy of science

My view on philosophy of science is in line with the critical realism paradigm, which combines and brings together ontological realism: there is a reality, which is differentiated, structured, layered, and independent of mind; epistemological relativism: all beliefs are socially constructed and hence potentially fallible; and judgemental rationality: it is possible to present justifiable reasons for preferring one theory over another (Archer et al., 1998).

Critical realism originates from the work of Roy Bhaskar by the initial publication of A Realist Theory of Science (1975). Other scholars, among them Rom Harré, Charles Varela, and Andrew Sayer have made their significant contributions to the critical realism paradigm. Today critical realism is a multidisciplinary movement and presents an intellectual challenge to other philosophies of science (Archer et al., 1998).

In particular, critical realism disclaims the positivistic stance of causal laws with a constant conjunction of events, because it would imply a closed world (Tsoukas 1989). On the contrary, according to critical realism most events in the natural and the social world take place in open systems, in which events do not invariably follow a determined and recurrent pattern, but are instead subject to diverse causal variations (Bhaskar 1978; Harré and Madden 1975). Tsoukas (1989) argues that exactly because of the open nature of the world researchers need to engage in experiments in which the conditions for constant conjunctions of events, i.e. closed systems, need to be constructed so that causal laws can be identified. In the experiments the researchers do not produce the causal laws they identify; instead they are the causal agents of patterns of events generated under conditions of closure, through which they gain access to causal laws. For causal laws detected in the experiments to be externally valid, they must be ontologically distinct from patterns of events. Subsequently, this implies that the laws or mechanisms that are identified by experiments continue to operate in their normal way in open systems, where no constant conjunction of events is possible. Consequently, event regularities are insufficient and unnecessary conditions for the identification of a causal law. As a final argument, Tsoukas (1989) argues that as a result of the open nature of the world causal laws are primarily explanatory and not predictive. Explanation and prediction are symmetrical only under conditions of closure (Cummins 1983; Manicas 1987; Manicas and Secord 1983; Secord 1986).

Moreover, the critical realists believe there is a ‘real’ world to detect even if it is only imperfectly and probabilistically apprehensible (Guba and Lincoln 1994; Perry, Riege,
and Brown 1999; Tsoukas 1989). Perry et al. (1999) point out that perception is not reality as constructivists and critical theorists may claim; instead critical realists recognise the distinction between the world and perceptions of it. Constructivists and critical theorists believe there are many realities, whilst critical realists consider there is only one reality although several perceptions of that reality, which must be triangulated in order to get a better picture of it.

According to Bhaskar (1978) the ontological assumptions in the critical realism paradigm can be summarized in three domains of reality of mechanisms, events, and experiences, as illustrated in Table 4. The checkmarks (✓) indicate the domain of reality in which mechanisms, events, and experiences respectively reside, as well as the domains involved for such a residence to be possible (Tsoukas 1989).

Table 4  Ontological assumptions of critical realism (Bhaskar 1978, 1998)

<table>
<thead>
<tr>
<th></th>
<th>Real domain</th>
<th>Actual domain</th>
<th>Empirical domain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mechanisms</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Events</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Experiences</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

The three domains are the real domain, the actual domain, and the empirical domain (Bhaskar 1978, 1998). The real domain is the domain in which generative mechanisms or causal powers exist independently with a tendency to produce patterns of observable events under contingent conditions. The actual domain is the domain in which observed events or patterns of events occur. The empirical domain is the domain in which experiences take place. According to Tsoukas (1989), experiences presume the occurrence of events in the actual domain, independently of researchers becoming aware of them. In turn, events presuppose the existence of mechanisms in the real domain, which have been responsible for the generation of events. The discovery of these observable and unobservable structures and mechanisms that underlie events and experiences is the goal of realism research (Tsoukas 1989). Karl Popper (Perry et al. 1999) summarises the three ontological assumptions of critical realism in three ‘worlds’: World one is positivist and consists of objective material things. World two is related to critical theory and constructivism, and is the subjective world of minds. World three is related to realism and consists of abstract things that are born of people’s minds but exist independently of any person.

Guba and Lincoln (1994) assert that both qualitative and quantitative methods may be used correctly with any research paradigm. Moreover, they declare that questions of method are secondary to questions of paradigm. In essence, it is quite possible to apply statistical methods without being a positivist (Hunt, 1994; Porpora 2001; Pratschke 2003). According to Porpora (2001), critical realism is distinguished from positivism in how the analytical statistics are used and the significance attached to them. Moreover, Porpora (2001) argues that analytical statistics in general are compatible with critical realism, especially when analytical statistics is interpreted as evidentiary rather than
explanatory tools. In use of analytical statistics, positivism incorrectly conflates evidence and explanation. Rather than being explanatory tools, analytical statistics are evidentiary instruments, which enable assessment of explanations. In addition, Pratschke (2003) argues for the appropriateness of applying structural equation modelling, e.g. LISREL, as a method within the critical realist paradigm.

3.2 The research process in this study

The starting point for this research journey was the researcher’s access to a large countrywide dataset of survey data combined with customer profitability data on an individual customer level. The origin of the dataset comes from a customer satisfaction survey conducted among high-volume customers in a retail bank in one of the Nordic countries. These high-volume customers represent the ‘prime’ customer segment of the bank. The customer satisfaction survey data was augmented with a dataset on relationship volume and profitability figures on an individual customer level. This was done by using a running code for both the survey questionnaires and the dataset on relationship volume and profitability. All possibilities to identify any customer by name or address were eliminated in both datasets. Thereby the confidentiality of the customers was not at risk at any point of the process. The researcher is very familiar with the origins of the dataset and the process of collecting the data as he had worked as a consultant responsible for the assignment, including analysis and reporting of the results of the customer satisfaction survey to the bank. The actual data collection was outsourced to third parties under the supervision of the researcher, or more precisely in the role as a consultant at that point of time.

Antecedents  | Customer satisfaction index  | Consequences
---|---|---
Variable 1  | CSI  | Outcome 1
Variable 2  |  | Outcome 2
Variable 3  |  |  
Variable n  |  | Outcome n

Figure 5  An outline of the original theoretical framework in the dataset
Before making the decision whether to use the dataset or not in the research for the doctoral thesis an assessment of the dataset was made by the researcher. The original theoretical framework (see Figure 5) was following the line of reasoning put forward in the national customer satisfaction index (CSI) models with propensity to refer and propensity to stay as examples of outcome variables (Fornell 1992; Fornell, et al. 1996; Johnson, et al. 2001). These customer satisfaction models are based on cause and effect relationships (Johnson et al. 2001) and drawing on nationwide survey methodology and an econometric approach to estimate the indices (Fornell et al. 1996). The indices can be used for both cross-sectional and longitudinal benchmarking purposes (Fornell et al. 1996). These national customer satisfaction indices have evolved to a Pan-European initiative to develop, launch and implement a system for comparable aggregate (national) Performance Satisfaction Index studies, the EPSI Rating (Eklöf and Westlund 2002). At the present time EPSI operates in around 20 European countries conducting surveys in a number of industries, among them banking, insurance, trade and distribution, telecommunications (fixed lines, mobiles, and broadband/internet), utilities (electricity, water, gas, etc.), health services, etc. (http://www.epsi-rating.com).

To summarise the assessment, the dataset can be concluded to be based on a solid foundation and to be reliable. Accordingly, the researcher decided to use the dataset for the doctoral thesis. As Brinberg (1982) points out, one alternative research process is to start from a body of data formed by the methodological and the substantive domains. In this case, the dataset was formed on the basis of a customer satisfaction survey, conducted in accordance with the national customer satisfaction indices (the methodological domain) and in a certain context, among a sample of customers of the retail bank (the substantive domain).

Next, the research process in this study can actually start off. The research process is depicted in Figure 6. In effect, the research process is divided into two major parts: first an abductive part (step 0 to 2) followed by a deductive part (step 3 and 4). The three arrows from step 1 onwards symbolise the research process in each of the three essays.

![Figure 6](http://www.epsi-rating.com)  
*Figure 6  The research process in this study (adapted from Kovács and Spens 2005)*
However, the original theoretical framework is first turned into a prior theoretical framework, which represents the theoretical background. Consequently, the original theoretical framework cannot explain the phenomena of interest in this thesis. Then the abductive research process starts by theory matching, in other words by a systematic combination of theory and data (Dubois and Gadde 2002; Kovács and Spens 2005). The aim of this abductive process is to understand the phenomena in question and to suggest new theory in the form of new hypotheses and propositions (Alvesson and Sköldberg 1994; Dubois and Gadde 2002; Kirkeby 1990). Subsequently, the research process continues in a deductive phase by testing the hypotheses and propositions. Then it ends by drawing final conclusions, either based on accepting or discarding the hypotheses or propositions.

In each of the three essays the theoretical concepts have first been formed and then tested by selecting an appropriate method for the analysis.

On the whole, the study design in Essay 1 is following an abductive research process, which is considered well-suited for theory generation (Dubois and Gadde 2002; Kovács and Spens 2005). The measures for this study are developed from multiple items in the customer satisfaction survey and anchored in previous research by following a systematic combining procedure between the empirical data and theory (see Dubois and Gadde 2002). It is noteworthy that the selected items were originally part of other constructs than the ones developed for this study. Accordingly, each construct is built on exploratory factor analysis, which is in line with the abductive approach and thus considered a useful method for theory generation (Haig 2005).

The measures are based on the 10-point scale used in the questionnaire, where 10 indicates that everything is perfect and that no improvement is needed and 1 indicates profound dissatisfaction (cf. Anderson and Mittal 2000; Fornell 1992; Keiningham et al. 2007). Exploratory factor analysis (principal component analysis with varimax rotation) was carried out by using SPSS in order to form the constructs. The hypotheses are tested by multivariate regression analysis, independent samples t-tests, and by the Euclidian distance. The profile deviations were calculated from the ‘non-ideal’ profile of customers to each of the rest of the customers on the five value facilitation dimensions by the Euclidian distance formula (Van de Ven and Drazin 1985; Venkatraman 1989; Vorhies and Morgan 2003). Finally, the profile deviation was assessed by multiple regression analysis.

The analyses in Essay 2 are conducted in several steps. First, confirmatory factor analysis (CFA) was carried out by using LISREL 8.0 to examine the value facilitation constructs. Secondly, the underlying relationships between customer profitability, propensity to stay and the value facilitation constructs are examined by Pearson (2-tailed) correlations analyses. Thirdly, a customer portfolio is formed by ranking the customers in order of their profitability into customer profitability deciles (cf. Elliott and Glynn 1998; Mulhern 1999; Storbacka 1994, 1997; Terho and Halinen 2008; van Raaij 2005). Then, multiple regression analyses were conducted within each customer profitability decile in order to examine the relationship between the value facilitation constructs and the change in the financial value of customers (ΔFV). Last, interaction
effects between support constructs and supportiveness were examined within those customer profitability deciles where appropriate.

In essay 3 the analyses are conducted in three steps. The measurement model is first assessed by exploratory factor analysis (principal component analysis with varimax rotation) by using SPSS, and then further developed and tested by confirmatory factor analysis (CFA) by using LISREL 8.0. The tests of the hypotheses by the structural model are divided into two distinct parts. The analysis of the seven first hypotheses concerning the links between the value facilitation constructs and referrals (propensity to refer) is conducted by a regular structural equation model (SEM). For the reason that customer profitability is not a latent variable the analysis of the remaining five hypotheses concerning the links to augmented customer lifetime value is carried out in a separate single indicator indexed model. The indexed model is building on item parcel theory (Cattell 1956). A parcel is defined as an aggregate-level indicator comprised of the sum (average) of two or more items, responses, orbehaviours (Little et al. 2002). The indexed model is used because ACLV does not form a latent variable. Therefore, an ACLV-index is created as corresponding to a value between 0 and 10. All the other indexed indicators are created by calculating the average of the corresponding items. Accordingly, the latent variables for enabling, enhancing and economical support, supportiveness, and referrals (propensity to refer) are replaced by the indexed indicators.
4 SUMMARY AND CONTRIBUTION OF EACH ESSAY

This chapter presents a summary of the contributions of the three essays to the contemporary service marketing literature. The implications of the studies are discussed in the next chapter. The complete essays are provided in part 2 of this thesis.

4.1 Essay 1: The Strategic Fit between Value Facilitation and Augmented Customer Lifetime Value

The first essay examines whether facilitating and supporting customers’ value creation can be an effective strategy and lead to superior performance in terms of superior augmented customer lifetime value (ACLV). The theoretical framework is illustrated in Figure 7.

![Figure 7 The theoretical framework in essay 1](image)

The assessment is performed by applying the concept of fit as profile deviation (e.g., Van de Ven and Drazin 1985; Venkatraman 1989; Vorhies and Morgan 2003) between the facilitation of customers’ value creation and two alternative paths for producing superior ACLV in a customer base (cf. Gupta, Lehmann, and Stuart 2004; Gupta and Zeithaml 2006; Hogan et al. 2002). One path to reach superior ACLV comes from maximising the profits generated by the customers, including the outcome of cross-selling and up-selling (e.g., Gupta and Zeithaml 2006; Gupta et al. 2006; Hogan et al. 2002). The other path to reach superior customer lifetime value is via maximising...
customer retention (e.g. Gupta and Zeithaml 2006; Hogan et al. 2002; Reichheld 1996; Reichheld and Sasser 1990). Thus, the higher the customer retention is, the greater the ACLV will be, given that everything else is unchanged.

The term ‘value facilitation’ is here defined as the extent to which the service offering and service provider are perceived by the customers as a way to support or hinder their value creation activities (see Grönroos 2008; Woodruff 1997). More specifically, the proposed value facilitation concept consists of four elements: enabling support, enhancing support, economical support, and supportiveness. The three first elements represent how the service offering can support customers’ value creation in different ways, whereas the last element represents the support of the customers’ value creation by the service provider in general.

The ACLV derives from the integration of survey data with transactional data. Typically, CLV equations either assume or estimate a constant retention rate over time (Blattberg et al. 2001). Different mathematical and statistical methods of various levels of complexity have been developed in the literature to estimate retention rates in non-contractual settings (Gupta and Zeithaml 2006; Neslin et al. 2006; Villanueva and Hanssens 2007). However, the ACLV approach differs from the typical methods for estimating retention rates in that individual propensity to stay rates are used for each customer as an indication of the retention rate (cf. Keiningham et al. 2007; Ranaweera and Prabhu 2003).

The essential tenet of the perspective on fit as profile deviation is that if an ‘ideal’ profile of key dimensions can be obtained for a set of high performing units, then any deviation from this ‘ideal’ profile implies negative performance (Van de Ven and Drazin 1985; Venkatraman 1989; Vorhies and Morgan 2003). This typical procedure on profile deviation can be applied to customer profitability as a performance indicator. The reason is that studies on customer profitability analysis tends to find that only a small fraction of the customer base stands for a major portion of the profitability (e.g. Mulhern 1999; Storbacka 1994; Raaij, Vernooij, and Triest 2003). Accordingly, if the ‘benchmark’ profile is formed based on customer profitability, then this essay proposes a hypothesis that customers with dissimilar characteristics to those of the ‘ideal’ profile perform worse than the ‘benchmark’ profile.

However, this essay argues that the procedure of forming an ‘ideal’ profile based on the highest performing customers cannot directly be applied to retention as a performance indicator. Instead, the logic of profile deviation needs to be reversed from retention maximisation to retention minimisation in order to test the fit. As emphasized by Fornell (1992, 1995), customer satisfaction rates are typically highly negatively skewed in competitive markets. This means that most retained customers are satisfied. Correspondingly, normally the retention rates can also be expected to be highly negatively skewed, especially in a continuous business situation (e.g. Ranaweera and Prabhu 2003). In such circumstances, the retention rates are high for a major portion of the customers. As a result, an ‘ideal’ customer profile based on maximum retention would encompass too large a share of the customers in comparison to the usually applied highest performing 10-15% in the data set. Therefore, the logic of fit as profile deviation should be reversed into corresponding to low performing units symbolising a ‘non-ideal’ profile. Consequently, if the ‘benchmark’ profile is formed based on customer retention, then this essay proposes a hypothesis that customers with dissimilar characteristics to those of the ‘non-ideal’ profile perform better than the benchmark profile.

On the whole, the study design follows the abductive research process, which is considered well-suited for theory generation (Dubois and Gadde 2002; Kovács and
Spens 2005). The measures for this study are developed from multiple items in the customer satisfaction survey and anchored in previous research by following a systematic combining procedure between the empirical data and the theory (see Dubois and Gadde 2002). Noteworthy, the selected items were originally part of other constructs than the ones developed for this study. Accordingly, each construct is built on exploratory factor analysis, which is in line with the abductive approach and thus also considered a useful method for theory generation (Haig 2005). The measures are based on the 10-point scale used in the questionnaire, where 10 indicates that everything is perfect and no improvement is needed and 1 indicates profound dissatisfaction. Exploratory factor analysis (principal component analysis with varimax rotation) was carried out by using SPSS to form the constructs. In addition, a preliminary assessment of the item reliability of the constructs established by the measurement items was made.

The findings of the analysis demonstrate that there is a mismatch between the facilitation of customers’ value creation and profit maximisation as a path for producing superior ACLV. Conversely, the results show that retention maximisation is the preferred path for producing superior ACLV in conjunction with the facilitation of the customers’ value creation activities.

4.2 Essay 2: The Added Value of Service Provision

Overall, the second essay conceptualises service, from the service provider's perspective, as consisting of service sales process and the service provision process, as illustrated in Figure 8.
In effect, the focus shifts from the consumption of the service to the financial consequences of the service provision. In addition, the focus is turned from individual to groups of customers in a customer portfolio. The customer portfolio is formed by ranking customers, in terms of their profitability, through customer profitability deciles (cf. Elliott and Glynn 1998; Mulhern 1999; Storbacka 1994, 1997; Terho and Halinen 2008; van Raaij 2005). Explicitly, this paper examines the dynamic effect of value facilitation on the change in the financial value of customers within a customer portfolio as a significant part of the added value of service provision. Even so, this paper argues that the customer perspective is fundamental for examining the added value of service provision. In fact, the customers’ perceptions of the value propositions present in the sales process as well as the customers’ perceptions of the value facilitation in provision process have a considerable impact on the financial value of customers. Accordingly, both the service sales process and the service provision process influence the ACLV.

The financial value of customers is here measured by the ACLV. In particular, the ACLV model derives from the integration of transaction data and individual propensity to stay data to the original customer lifetime value (CLV) model proposed by Gupta and Lehmann (2003). The propensities to stay rates are applied as indicators of the retention rate instead of the more commonly assumed or estimated retention rates (e.g. Blattberg, Getz, and Thomas 2001; Gupta and Zeithaml 2006). By using the propensities to stay rates in the ACLV equation, it is possible to link the customers’ perceptions of the value facilitation and the service provision to the financial value of customers. Thus, the financial effect of the service provision process can be separated from the financial effect of the service sales process. In the ACLV equation the outcome of the service sales process is denoted by the profits generated by customers (value in exchange), while the outcome of the service provision process is reflected by the change in the financial value of customers (ΔFV). The change in the financial value of customers corresponds to a conversion of the margin multiple in the ACLV equation into financial terms. In effect, the ΔFV figures correspond to an increase (+ΔFV) or a decrease (−ΔFV) of the financial value of each customer.
Importantly, the financial effect of the service sales process and the service provision process emerge at different points in time. The financial effect of the service sales process is more instant, while the financial effect of the service provision process is more gradual and distant. In view of that, from an investment perspective, the pay-back of the service provision is more uncertain but potentially more substantial in the long-term value of customers.

Accordingly, from an ACLV perspective, the outcome of the service sales process reflects only the first part of the equation in form of the profits (value in exchange) generated by customers, which is realised through the price customers pay at the point of purchasing a service offering (Bowman and Ambrosini 2000). Therefore, the value proposition resulting in customer profits can be considered as an initial indication of the financial value of customers. The remaining part of the ACLV can be determined as a result of the realised service provision and value facilitation. The outcome of the service provision process is reflected by the change in the financial value of customers (ΔFV). Value facilitation is conceptualised by enabling, enhancing, economical support by the service offering, and supportiveness by the service provider.

The results from the multiple regression analyses show that the value facilitation construct, consisting of the three support dimensions of the service offering and the supportiveness by the service provider, has a significant positive linkage to the change in the financial value of customers within each customer profitability decile. More specifically, the value facilitation construct explains between 20% and 33% of the variance of the ΔFV. However, not all individual support dimensions of the service offering have a significant direct effect on the variance of the ΔFV.

Consequently, possible interaction effects were examined within those customer profitability deciles in which one or two support variables did not show significant direct effects on the dependent variable. In line with Baron and Kenny (1986), the interaction effect was controlled for by introducing an interaction variable consisting of the product of the standardised support variable, or variables, and the standardised supportiveness variable. Accordingly, it was hypothesised that supportiveness would moderate the effect of the support variable in question. In customer profitability decile 1 the enhancing support variable advice is moderated by supportiveness ($\beta = 0.093, p < 0.05$). In the rest of the deciles advice has a significant direct effect on the ΔFV. Furthermore, supportiveness is found to moderate the independent variable competitiveness in all the deciles, where applicable, except for decile 1. In summary, the empirical analyses of this study demonstrate that the facilitation of customers’ value-creation activities plays a significant part in the added value of service provision.

4.3 Essay 3: A Service Logic Perspective on Customer Profitability Analysis

The third essay introduces a service logic perspective on customer profitability analysis. In effect, this essay argues that only the ACLV approach can incorporate value facilitation and value capture as a multi-dimensional concept consisting of value in exchange, value in retention, value in time, and value in referrals.

The existing conceptualisations of customer profitability in the marketing literature are either based on products (goods or services) or customer relationships. This essay argues that these conceptualisations are significant but not sufficient from a service logic perspective. The reason is that product (goods or services) profitability and
customer relationship profitability are both related to different paradigms on marketing than the contemporary perspectives on service (cf. Grönroos 1997; Sheth and Parvatiyar 2002; Vargo and Lusch 2004a). The product profitability perspective corresponds to the Four Ps (product, price, place, and promotion) in the marketing mix paradigm first introduced by McCarthy (1960). The conceptualisation of customer relationship profitability is an extension of the product profitability concept and draws on the relationship marketing paradigm (e.g. Berry 1983; Grönroos 1997; Sheth and Parvatiyar 2002).

Along the lines of the reasoning in the contemporary service marketing literature (e.g. Edvardsson et al. 2005; Grönroos 2007; Gummesson 2007) and in conjunction with the marketing-finance interface literature (e.g. Gupta and Lehmann 2005; Kumar, et al. 2009; Storbacka 1997), this essay considers the concept of service profitability as a perspective on profitability based on a dual notion of customer value, while the concept of services profitability corresponds to the financial outcome of a category of market offerings. This dual notion of the concept of customer value represents both the value that is derived by the customer from using the service offering and the relationship with the service provider, as well as the value that is derived by the service provider from the relationship with the customer (cf. Gupta and Lehmann 2005; Woodall 2003).

The conceptual framework is composed of three parts, as presented in Figure 9. The first part represents value facilitation conceptualised as the support by the service offering and the supportiveness of the service provider. The value facilitation serves as input for the customers’ value creation activities. The second part stands for value capture conceptualised as value in exchange, value in retention, value in time, and value in referrals. The value capture equals the value outcome to the service provider. The third part symbolises customer profitability analysis as ACLV, which this essay puts forward as the measurement of service profitability.

This essay takes as a foundational premise the notion that service providers can to various degrees facilitate or hinder their customers’ value creation activities (Grönroos 2006, 2008; Woodruff 1997). Thus, this essay defines value facilitation as the extent to which the service offering and service provider are perceived by the customers as a support or hindrance to their value creation activities (cf. Grönroos 2008; Normann and Ramirez 1994; Woodruff 1997). Specifically, this essay proposes enabling,
enhancing, economical support by the service offering, and supportiveness by the service provider as the focal units of the value facilitation concept.

By emphasising value creation the contemporary literature has paid considerably less attention to value capture. Consequently, value capture is dealt with mostly in the strategic management (e.g. Bowman and Ambrosini 2000; Lepak, Smith, and Taylor 2007; Priem 2007) and the marketing-finance interface streams of literature (e.g. Blattberg, Getz, and Thomas 2001; Rust, Zeithaml, and Lemon 2000). In these streams value capture is for the most part set as equivalent to the financial value of customers. The financial value reflects the exchange value, which is realized through the price customers pay at the point of purchasing an offering (Bowman and Ambrosini 2000). However, Priem (2007) extends the value capture concept by arguing that retaining cash flows from customers (value in retention) is also crucial. Nevertheless, the financial value is still seen as the main source of value captured from the customers.

The primary attention on financial value is shared by the retrospective approach on customer profitability analysis (Mulhern 1999; Storbacka 1994, 1997; van Raaij 2005) and by the prospective approach of forecasts of CLV (e.g. Donkers, Verhoef, and de Jong 2007; Gupta and Lehmann 2003; Hogan, Lemon, and Rust 2002; Venkatesan and Kumar 2004). The main difference between these two approaches comes from the time perspective: the retrospective approach is based on historical transaction data only (value in exchange), while the prospective approach is based on predictions of retention rates (value in retention) and estimates of future profits discounted to the present value (value in time).

Furthermore, Ryals (2002, 2008) points out that there is another dimension of value capture in addition to the value generated by the cash flow from customers. This dimension of value capture is the relationship benefits, which are considered a source of hidden value. There are mainly four sources of relational benefits: references, referrals, learning, and innovation. The two first ones are related to the reduction of customer acquisition costs, while the latter two are related to efficiency improvement. However, out of these four forms of relational benefits only (value in) referrals is relevant for this paper. Referrals, i.e. positive word of mouth, are a well-recognised form of value capture in a business to consumer (B2C) context (cf. Arndt 1967; Reichheld 2003). Moreover, some scholars argue that by connecting referrals to the calculation of CLV the quality of the estimates would improve (e.g. Bechwati and Eshghi 2005; Rust et al. 2000).

Nevertheless, none of these perspectives on value capture and customer profitability analysis incorporate the linkage to value facilitation and the support of customers’ value creation activities. Accordingly, these perspectives are one-sided in their views by leaving out the customers’ perspective on value. Thus, these perspectives fall short of a service logic perspective on customer profitability analysis. Consequently, this essay argues that, in order to measure value capture conceptualised as a multi-dimensional construct and as a function of value facilitation, the traditional conceptualisations of customer profitability should be extended into ACLV.

Contrary to the retrospective and prospective approaches to customer profitability analysis, the augmented approach to customer profitability analysis, as proposed in this essay, uses the customer-specific profitability data from a transaction database and individual retention rates from a survey as input for the calculation of the customer profitability as ACLV.
The different scopes of the three approaches to customer profitability analysis are presented in Table 5.

**Table 5 The scope of different approaches to customer profitability analysis**

<table>
<thead>
<tr>
<th>Approach to customer profitability analysis</th>
<th>Value in exchange</th>
<th>Value in retention</th>
<th>Value in time</th>
<th>Value in referrals</th>
<th>Value facilitation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retrospective</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prospective</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Augmented</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

With the aim of examining the effect of value facilitation on value capture, three sets of hypotheses are put forward. First, the three support dimensions of the service offering are hypothesized to have a positive effect on the supportiveness by the service provider. Second, each dimension of the value facilitation concept is hypothesized to have a positive effect on referrals. Third, all the dimensions of the value facilitation concept and referrals are hypothesized to have a positive effect on ACLV.

**Figure 10 The final model in essay 3**

The results of the analyses demonstrate, as shown in Figure 10, that all three support dimensions of the service offering have a direct effect on the supportiveness by the service provider. However, only enabling and enhancing support have a direct effect on referrals. Economical support has an indirect effect on referrals via supportiveness. Only economical support and referrals have a direct effect on customer profitability.
Accordingly, the enabling and enhancing support dimensions as well as supportiveness have indirect effects on customer profitability via referrals. Essentially, this essay finds that the value in referrals goes beyond the traditional notion of only reducing the acquisition costs and increasing sales to new customers (e.g. Ryals 2002, 2008; Stahl et al. 2003) by moderating the linkage between value facilitation and ACLV. Accordingly, referrals fundamentally explain the ACLV of current customers. Thus, the value of referrals goes beyond having an effect on the value of new customers as traditionally demonstrated.
5 DISCUSSION

This last chapter starts with the discussion of the theoretical and methodological contribution of the thesis. Then managerial implications of findings are described. The chapter ends with the limitations of the thesis and propositions for further research.

5.1 Contribution to theory

The overall purpose of this thesis was to develop a service profitability framework by taking an augmented approach on customer lifetime value (ACLV). An underlying service profitability framework was put forward in the second chapter ‘Service profitability’. This underlying framework proposed the essential mechanisms of the interdependencies between service sales (value proposition), service provision (value facilitation), and service use (value formation). Subsequently, three essays addressed specific research questions and led to the development of a concluding service profitability framework, which is presented in Figure 11. The contribution of each essay was discussed in the previous chapter.

Figure 11 The concluding service profitability framework

Fundamental to the concluding service profitability framework is the concept of value facilitation. The concept of value facilitation is defined as “the extent to which the service offering and service provider are perceived by the customers to support or hinder their value creation activities” (cf. Grönroos 2008; Normann and Ramirez 1994; Woodruff 1997). More specifically, value facilitation appears to be composed of three
different forms of support by the service offering and the supportiveness by the service provider.

The first form of support, enabling support, makes it possible to use the service offering and thereby brings about the customers’ value creation (cf. Grönroos 2007; Normann and Ramirez 1994). The second form of support, enhancing support, advances the customers’ value creation and makes it possible to get more out of the service offering (cf. Grönroos 2007). The third form of support, economical support, corresponds to the competitiveness of the service offering and thereby advances the cost-effectiveness of the customers’ value creation (cf. Bowman and Ambrosini 2000; Hauser and Wernerfelt 1990; Normann and Ramirez 1993; Kenyon and Mathur 2002). The term supportiveness refers to the extent to which customers perceive the service provider to support or hinder the customers’ creation of value in general. Explicitly, the term supportiveness corresponds to how well the service provider takes the customers’ interests into consideration (cf. Heinonen et al. 2010; Kohli and Jaworski 1990; Slater and Narver 1994) and the extent to which the service provider adds value to the customers’ value creation activities (cf. Gummesson 2007).

All three essays examined different angles with respect to the value facilitation concept. The first essay examined the linkage between value facilitation and profitability maximisation and retention maximisation as two alternative paths to superior customer equity in a customer base. The second essay examined the effect on the financial consequences of value facilitation as part of the service provision. The third essay examined the interdependencies between the support constructs and supportiveness, as well as their relation to referrals as measured by propensity to refer, and the ACLV.

The conceptualisation of service provision is presented in the second essay. Service provision is characterised as the input by the service provider for the customers’ resource integration and value creation activities (Normann 2001; Vargo and Lusch 2006). Specifically, the service provision corresponds to the process wherein the service provider can influence the value outcome to the customer (cf. Grönroos 2008; Gummesson 2007; Vargo and Lusch 2004a). Furthermore, the second essay proposes that, from the service provider’s perspective, service can be conceptualised by the service provision process and the service sales process. The second essay proposed that the customer perspective on these processes is imperative for the financial consequences of the service. Accordingly, from the customer perspective, the service provision process comprises value facilitation, i.e. the facilitation of the customers’ value creation activities (cf. Grönroos 2006, 2008; Woodruff 1997). In addition, from the customer perspective, the service sales process deals with value propositions, which indicates that service offerings are not the final result of an economic activity but should add value to customers (cf. Gummesson 2007).

To continue, the middle section in the concluding service profitability framework illustrates the customer perspective on the service. The value formation is proposed to be a function of the customers’ service use experience, which reflects the customers’ perceptions of the value proposition as an element of the service sales process and the
facilitation of their value creation activities as part of the service provision. Moreover, the service experience is proposed to comprise the customers’ service purchases and value creation activities, which bring about value in use. In addition, the customers’ value creation activities are proposed to be reflected in the propensity to stay and referrals.

In the lowest section of the concluding service profitability framework, the financial consequences of the service are elaborated on. As discussed in the second essay, the outcome of the service sales process reflects the value in exchange, which is presented in the first part of the ACLV model. The value in exchange is realised by the price customers pay when purchasing the service offering (Bowman and Ambrosini 2000). The latter part of the ACLV model is a result of the service provision process including the value facilitation of the customers’ value creation activities.

5.2 Contribution to methodology

Fundamental to this thesis is the method for calculating the ACLV. In contrast to common models on customer lifetime value (CLV), the ACLV model is built on the integration of customer specific profitability data from a transaction database with survey data on individual propensity to stay rates instead of the commonly used retention rates (cf. Ranaweera and Prabhu 2003). The propensities to stay rates were based on the customers’ statements in a survey with the single item question: “How likely is it that in 12 months’ time The Bank is still your bank?” The use of a single item as a measure of propensity to stay is considered appropriate because it fulfils the criteria of being “concrete singular”, which means that the measure is “easily and uniformly imagined” (Bergkvist and Rossiter 2007; Rossiter 2002).

Typically CLV equations either assume or estimate a constant retention rate over time (Blattberg et al. 2001). There are many different mathematical and statistical methods of various complexity for estimating retention rates in non-contractual settings (Gupta and Zeithaml 2006; Neslin et al. 2006; Villanueva and Hanssens 2007). However, in contractual service settings, e.g. retail banking, mobile subscriptions, and insurance policies, customers have to notify the service provider in order to terminate their relationships (cf. Gupta and Zeithaml 2006). In a similar manner, this thesis argues that in contractual service settings the retention rate can be inferred by simply asking customers about their propensity to continue their relationships.

A consequence of using the ACLV model is the possibility to link value facilitation with the financial consequences of service provision. Previous models of CLV fail to capture this linkage because of their sole focus on value in exchange. Consequently, the method applied in the ACLV model bridges the contemporary service marketing literature to the marketing and finance interface streams of literature.

An additional methodological contribution is presented in the first essay. Reversing the logic for forming a benchmark profile from an ideal profile into a ‘non-ideal’ profile contributes to the literature by applying the concept of fit as profile deviation (e.g. Van de Ven and Drazin 1985; Venkatraman 1989; Vorhies and Morgan 2003). The ‘non-
ideal’ profile is set up based on the value facilitation scores of the group of customers with propensity to stay rates with a margin multiple less than one. A margin multiple less than one corresponds to a lower ACLV figure than the customer profitability figure, which indicates a negative change in the financial value of customers. The reason for this rotation of the logic for forming a ‘benchmark’ profile is attributed to typically highly negatively skewed customer satisfaction and retention rates in competitive markets (Fornell 1992, 1995; Ranaweera and Prabhu 2003). In such circumstances the retention rates are high for a major part of the customers. As a result, an ‘ideal’ customer profile based on maximum retention would encompass too large a share of the customers in comparison to the usually applied 10-15% highest performing share of customers in the data set. Therefore, the logic of the tenet on fit as profile deviation should be reversed to low performing units symbolizing a ‘non-ideal’ profile.

5.3 Managerial implications

This section discusses the managerial implications of applying the service profitability framework in a contract-based continuous business context.

To begin with, this thesis argues that in applying service logic in any business, and especially in a contract-based continuous business context, it is insufficient to measure the financial value of customers just by the value in exchange. Therefore, from a service perspective, it is not enough to base managerial decisions only on the exchange value. As presented in the second essay and in the concluding service profitability framework, the value in exchange reflects the value proposition and results from the price customers pay when purchasing service offerings (cf. Bowman and Ambrosini 2000). Accordingly, value in exchange reflects the outcome of the service sales process from the service provider’s perspective.

However, as presented in the first and second essays, there is no statistically significant relationship between exchange value, which can be measured by customer profitability, and the customers’ perceptions of the facilitation of their value creation activities. Neither is there any statistically significant relationship between customer profitability and propensity to stay, as also reported in the first and second essays. Furthermore, there is no statistically significant relationship between customer profitability and referrals measured by propensity to refer, as reported in the third essay. Consequently, value in exchange fails to establish a linkage to service provision. This can be problematic from a managerial point of view because service provision is the process whereby the service provider can facilitate the customers’ value creation activities to create a competitive advantage.

As a matter of fact, this thesis claims that the better service providers can facilitate the customers’ value creation activities, the higher financial value they are likely to provide. Moreover, service providers can improve the propensity to stay by facilitating their customers’ value creation activities. From a managerial perspective, it is important to find out how the current service provision processes and managerial practices can be developed into even better facilitation of the customers’ value creation activities.
Instead of using only value in exchange as a basis for managerial decisions, this thesis proposes the use of the augmented approach. As discussed in the third essay, ACLV is the only approach on customer profitability analysis that can incorporate value facilitation and value capture as a multi-dimensional concept. As proposed in the first essay, value capture can be conceptualised as consisting of value in exchange, value in retention, value in time, and value in referrals.

The application of the augmented approach requires a combination of transaction databases with survey data on an individual customer level. This calls for managerial attention in planning and executing customer analyses. Only then is it possible to link value facilitation and value capture into a measurable customer profitability construct, which can be used for managing the value capture from a broader perspective than merely value in exchange.

Furthermore, as proposed in the first essay and illustrated in Figure 12, an important managerial implication is the application of adapted strategies to different categories of customers. The most loyal customers, corresponding to 9 and 10 in their propensity to stay (cf. Reichheld 2003), can be cultivated by maintaining the facilitation of their value creation activities. The customers corresponding to an intermediate level of loyalty, equalling 7 and 8 in their propensity to stay (cf. Reichheld 2003), can be addressed by new service development with the aim to improve the value facilitation. A plausible strategy is to involve these customers in new service development activities (cf. Alam 2002; Matthing, Kristensson, Gustafsson, and Parasuraman 2006) as at least some of them can be expected to have a reason for coming up with innovative ideas due to the inadequacy in the facilitation of their value creation activities. Then, the least loyal customers, equalling 1 to 6 in their propensity to stay (cf. Reichheld 2003), can be addressed by cost efficiency actions.

By applying adapted strategies, service providers can in reality learn from all of their customers and find out latent needs with the aim to further develop their service business (cf. Goffin, Lemke, and Koners 2010; Matthing, Sandén, and Edvardsson 2004).
As proposed in the second essay, any customer segment can be managed as a customer portfolio built up of groups of customers. Managing the customer base or any particular customer segment as a customer portfolio is especially relevant in a continuous contract-based B2C-context. However, this does not mean that the individual customers would not be important, on the contrary. Especially in interactions, customers should be treated as individuals, or members of a group such as a family. Service providers should establish an in-depth understanding of the customers’ experiences to better support their customers’ value creation activities.

5.4 Limitations and suggestions for further research

This thesis has a number of limitations, which opens up several avenues for further research in the area of service profitability.

Firstly, common to all three essays is the omission of essential support. A fruitful avenue could look at establishing a link to previous research on consumer goals (e.g. Bagozzi and Dholakia 1999; Huffman, Ratneshwar and Mick 2000; Sheth, Newman and Gross 1991; Woodruff 1997). Especially, examining the linkage to value propositions from an essential support perspective could give further insights into the effects of value facilitation.

Secondly, the measurement items are based on items in a customer satisfaction survey originally developed for other purposes. Accordingly, the measurement items could be developed based on qualitative research with the purpose of adding additional dimensions of enabling, enhancing, and economical support.
Thirdly, only profitable customers are included in the data. Therefore, a potential direction for further research would be to study value facilitation as a strategy for improving the ACLV of unprofitable customers (cf. Mittal, Sarkees, and Murshed 2008).

Fourthly, only retained customers are included in the sample. Hence, an avenue for further research could be to compare retained customers with lost customers.

Fifthly, a potential area for further research could be to study the reasons for customers not tending to spread positive word of mouth, when the service offering is perceived to be competitive, as indicated to be the case in the third essay.

Sixthly, studies on how customers perceive various service providers to facilitate their value creation activities could be conducted by qualitative research such as ethnography (e.g. Goffin, Lemke, and Koners 2010), or by service stories (Nyman, Mickelsson, and Strandvik 2011).

Seventhly, a possible topic for further research would be to use the perceived value facilitation as a selection criterion for involving customers in new service development.

Eighthly, additional studies could be conducted in retail banking, for instance, by expanding the scope into additional customer segments.

Ninthly, studies in other contractual and continuous business settings could also be a fruitful avenue for further research.

Lastly, additional research could be conducted in other business contexts than the contractual and continuous business setting. The business setting could either represent a contractual and discrete context, or a non-contractual and continuous context, or a discrete and non-contractual context. Obviously, all these four types of business settings could be compared in a study.
REFERENCES


APPENDIX 1  LIST OF ESSAYS INCLUDED IN THIS THESIS

ESSAY 1:
Nyman, H., The Strategic Fit between Value Facilitation and Augmented Customer Lifetime Value

ESSAY 2:
Nyman, H., The Added Value of Service Provision

ESSAY 3:
Nyman, H., A Service Logic Perspective on Customer Profitability Analysis
APPENDIX 2  ESSAY 1

Nyman, H.: The Strategic Fit between Value Facilitation and Augmented Customer Lifetime Value
The Strategic Fit between Value Facilitation and Augmented Customer Lifetime Value

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Abstract

Purpose – The main purpose is to examine whether facilitating customers’ value creation activities would be an effective strategy and lead to superior augmented customer lifetime value (ACLV).

Design/methodology/approach – The examination is done by assessing the strategic fit as profile deviation between the facilitation of customers’ value creation activities and two alternative paths, retention and profit maximisation, to superior augmented customer lifetime value (ACLV).

Findings – The results show that retention maximisation is the preferred path for producing superior ACLV in conjunction with the facilitation of the customers’ value creation activities.

Research limitations/implications – The retail banking context represents a contractual and continuous business setting. The measurement items come from a customer satisfaction survey, which was originally developed for other purposes. Further studies could address these limitations.

Practical implications – By facilitating and supporting their customers’ value creation activities, service providers can improve the propensity of their customers to stay and thereby the ACLV. Accordingly, value facilitation creates an additional form of positive exit barrier.

Originality/value – The general value facilitation notion is expanded into the customers’ perceptions of the enabling, enhancing and economical support provided by the service offering and the perceived supportiveness of the service provider. The augmented customer lifetime value is derived from the integration of survey data with transactional data. Fit as profile deviation is examined in two distinct ways.

Keywords Profile deviation, augmented customer lifetime value, service logic

Paper type Research paper
Introduction

A fundamental tenet in the contemporary service marketing literature is the notion that service providers can either facilitate or hinder their customers’ value creation activities (Grönroos 2006, 2008; Woodruff 1997). In view of that, the perspective on service offerings has shifted from being an output to being an input for the customers’ own creation of value (Grönroos 2008; Gumnessson 1995; Lusch, Vargo, and O’Brien 2007; Normann 2001; Vargo and Lusch 2004, 2008). Accordingly, several scholars argue that service offerings and service providers should support the customers’ creation of value (Grönroos 2006, 2008; Heinonen et al. 2010; Normann and Ramirez 1994; Lusch, Vargo, and Tanniru 2010). However, the notion of the service offering and service provider as a support function of the customers’ value creation processes has been presented only as a general principle. As a result, the service marketing literature lacks specific conceptualisations of various forms of support provided by the service offering and the service provider.

To address this research gap, this paper extends the value facilitation concept into reflecting the extent to which the service offering and service provider are perceived by the customers to facilitate or hinder their value creation (cf. Grönroos 2006, 2008; Woodruff 1997). More specifically, the value facilitation concept is here built on three forms of support provided by the service offering and on the customers’ perceived supportiveness of the service provider. The three forms of support of the customers’ value creation by the service offering are enabling support, enhancing support and economical support.1

In view of the fact that the service offering and service provider as a support function of the customers’ value creation processes is put forward as a normative notion, it can be concluded that facilitating and supporting the customers’ value creation would be an effective strategy and lead to superior performance for service providers. However, there is overall a lack of research addressing the effects of facilitating and supporting the customers’ value creation activities. Above all, there is no prior research on the strategic fit between the facilitation of the customers’ value creation and customer-based financial performance, such as augmented customer lifetime value (ACLV). The augmented customer lifetime value differs from conventional CLV calculations in that transaction data and survey data in the form of individual propensity to stay rates are integrated into the ACLV equation.

Accordingly, the main aim of this study is to assess the strategic fit between the support and supportiveness of customers’ value creation and superior ACLV. This is done by applying fit as profile deviation from a value facilitation benchmark profile implying systematic effects on superior ACLV (cf. Van de Ven and Drazin 1985; Venkatraman 1989). Furthermore, there are essentially two alternative paths for achieving superior ACLV for current customers in a customer base (cf. Gupta, Lehmann, and Stuart 2004; Gupta and Zeithaml 2006; Hogan et al. 2002). One path goes via customer profit maximisation and the other via retention maximisation. Therefore, another aim of this study is to determine which of the two alternative paths to superior ACLV has a stronger linkage to value facilitation.

As a result, this paper contributes to the strategic marketing literature by moving beyond the normative notion advocated in the service marketing literature that the customers’ creation of value should be supported (cf. Grönroos 2006, 2008; Heinonen et al. 2010; Normann and Ramirez 1994; Lusch, Vargo, and Tanniru 2010) into

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1 The fourth type of support is here proposed to be essential support, which is directed toward the customers’ reasons for buying and using a service offering. However, the essential support is excluded from the framework because the examination of the customers’ reasons for buying and using a service offering is beyond the scope of this paper.
assessing whether value facilitation has systematic effects on customer-based financial performance.

The paper is structured as follows. First, the theoretical framework is introduced and discussed. Then, the hypotheses are developed. Third, the empirical study is presented and the results put forward. Then, the theoretical and practical implications are discussed. To conclude, the limitations and directions for future research are elaborated on.

**Theoretical Framework**

The theoretical framework, illustrated in Figure 1, symbolises the fit as profile deviation between the facilitation of customers’ value creation and two alternative paths for producing superior augmented customer lifetime value (ACLV). The central terms in the theoretical framework are discussed next.

**Facilitation and support of customers’ value creation activities**

The primary underpinning of the theoretical framework is the notion that service offerings and service providers should facilitate and support their customers’ value creation activities (Grönroos 2006, 2008; Heinonen et al. 2010; Normann and Ramirez 1994; Lusch, Vargo, and Tanniru 2010). The value facilitation notion is related to the value in use notion, which stresses that value emerges for customers when they use service offerings (see Edvardsson, Gustafsson, and Roos 2005; Grönroos 2006;
Accordingly, the term ‘value facilitation’ is here defined as the extent to which the service offering and service provider are perceived by the customers to support or hinder their value creation activities (see Grönroos 2008; Woodruff 1997). More specifically, the proposed value facilitation concept consists of four elements: enabling support, enhancing support, economical support and supportiveness. The three first elements represent how the service offering can support customers’ value creation in different ways, whereas the last element represents the support of the customers’ value creation by the service provider in general.

First, the term ‘enabling support’ refers to such support of the service offering that makes it possible for the customers to use the service offering and thereby to create value in the first place (cf. Grönroos 2007; Normann and Ramirez 1994). Second, the term ‘enhancing support’ corresponds to support of the service offering that helps the customers to increase their value creation (cf. Grönroos 2007). Third, the term ‘economical support’ stands for the competitiveness of the service offering in relation to the customers’ consideration sets (cf. Bowman and Ambrosini 2000; Hauser and Wernerfelt 1990; Normann and Ramirez 1993; Kenyon and Mathur 2002). Finally, the term ‘supportiveness’ refers to the degree to which the service provider supports or hinders the customers’ creation of value in general.

Paths to superior customer lifetime value

Customer lifetime value (CLV) is generally defined as the present value of all future profits from a customer over the course of his or her relationship with a firm (e.g. Blattberg and Deighton 1996; Gupta and Lehmann 2003; Rust, Zeithaml, and Lemon 2000). Customer lifetime value is, in principle, determined by customer acquisition costs, retention and cross-selling (Gupta and Zeithaml 2006). However, the acquisition costs for existing customers can be considered sunk and could, thus, be excluded from the estimation of their customer lifetime value (Gupta 2009; Pfeifer, Haskins, and Conroy 2005).

Consequently, there are essentially two distinct paths to reach superior customer lifetime value for current customers in a customer base (Gupta, Lehmann, and Stuart 2004; Gupta and Zeithaml 2006; Hogan et al. 2002). One path to reach superior augmented customer lifetime value comes from maximising the profits generated by the customers, including the outcome of cross-selling and up-selling (e.g. Gupta and Zeithaml 2006; Gupta et al. 2006; Hogan et al. 2002). Thus, the higher the customer profits are, the greater the customer lifetime value will be, given that everything else remains the same. Ranking and prioritising customers according to their profitability is typical in the literature on customer profitability analysis (e.g. Storbacka 1994; Mulhern 1999; Zeithaml, Rust, and Lemon 2001). The other path to reach superior customer lifetime value is via maximising customer retention (e.g. Gupta and Zeithaml 2006; Hogan et al. 2002; Reichheld 1996; Reichheld and Sasser 1990). Thus, the higher the customer retention is, the greater the customer lifetime value will be, given that everything else is unchanged. Accordingly, this path to superior customer lifetime value is in line with the relationship marketing literature advocating long-term relationships with current customers (e.g. Berry 1983; Grönroos 1994; Sheth and Parvatiyar 1995).²

² In principle, maximising both customer profitability and retention simultaneously would represent a third option. However, this paper argues that customer profit maximisation and retention maximisation
Fit as profile deviation

Drawing on previous research, this paper applies the concept of fit as profile deviation (e.g. Van de Ven and Drazin 1985; Venkatraman 1989; Vorhies and Morgan 2003). According to Venkatraman (1989) fit as profile deviation is the degree of adherence to an externally specified 'ideal' profile, which is anchored to a specific criterion, typically performance. In other words, this perspective allows a researcher to specify a 'benchmark' profile and to demonstrate that adherence to such a profile has systematic implications for performance (Venkatraman 1989).

The concept of fit with its roots in configuration theory is a well established concept in strategic management and organisation theory (e.g. Venkatraman 1989; Venkatraman and Camillus 1984; Zajac, Kraatz, and Bresser 2000). Fundamental to the configuration theory is the notion that the suitability of a firm’s strategy can be characterised in terms of its fit, match or congruence with the environmental or organisational contingencies confronting the firm (Andrews, 1971; Zajac et al. 2000).

However, only recently has the concept of fit become of interest within the marketing literature (e.g. Kabadayi, Eyuboglu, and Thomas 2007; Olson, Slater, and Hult 2005; Vorhies and Morgan 2003). Overall, these studies take a management perspective by measuring the perceptions of executives (Kabadayi et al. 2007), senior marketing managers (Olson et al. 2005) and chief marketing executives (Vorhies and Morgan 2003). Therefore, studies employing the concept of fit in the marketing literature lack a focus on customers, as noticed by Santala and Parvinen (2007). Consequently, customer-based financial performance measures such as customer lifetime value (CLV) have not previously been used in studies applying the concept of fit.

Hypotheses

To assess the fit between the facilitation of customers’ value creation and the path that produces superior augmented customer lifetime value (ACLV), the following hypotheses are presented.

To start with, as described earlier, the proposed value facilitation concept is built on three different forms of support by the service offering and their link to the supportiveness of the service provider. The arrows in Figure 1 between the three support elements of the service offering and the supportiveness element symbolise the links between these elements. Thus, the first hypothesis consists of three parts:

- H_{1A}: The enabling support of the service offering is positively related to the supportiveness of the service provider.
- H_{1B}: The enhancing support of the service offering is positively related to the supportiveness of the service provider.
- H_{1C}: The economical support of the service offering is positively related to the supportiveness of the service provider.

Next, the basis of setting up the subsequent hypotheses is the creation of a ‘benchmark’ customer profile leading to superior customer lifetime value. These hypotheses reflect the link between the customers’ perceived value facilitation and the two alternative paths to superior customer lifetime value.

are primarily results of distinct processes symbolising service sales and service provision, respectively. Thus, they should be treated separately.
The essential tenet of the perspective on fit as profile deviation is that, if an ‘ideal’ profile of key dimensions can be obtained for a set of high-performing units, then any deviation from this ‘ideal’ profile implies negative performance (Van de Ven and Drazin 1985; Venkatraman 1989; Vorhies and Morgan 2003). Configuration theory studies applying profile deviation typically form the ‘ideal’ profile based on the highest-performing 10% or 15% in a data set (Van de Ven and Drazin 1986; Venkatraman and Prescott 1990; Vorhies and Morgan 2003).

This typical procedure on profile deviation can, as such, be applied on customer profitability as a performance indicator. The reason is that, typically, in studies on customer profitability analysis, it is found that only a fraction of the customer base stands for a major part of the profitability (e.g. Mulhern 1999; Storbacka 1994; Raaij, Vernooij, and Triest 2003).

Accordingly, if the benchmark profile is formed based on customer profitability, then this paper expects customers with dissimilar characteristics to those of the ideal profile to perform worse. Therefore, the first part of the second hypothesis is expressed as:

\[ H_{2A}: \text{The mean values of value facilitation should be higher for the ideal customer profile than for the rest of the customers.} \]

Consequently, if the benchmark profile is based on profit maximisation, then the latter part of the second hypothesis can be expressed as follows:

\[ H_{2B}: \text{The more a customer profile deviates from that of the ideal customer profile, the lower the customer lifetime value will be.} \]

However, this paper argues that the procedure of forming an ideal profile based on the highest-performing customers cannot directly be applied to retention as the performance indicator. Instead, the logic of profile deviation needs to be reversed from retention maximisation to retention minimisation to test the fit. The rationale for this rotation of the logic for forming a benchmark profile is explained next.

As stated by Fornell (1992, 1995), customer satisfaction rates are typically highly negatively skewed on competitive markets. This means that most retained customers are satisfied. Correspondingly, normally, the retention rates can also be expected to be highly negatively skewed, especially in a continuous business situation (e.g. Ranaweera and Prabhu 2003). In such circumstances, the retention rates are high for a major part of the customers. As a result, an ideal customer profile based on maximum retention would encompass too large a share of the customers in comparison to the usually applied highest-performing 10–15% in the data set. Therefore, the logic of the tenet on fit as profile deviation should be reversed into corresponding to low-performing units symbolising a ‘non-ideal’ profile.

As a result, if the benchmark profile is formed based on customer retention, then this paper expects customers with dissimilar characteristics to those of the non-ideal profile to perform better. Thus, the first part of the third hypothesis is expressed as follows:
H$_{3A}$: The mean values of value facilitation should be lower for the non-ideal customer profile than for the rest of the customers.

Moreover, any deviation from the non-ideal profile based on low retention rates implies positive performance, contrary to the normally expected negative performance. Thus, the latter part of the third hypothesis is formulated as:

H$_{3B}$: The more a customer profile deviates from that of the non-ideal customer profile, the larger the customer lifetime value will be.

**Empirical study**

Configuration theory studies typically use single-industry samples to control for industry effects and to isolate the fit–performance relationship of interest (Vorhies and Morgan 2003). In line with this tendency, the empirical context for this study comes from one particular industry, more specifically from a retail banking company in a Nordic country. The retail banking context is appropriate for this study since retail banks typically segment their customers based on some performance indicator, such as relationship volume or profitability (Leverin and Liljander 2006; Storbacka 1997; Zeithaml, Rust, and Lemon 2001).

**Data and sample**

The data consists of a large sample of profitable high relationship volume customers in this particular bank. These high relationship volume customers represent a prioritised customer segment of the bank. Accordingly, these customers have all been appointed a personal advisor at the bank as the primary customer value-enhancing support element of the service offering.

Originally, the data was collected using a customer satisfaction survey and augmented with a dataset on relationship volume and profitability figures on an individual customer level. This was done by using a running code for both the survey questionnaires and the dataset on relationship volume and profitability. All possibilities to identify any customer by name or address were eliminated in both datasets. Thus, the confidentiality of the customers was not at risk at any point of the process.

The bank has hundreds of thousands of customers in the countrywide branch network. A survey was sent out to a stratified random sample of high-volume customers all over the country, and the effective response rate was 32%, corresponding to 21,584 respondents. Demographically, the respondents represent ages between 18 and 75, and the share of women is 42% and 58% for men. The relatively larger share of men corresponds fairly well to the population of this high relationship volume customer segment. The average duration of the respondents' relationship with the bank is 19 years, ranging from less than 1 year to 74 years.

**Measures and study design**

Overall, the study design follows an abductive research process, which is considered well suited for theory generation (Dubois and Gadde 2002; Kovács and Spens 2005). The measures for this study are developed from multiple items in the customer satisfaction survey and anchored in previous research by following a systematic combining procedure between the empirical data and theory (see Dubois and Gadde 2002). Notably, the selected items were originally part of constructs other than those developed for this study. Accordingly, each construct is built on exploratory factor

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3 The bank defines high relationship volume customers as those who have a bank account with a regular income stream, use products or services from a given number of different product groups and have savings and/or loans of a certain minimum value.
analysis, which is in line with the abductive approach and thus considered a useful method for theory generation (Haig 2005). The measures are based on the 10-point scale used in the questionnaire, where 10 indicates that everything is perfect and that no improvement is needed and 1 indicates profound dissatisfaction (cf. Anderson and Mittal 2000; Fornell 1992; Keiningham et al. 2007). Applying a 10-point scale instead of a typical 5- or 7-point Likert scale allowed customers to make more precise assessments (Fornell 1992). Exploratory factor analysis (principal component analysis with varimax rotation) was carried out by using SPSS to form the constructs. In addition, a preliminary assessment of the item reliability of the constructs established by the measurement items was made.

**Operationalisation of value facilitation**

As previously indicated, the value facilitation concept is built on four elements, which correspond to three forms of support by the service offering and the supportiveness of the service provider.

**Enabling support** is here reflected by two different factors:

- **Accessibility** of the service offering (e.g. Grönroos 1987, 2007; Parasuraman, Zeithaml, and Berry 1985)
- **Ease of use** of Internet banking (Davis 1989; Lin, Shih, and Sher 2007; McCloskey 2006)

**Enhancing support** is operationalised by one factor:

- **Value-enhancing advice** by the personal advisor (see Hanna and Lindamood 2010)

**Economical support** is represented by the following factor:

- **Competitiveness** of terms and conditions (Grönroos 2006; Webb, Webster, and Krepapa 2000)

**Supportiveness** is anchored in the following two dimensions:

- **Creating added value for the customers** (Gummesson 2007)
- **Focusing on customer interests and needs** (Heinonen et al. 2010; Kohli and Jaworski 1990; Slater and Narver 1994)

**Operationalisation of augmented customer lifetime value**

Next, the augmented customer lifetime value (ACLV) model applied in this paper is presented. Overall, a plethora of alternative CLV models has been published in the academic literature. Since the early present value-based models, researchers have developed more mathematically complex CLV models. Gupta et al. (2006) identify six modelling approaches: RFM models (recency, frequency and monetary value of previous purchases), probability models, econometric models, persistence models, computer science models and diffusion/growth models. However, in a study on how well CLV models of various complexity perform, Donkers, Verhoef and de Jong (2007) find that more complex models do not lead to substantially better CLV predictions. On the contrary, they find that simple models perform relatively well, even though the more complex models allow for changes in customer behaviour over time. In summary, they conclude that there is no best model for the prediction of individual CLV levels. However, for segmentation purposes, the simple status quo model performs best.

Consequently, this paper draws on the simple CLV equation proposed by Gupta and Lehmann (2003, 2005), in which \( m \) equals profit from a customer, \( r \) equals the retention rate, which in this paper is measured by the customer’s stated propensity to
stay, and \( i \) equals the discount rate. The margin multiple \( \frac{r}{(1+i-r)} \) multiplied with the profit figure \( m \) equals the lifetime value; see Equation 1.

\[
(1) \quad ACLV = m \times \frac{r}{(1+i-r)}
\]

A margin multiple higher than one corresponds to an increase in the financial value of customers, whereas a margin multiple lower than one characterises a decrease in the financial value of customers. Correspondingly, the lifetime value in the latter condition would be lower than the customer profitability, and in the former situation, the lifetime value would be higher than the customer profitability value.

According to Gupta and Lehmann (2003), the retention rate is one of the trickiest metrics to estimate empirically. Typically, CLV equations either assume or estimate a constant retention rate over time (Blattberg et al. 2001). Many different mathematical and statistical methods of various complexity have been developed in the literature for estimating retention rates in non-contractual settings (Gupta and Zeithaml 2006; Neslin et al. 2006; Villanueva and Hanssens 2007).

However, in contractual service settings, e.g. retail banking, mobile subscriptions and insurance policies, customers have to notify the service provider to terminate their relationships (cf. Gupta and Zeithaml 2006). In a similar manner, this paper argues that, in contractual service settings, the retention rate can be inferred by simply asking customers about their propensity to continue their relationships. Accordingly, this paper differs from the typical methods for estimating retention rates in that individual propensities to stay rates are used for each customer as an indication of the retention rate (cf. Keiningham et al. 2007; Ranaweera and Prabhu 2003). The propensities to stay figures are based on the customers’ answers to a single item in the survey (cf. Bergkvist and Rossiter 2007; Keiningham et al. 2007; Reichheld 2003). Thus, the lifetime value is based on the integration of survey data with transactional data. Therefore, the term augmented customer lifetime value (ACLV) is preferred over the more commonly used term customer lifetime value (CLV).

Using surveys to estimate the drivers of customer lifetime value was proposed by Rust et al. (2000, 2004). However, instead of using the survey data to infer the retention rates, Rust et al. (2000, 2004) uses a Markov switching matrix to model customer retention.

**Empirical findings**

First, the results of the exploratory factor analysis are presented. Second, the descriptive statistics are presented in Table 1. Then the value facilitation concept is examined, and hypothesis one is tested. Fourth, the ideal profile is determined by testing hypothesis two. Finally, hypothesis three is tested by assessing the fit between the facilitation of the customers’ value creation and augmented customer lifetime value (ACLV).

**Exploratory factor analysis**

Exploratory factor analysis (principal component analysis with varimax rotation) was used for data reduction and to assess the item reliability of the four service offering support constructs. As a result, the enabling support constructs accessibility and ease of use are both built on three items; enhancing support, measured by the construct value-enhancing advice, contains four items; and finally, the economical support construct competitiveness is built on three items. All retained items load strongly (ranging from .56 to .87) on the construct in question. The measurement items and the factor loadings are reported in the Appendix.
Descriptive statistics

The descriptive statistics are reported in Table 1, which shows the construct means, standard deviations, correlations and Cronbach’s alphas.

### Table 1: Construct means, standard deviations, correlations and Cronbach’s alphas

<table>
<thead>
<tr>
<th>Construct</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>C1</th>
<th>C2</th>
<th>C3</th>
<th>C4</th>
<th>C5</th>
<th>C6</th>
<th>C7</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1 Accessibility</td>
<td>7.67</td>
<td>1.73</td>
<td>.73</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C2 Ease of use</td>
<td>8.58</td>
<td>1.29</td>
<td>.48*</td>
<td>.76</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C3 Value-enhancing advice</td>
<td>7.96</td>
<td>1.78</td>
<td>.46*</td>
<td>.40*</td>
<td>.93</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C4 Competitiveness</td>
<td>6.64</td>
<td>2.14</td>
<td>.42*</td>
<td>.36*</td>
<td>.49*</td>
<td>.86</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C5 Supportiveness</td>
<td>7.33</td>
<td>1.85</td>
<td>.60*</td>
<td>.50*</td>
<td>.64*</td>
<td>.67*</td>
<td>.94</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C6 Propensity to stay</td>
<td>8.91</td>
<td>1.58</td>
<td>.42*</td>
<td>.39*</td>
<td>.45*</td>
<td>.46*</td>
<td>.59*</td>
<td>N.A.</td>
<td></td>
</tr>
<tr>
<td>C7 Customer profitability</td>
<td>100</td>
<td>95.75</td>
<td>-.04*</td>
<td>.01</td>
<td>-.02**</td>
<td>.06*</td>
<td>.01</td>
<td>.02**</td>
<td>N.A.</td>
</tr>
</tbody>
</table>

* p < .01, ** p < .05

Cronbach’s alphas are shown on the diagonal in the correlation matrix.
N.A. = Not applicable

1 = Enabling support, 2 = Enhancing support, 3 = Economical support

The Cronbach’s alpha for each multi-item construct exceeds the threshold value of 0.7, so the scales are considered internally reliable (Hair, Anderson, Tatham, and Black 1998). All constructs, except for customer profitability, are measured on the 10-point scale. The customer profitability figures are recalculated from the original monetary figures in the bank’s database by letting the mean customer profitability figure correspond to 100. This is done to make the comparisons easier and to maintain the confidentiality of the actual profitability figures. Notably, the correlations between customer profitability and the other constructs are very weak if they are statistically significant. Consequently, the link between the value facilitation constructs and customer profitability is non-existent. In contrast, the correlations between retention and the value facilitation constructs are all positive and statistically significant (at the p < .01 -level).

Examination of the value facilitation concept

Next, a regression analysis is conducted to test hypotheses 1A, B and C that enabling support, enhancing support and economical support are all positively related to the value facilitation of the service provider.

As reported in Table 2, the regression analysis is statistically significant (R² = .65, p < .0005). Accordingly, the results of the regression analysis support hypotheses 1A, B and C in that all four factors have positive relationships with value facilitation: accessibility (β = .254, p < .0005), ease of use (β = .129, p < .0005), value-enhancing advice (β = .287, p < .0005) and competitiveness (β = .372, p < .0005). Thus, the regression analysis supports the proposition that the value facilitation concept can be built on the three
support categories of the service offering and the supportiveness of the service provider.

Table 2: Regression analysis of the value facilitation concept

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Dependent variable: Supportiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Enabling support:</strong></td>
<td></td>
</tr>
<tr>
<td>Accessibility (β)</td>
<td>.254*</td>
</tr>
<tr>
<td>Ease of use (β)</td>
<td>.129*</td>
</tr>
<tr>
<td><strong>Enhancing support:</strong></td>
<td></td>
</tr>
<tr>
<td>Value-enhancing advice (β)</td>
<td>.287*</td>
</tr>
<tr>
<td><strong>Economical support:</strong></td>
<td></td>
</tr>
<tr>
<td>Competitiveness (β)</td>
<td>.372*</td>
</tr>
<tr>
<td><strong>F-value</strong></td>
<td>6,807.28 (df 4)*</td>
</tr>
<tr>
<td><strong>R2</strong></td>
<td>.65</td>
</tr>
</tbody>
</table>

*p < .0005

The ideal customer profile based on profit maximisation

A common practice in customer profitability analysis is to rank customers in deciles based on their financial value (e.g. Kumar, Pozza, Petersen, and Shah 2009; Malthouse and Blattberg 2005; Storbacka 1994, 1997). Accordingly, the customers in the dataset were ranked in deciles based on their profitability to form two groups of customers: the ideal customer profile and the rest of the customers. The ideal customer profile is formed by the value-facilitation scores for the customers in the highest customer profitability decile. Correspondingly, this ideal customer profile is based on profit maximisation.

The results of the independent-samples t-tests, presented in Table 3, show that only the mean values of the item *competitiveness* are statistically different (p < .005) between the ideal profile based on profit maximisation and the rest of the customers. Although the differences between the mean values of item accessibility are also statistically significant, the mean value is lower for the ideal profile than the mean value for the rest of the customers. According to the configuration theory based on profile deviation, the mean values should be higher for the ideal group of customers than for the rest of the customers. There are no statistically significant differences between the mean values for the three other items: ease of use, value-enhancing advice and value facilitation. These mixed results are in line with the weak correlations between customer profitability and the value facilitation factors, as reported in Table 1.

Consequently, these findings demonstrate that there is a mismatch between the facilitation of customers’ value creation and profit maximisation as the path for producing superior ACLV. As a result, hypothesis 2A is rejected.
Table 3: Comparison of the mean values of the value facilitation elements between the ideal customer profiles based on profit maximisation and the rest of the customers

<table>
<thead>
<tr>
<th>Value facilitation</th>
<th>Ideal</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>Mean</td>
<td>Std. dev.</td>
<td>n</td>
<td>Mean</td>
<td>Std. dev.</td>
<td>t-value</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enabling support:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accessibility</td>
<td>2,229</td>
<td>7.57</td>
<td>1.75</td>
<td>19,867</td>
<td>7.68</td>
<td>1.72</td>
<td>2.79*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ease of use</td>
<td>2,039</td>
<td>8.59</td>
<td>1.30</td>
<td>17,446</td>
<td>8.58</td>
<td>1.29</td>
<td>-.60</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enhancing support:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value-enhancing advice</td>
<td>1,737</td>
<td>7.93</td>
<td>1.85</td>
<td>14,390</td>
<td>7.96</td>
<td>1.77</td>
<td>.48</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economical support:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Competitiveness</td>
<td>1,991</td>
<td>6.90</td>
<td>2.05</td>
<td>16,880</td>
<td>6.61</td>
<td>2.15</td>
<td>-5.89*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supportiveness</td>
<td>2,176</td>
<td>7.39</td>
<td>1.83</td>
<td>19,110</td>
<td>7.33</td>
<td>1.85</td>
<td>-1.45</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .005

The non-ideal customer profile based on retention minimisation

The distribution of retention rates was found to be highly negatively skewed (-2.218), as expected from the existing literature and the high mean value (8.91) reported in Table 1. Therefore, the benchmark profile is formed as a non-ideal customer profile based on the lowest retention rates. To create a coherent and sufficiently large group of customers, the non-ideal group of customers is formed of those with retention rates giving a margin multiple of less than one, which corresponds to a decrease in the financial value of customers. As a result, in this case, customers with retention rates between 1 and 6 form the non-ideal profile. The non-ideal group of customers corresponds to 7% of the customers in the data set.

The results of the analysis, reported in Table 4, demonstrate that the mean values of the value facilitation factors for the non-ideal group of customers are all lower than for the rest of the customers. In addition, the independent t-tests show that all mean values of the value facilitation factors are statistically different (p < .005). Moreover, the correlations between retention and the value facilitation factors are all positive and statistically significant (p < .01), as exhibited in Table 1. Altogether, hypothesis 3A is confirmed.
Table 4: Comparison of the mean values of the value facilitation concepts between the non-ideal profiles based on *retention minimisation* and the rest of the customers

<table>
<thead>
<tr>
<th>Value facilitation</th>
<th>Non-ideal</th>
<th>Rest</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>Mean</td>
<td>Std. dev.</td>
</tr>
<tr>
<td><strong>Enabling support:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accessibility</td>
<td>1,655</td>
<td>5.81</td>
<td>2.06</td>
</tr>
<tr>
<td>Ease of use</td>
<td>1,469</td>
<td>7.32</td>
<td>1.84</td>
</tr>
<tr>
<td><strong>Enhancing support:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value-enhancing advice</td>
<td>1,135</td>
<td>5.82</td>
<td>2.40</td>
</tr>
<tr>
<td><strong>Economical support:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Competitiveness</td>
<td>1,473</td>
<td>4.20</td>
<td>2.06</td>
</tr>
<tr>
<td>Supportiveness</td>
<td>1,607</td>
<td>4.42</td>
<td>1.94</td>
</tr>
</tbody>
</table>

*p < .005

**Assessment of the fit based on profile deviation**

As a result of the preceding analyses, the fit assessment should follow the proposed reversed logic and be based on retention minimisation. Accordingly, the results hitherto suggest that, from the value-facilitation, perspective retention maximisation, not profit maximisation, would be the preferred path for producing superior ACLV. This means that the non-ideal profile should be formed irrespectively of any particular profitability level, ranging through all the customer profitability deciles. Consequently, hypothesis 2B is invalid.

Euclidian distance = \( \sqrt{\sum_{j} (X_{sj} - \bar{X}_{ij})^2} \)

\( X_{sj} \) = the score for a customer in the sample on the jth dimension

\( \bar{X}_{ij} \) = the mean score for the ‘non-ideal’ profile on the jth dimension

\( j \) = the number of profile dimensions (1, 2 ... 5).

To test hypothesis 3B, the mean scores of the non-ideal profile for each value facilitation dimension presented in Table 4 were used as the benchmark. As a following step, the profile deviations were calculated from the non-ideal profile of customers to each of the rest of the customers on the five value facilitation dimensions by the Euclidian distance formula (Van de Ven and Drazin 1985; Venkatraman 1989; Vorhies and Morgan 2003), presented in Equation 2.
The regression analysis reported in Table 5 confirms hypothesis 3 by demonstrating a positive and statistically significant profile deviation ($\beta = .544$, $p < .005$, and $R^2 = .30$). Using the margin multiple as the dependent variable in the regression analysis is a result of forming the benchmark profile based on retention minimisation. Consequently, the results show that retention maximisation is the preferred path for producing superior augmented customer lifetime value (ACLV) in conjunction with the facilitation of the customers’ value creation. The implications of the results are discussed next.

**Discussion**

This paper contributes to the strategic marketing literature by assessing the strategic fit between facilitating and supporting the customers’ value creation activities and customer-based financial performance. This is done by applying fit as profile deviation from a value facilitation benchmark profile, implying systematic effects on superior ACLV (cf. Van de Ven and Drazin 1985; Venkatraman 1989).

An additional contribution comes from examining which of two alternative paths to superior ACLV can be linked to value facilitation. One path corresponds to profit maximisation, while the other path represents retention maximisation. The results of the analysis demonstrate that there is a positive link between the facilitation of the customers’ value creation and customer retention, while there is a weak link to customer profitability. Due to highly negatively skewed retention rates, the logic of testing the fit based on profile deviation had to be reversed. Therefore, from a value facilitation perspective, the benchmark profile is based on retention minimisation and, thus, formed irrespectively of the profitability level. The fit was then examined by profile deviation from a non-ideal value-facilitation profile. Consequently, the introduction of the non-ideal profile contributes to the methodology employed in studies on fit as profile deviation. Overall, the results of the empirical analysis support the fit between the facilitation of customers’ value creation and superior ACLV.

Moreover, this paper contributes to the service marketing literature by moving beyond the normative notion that the customers’ creation of value should be supported into addressing how the service offering and service provider can provide the support. Accordingly, this paper addresses a previously overlooked research gap on various

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4 If profit maximisation had been appropriate to use as the basis for forming the ideal profile, then customer profitability would have been used as the dependent variable.
forms of support provided by the service offering and service provider by extending the value facilitation concept. Value facilitation is defined here as the extent to which the service offering and service provider are perceived by the customers to support or hinder their value creation. In addition, the results of the empirical study support the proposition that the value facilitation concept can be built on the enabling support, enhancing support and economical support of the service offering and supportiveness by the service provider, i.e. the degree to which the service provider supports or hinders the customers’ creation of value in general.

**Theoretical implications**

This study has a number of theoretical implications for service marketing. First, the empirical results demonstrate that the service process and the sales process must be considered distinct processes. The service process represented by value facilitation contributes to superior ACLV via retention, while the sales process contributes to superior ACLV via the generated cash flow.

This means that the better customers perceive the service offering and service provider to support their value creation activities, the more value they are likely to generate for the service provider by remaining customers. These results are in line with the notion of customer perceptions as drivers of customer equity (Persson and Ryals 2010; Rust, Zeithaml and Lemon 2000). In addition, the weak link between value facilitation and customer profitability indicates that cash flow is mainly a result of the sales process. On the other hand, cash flow can also be considered a result of the customers’ needs and wants, which are addressed by the essential support of the service offering.

Second, the results indicate that facilitating customers’ value creation can represent an active strategy for retention maximisation. This result is contrary to the notion of retention maximisation as a passive strategy, as put forward by Fornell and Wernerfelt (1987, 1988). Consequently, this paper argues that the value facilitation concept represents a fruitful theoretical point of departure. Thus, examining the extent to which customers perceive service offerings and service providers to support or hinder their value creation can give new insights into how to increase the financial value of customers.

A third theoretical implication is related to selecting the proper measure for customer lifetime value. This paper shows that the augmented customer lifetime value (ACLV), which is built on input from both the customer and the service provider, makes it possible to assess the fit between the facilitation of customers’ value creation and ACLV. Due to the weak link between value facilitation and customer profitability, regular customer lifetime value models (CLV) also lead us astray because regular CLV models base their retention estimates on mathematical and statistical models that only simulate customer behaviour. Thereby, these models fail to establish a linkage to customer experience. Thus, the regular CLV models, by design, fall short of establishing a significant linkage to value facilitation.

**Managerial implications**

First, for service providers, it is essential to consider the service process in the form of value facilitation and the sales process resulting in cash flow as two distinct paths to superior ACLV. Mainly by facilitating and supporting their customers’ value creation activities, service providers can improve the propensity of their customers to stay and thereby the augmented customer lifetime value (ACLV) of each customer. Accordingly, from the service provider’s perspective, value facilitation creates an additional positive exit barrier (cf. Jones, Mothersbaugh, and Beatty 2000; Vázquez-Carrasco and Foxall 2006).
However, this does not mean that customer profits would be irrelevant for creating superior ACLV. Instead, it means that customer profitability is primarily a result of the sales process rather than the facilitation of customers’ value creation activities. Obviously, to increase the volume of the business and thus potentially also ACLV, service providers need to take an active sales approach.

In addition, the better service providers know and understand their customers, the better they can support their customers by selling service offerings that fit their value creation activities (cf. Payne, Storbacka, and Frow 2008).

Furthermore, as illustrated in Figure 2, a key managerial implication is the application of adapted strategies for different categories of customers.

![Figure 2: Adapted strategies](image)

The most loyal customers, corresponding to 9 or 10 in their propensity to stay (cf. Reichheld 2003), should be cultivated by maintaining the facilitation of their value creation activities. The customers corresponding to an intermediate level of loyalty, rated at 7 or 8 in their propensity to stay (cf. Reichheld 2003), should be addressed by new service development with the aim to improve the value facilitation. A plausible strategy is to involve these customers in new service development activities (cf. Alam 2002; Matthing, Kristensson, Gustafsson, and Parasuraman 2006), as at least some of them can be expected to have a reason for coming up with innovative ideas due to the inadequacy in the facilitation of their value creation activities. Then, the least loyal customers, responding from 1 to 6 in their propensity to stay (cf. Reichheld 2003), should be addressed through cost-efficiency actions. Implementing proper cost-efficiency actions is crucial because these propensity to stay rates give a margin multiple of less than one, which corresponds to a decrease in the financial value of customers (cf. Gupta and Lehmann 2005).

Finally, despite applying adapted strategies, service providers can in reality strive to learn from all of their customers to identify latent needs with the aim to further develop their service business (cf. Goffin, Lemke, and Koners 2010; Matthing, Sandén, and Edvardsson 2004).
Limitations and directions for future research

This study has a number of limitations that open up possibilities for further research. One limitation comes from the retail banking context, which represents a contractual and continuous business setting. Accordingly, additional research could be conducted in other business contexts. The business setting could represent a contractual and discrete context, a non-contractual and continuous context or a discrete and non-contractual context. Obviously, all four types of business settings could be compared in a study. Another path for further research could be to confirm the results of the current study by conducting additional research in the retail banking sector or in a similar contractual and continuous business setting.

Another limitation comes from including only retained customers in the sample. Hence, an avenue for further research could be to focus on newly acquired and potential customers. Furthermore, an essential limitation comes from including only profitable customers in the sample. Therefore, a potential direction for further research would be to study value facilitation as a strategy for improving the ACLV of unprofitable customers (cf. Mittal, Sarkees, and Murshed 2008). Moreover, a possible topic for further research would be to use perceived value facilitation as a selection criterion for involving customers in new service development.

A further limitation of this study is that the measurement items are based on items in a customer satisfaction survey developed for other purposes. Accordingly, one avenue for further research could be to develop measurement items based on qualitative research with the purpose of adding additional dimensions of enabling, enhancing and economical support. Likewise, a feasible direction for further research would be to include the essential support in the value facilitation framework. Further studies with the intention of finding out how customers perceive various service offerings to facilitate their value-creation activities could be achieved using qualitative research methods such as ethnography (e.g. Goffin, Lemke, and Koners 2010) or service stories (Nyman, Mickelsson, and Strandvik 2011).
References


# APPENDIX A

Factor loadings and cross-loadings for the measurement items of the service offering support constructs

<table>
<thead>
<tr>
<th>Constructs/Measurement items:</th>
<th>Enabling support</th>
<th>Enhancing support</th>
<th>Economical support</th>
</tr>
</thead>
<tbody>
<tr>
<td>The opportunity to take care of banking affairs at hours that suit you</td>
<td></td>
<td>.79</td>
<td></td>
</tr>
<tr>
<td>The location of the bank branch you usually visit</td>
<td></td>
<td>.82</td>
<td></td>
</tr>
<tr>
<td>The accessibility of the bank (opening hours, waiting time, how easy it is to get in contact with staff at the bank)</td>
<td>.56</td>
<td>.32</td>
<td>.39</td>
</tr>
<tr>
<td>How faultlessly the self-services work</td>
<td></td>
<td>.86</td>
<td></td>
</tr>
<tr>
<td>How easy the self-services are to use</td>
<td></td>
<td>.80</td>
<td></td>
</tr>
<tr>
<td>Getting help from the bank in case of problems in using the self-services</td>
<td>.37</td>
<td>.61</td>
<td>.31</td>
</tr>
<tr>
<td>Proposing suitable solutions to you</td>
<td></td>
<td>.83</td>
<td></td>
</tr>
<tr>
<td>Giving you advice on how to make your banking easier</td>
<td></td>
<td>.86</td>
<td></td>
</tr>
<tr>
<td>Giving you advice and hints on how you can improve your personal finances</td>
<td></td>
<td>.85</td>
<td></td>
</tr>
<tr>
<td>Giving you sufficient information about the characteristics of different investment alternatives</td>
<td></td>
<td>.84</td>
<td></td>
</tr>
<tr>
<td>How competitive are the bank’s interest rates on loans</td>
<td></td>
<td></td>
<td>.71</td>
</tr>
<tr>
<td>How competitive are the returns from investment funds</td>
<td></td>
<td>.31</td>
<td>.83</td>
</tr>
<tr>
<td>How competitive are the interest rates on savings and investments</td>
<td></td>
<td></td>
<td>.87</td>
</tr>
</tbody>
</table>

5 Factor loadings and cross-loadings under .3 are excluded from the table.
APPENDIX 3  ESSAY 2

Nyman, H.: The Added Value of Service Provision
The Added Value of Service Provision

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ABSTRACT

Purpose – The overall purpose of this paper is to present a framework for examining the value of service sales and the added value of service provision as distinctive parts of augmented customer lifetime value (ACLV). An additional purpose is to examine the effect of value facilitation on change in the financial value of customers within a customer portfolio as a result of service provision.

Design/methodology/approach – The empirical study was performed by examining a large sample of high-volume customers belonging to the same customer segment of a retail bank.

Findings – The added value of the service provision process is considerable. Value facilitation has a significant impact on change in the financial value of customers.

Research limitations/implications – Possible avenues for further research would be to study multiple customer segments in a retail bank or in different industries.

Practical implications – Customer profits resulting from the service sales process should be considered as only an initial indication of the financial value of customers. Managers should pay attention to the added value generated by the service provision process and the facilitation of customers’ value-creation activities.

Originality/value – This paper contributes to the contemporary service marketing literature by conceptualising service from the service provider’s perspective in terms of the service sales process and the service provision process. Thus, the focus is placed on the added value of service provision rather than on the consumption of a service.

Keywords Service logic, value facilitation, augmented customer lifetime value, customer portfolios

Paper type Research paper
INTRODUCTION

Studies in the contemporary service marketing literature have for the most part taken a customer perspective on service by focusing on service experiences as indications of value in use (e.g., Edvardsson, Gustafsson and Roos, 2005; Helkkula and Kelleher, 2010; Heinonen et al., 2010; Holbrook, 2006; Sandström et al., 2008; Schembri, 2006; Vargo and Lusch, 2008). Alternatively, the financial consequences of a service from a service provider's perspective have received less critical attention. Overall, the contemporary service marketing literature is short of studies that employ techniques from the marketing-finance interface literature, such as customer portfolio analysis (cf. Campbell and Cunningham, 1983; de Ruyter and Wetzels, 2000; Srivastava, Shervani and Fahey, 1998; Zinkhan and Verbrugge, 2000). Customer portfolio analysis derives from financial portfolio theory, or more particularly, from modern portfolio theory (MPT), which was introduced by Harry Markowitz in 1952. Drawing on such theory, this paper argues that the research focus should be moved from individual customers to groups of customers that represent a customer portfolio (cf. Elliott and Glynn, 1998; Terho and Halinen, 2008; Yorke and Droussiotis, 1994). In so doing, the dynamic effects of service provision within a customer portfolio can be better understood.

This paper takes a provider perspective on service in conceptualising service as consisting of two distinct processes: the service sales process and the service provision process. Of course, the customer perspective of these processes is intimately tied to the financial outcomes of a service as well. From a customer perspective, the service sales process deals with value propositions which indicate that service offerings are not the final result of an economic activity, but should add value for customers (cf. Gummesson, 2007). Moreover, from a customer perspective the service provision process involves value facilitation, or, the facilitation of customers' value-creation activities (cf. Grönroos, 2006, 2008; Woodruff, 1997). Consequently, this paper argues that from a service provider perspective both the service sales process and the service provision process have an effect on the financial value of customers.

The financial value of customers is here measured in terms of augmented customer lifetime value (ACLV). The ACLV has been modified from the more common customer lifetime value (CLV) model proposed by Gupta and Lehmann (2003) with the integration of transaction data and individual propensity to stay data. Propensity to stay rates are here applied as indicators of retention rate as opposed to more commonly assumed or estimated retention rates (e.g., Blattberg, Getz and Thomas, 2001; Gupta and Zeithaml, 2006). As a result, by using the propensity to stay rates in the ACLV equation it is possible to link customers' perceptions of value facilitation (and thereby, of service provision) to the financial value of customers. Thus, the financial effect of the service provision process can be separated from the financial effect of the service sales process. In the ACLV equation, the outcome of the service sales process is denoted by the profits generated by customers (value in exchange), while the outcome of the service provision process is reflected by change in the financial value of customers (ΔFV).

Importantly, the financial effects of the service sales process and the service provision process emerge at different points in time. The financial effect of the service sales process is more immediate, while the financial effect of the service provision process is more gradual and long-term. From an investment perspective, payback from service provision is more uncertain yet potentially more substantial in terms of the long-term value of customers.

Consequently, the overall purpose of this paper is to present a framework for examining the value of service sales and the added value of service provision as distinctive parts of ACLV. An additional purpose is to examine the effect of value facilitation on change in the financial value of customers within a customer portfolio that are categorized into customer profitability deciles.
THEORETICAL FRAMEWORK

As demonstrated in Figure 1, the theoretical framework of this paper is built upon aspects of both the service marketing and the marketing-finance interface literature. The ACLV is here applied for an examination of the financial consequences of service sales and service provision. The elements of the theoretical framework are discussed in the following sections.

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**Figure 1 The theoretical framework**

*Setting the focus on service provision*

A central tenet of the service-dominant logic first introduced by Vargo and Lusch (2004) is the proposition that economic exchange is primarily about service provision. Service provision can be characterised as an input by a service provider for customer resource integration and value-creation activities (Normann, 2001; Vargo and Lusch, 2006). The input of service provision for customers as well as the outcome of service provision for a service provider differs depending on the context and resources involved in the value-creation process (Heinonen et al., 2010; Grönroos, 2006; Normann, 2001; Vargo and Lusch, 2006). Hence, from a service provider’s perspective, service provision can be considered as the process wherein a service provider can influence the value outcomes for the customer (cf. Grönroos, 2008; Gummesson, 2007; Vargo and Lusch, 2004). This paper argues that service provision can also be expected to have an effect on the financial value of customers. The contemporary service marketing literature has to a large extent disregarded the financial consequences of service provision for a service provider. Consequently, this paper asserts that, in terms of ACLV, the financial value of customers is a function of both the service sales process and the service provision process. The service sales process deals with value proposition, while the service provision process encompasses value facilitation.

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In a later article by Vargo and Lusch, the term *service provision* has been replaced by the concept of *service* as the fundamental basis of exchange (Vargo and Lusch, 2008a). However, this paper argues that from a financial perspective the concept of *service* should be divided into two distinct processes: the service sales process and the service provision process.
Value proposition

The term “value proposition” refers to the distinction between embedded value in service offerings and the value of use notion, the latter of which stresses that value emerges for customers when they use service offerings (Edvardsson, Gustafsson and Roos, 2005; Grönroos, 2006, 2008; Gummesson, 2007; Heinonen et al., 2010; Normann and Ramirez, 1994; Vargo and Lusch, 2004; Woodruff and Gardial, 1996).

According to Gummesson (2007), the term “value proposition” emphasises that customers buy things that they perceive to be of value. Consequently, service offerings should add value for customers, as they are only value propositions and not the final result of an economic activity (Gummesson, 2007). In effect, a service provider can only make value propositions (Vargo and Lusch, 2004) and facilitate customers’ value-creation activities (Grönroos, 2006, 2008; Normann and Ramirez, 1994). Thus, service providers actually sell value propositions (cf. Gummesson, 1995). Consequently, this paper argues from a service provider’s perspective that the value of service propositions reflects value in exchange, which can be measured by the profits generated from customers. Furthermore, this paper argues that value in exchange only forms the first part of the ACLV formula and does not reflect the added value of service provision.

Value facilitation

According to Grönroos (2008), the role of the service provider is to act as a value facilitator and support customers’ value-creation activities via interactive processes, such as face to face interactions or via self-service channels. In practice, service providers can to various degrees facilitate or hinder their customers’ value-creation activities (Grönroos, 2006, 2008; Normann and Ramirez, 1994; Woodruff, 1997). Therefore, this paper argues that customers’ perceptions of value facilitation influence whether service provision results in the increase or decrease of the financial value of customers.

This paper conceptualises value facilitation as customers’ perceptions of three different forms of support from a service offering and the supportiveness of a service provider. The first form of support, enabling support, makes it possible for a customer to use a service offering and thereby brings about customers’ value-creation (cf. Grönroos, 2007; Normann and Ramirez, 1994). The second form of support, enhancing support, advances the customers’ value-creation, e.g. by personal value enhancing advice, and makes it possible to get more out of a service offering (cf. Grönroos, 2007). The third form of support, economical support, corresponds to the competitiveness of a service offering and thereby progresses the cost-effectiveness of the customers’ value-creation (cf. Bowman and Ambrosini, 2000; Hauser and Wernerfelt, 1990; Normann and Ramirez, 1993; Kenyon and Mathur, 2002).

The term supportiveness refers here to the degree a service provider is perceived to support or hinder a customer’s general creation of value. More specifically, the term supportiveness pertains to how well a service provider is perceived to take customers’ interests into consideration (cf. Heinonen et al., 2010; Kohli and Jaworski, 1990; Slater and Narver, 1994) and add value to customers’ value-creation activities (cf. Gummesson, 2007).

To conclude, this paper argues that value facilitation has a significant impact on the added value of service provision. More specifically, this paper argues that the added value of service provision can be measured by change in the financial value of

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7 The fourth type of support from a service offering is essential support, which relates to customers’ reasons for buying and using a service offering. However, essential support is excluded from this paper’s framework because the examination of customers’ reasons for buying and using a service offering is beyond the scope of this paper.
customers, which forms the second part of the augmented customer lifetime value equation.

**Augmented customer lifetime value**

There is a plethora of alternative customer lifetime value (CLV) models published in the academic literature. CLV is generally defined as the present value of all future profits from a customer over the course of his or her relationship with a firm (Blattberg and Deighton, 1996; Gupta and Lehmann, 2003). According to Gupta et al. (2006), CLV is similar to discounted cash flow in finance. However, they also point out some differences between the two concepts. CLV is typically estimated at the individual customer or segment level, which makes it possible to differentiate between customers based on their lifetime value. In addition, CLV explicitly considers the possibility that a customer might defect to a competitor in the future. Nonetheless, most CLV models are based on transaction data only (Gupta et al., 2006). Consequently, the customer side of a transaction and the factors that drive customer behaviour are often excluded from these models.

Therefore, in this paper the financial value of customers is assessed in terms of augmented customer lifetime value (ACLV). Importantly, ACLV differs from common CLV approaches in that both transaction data and survey data are integrated into the augmented customer lifetime value equation. For this reason, the term *augmented customer lifetime value* is regarded as more appropriate than customer lifetime value, which is the generally used term.

The ACLV equation, save for individual propensity to stay figures in place of retention rates, corresponds to the status quo CLV equation put forward by Gupta and Lehmann (2003):

\[ ACLV = m \times \frac{r}{(1+i-r)} \]

In this equation, ACLV is equal to profit \( m \) of the last 12 months made from a customer multiplied by the margin multiple: \( \frac{r}{(1+i-r)} \). Central to the margin multiple are the individual propensity to stay figures \( r \) and the discount rate \( i \). This status quo model assumes the individual profit \( m \) and propensity to stay figures \( r \) to be constant. The time horizon is infinite.

As a common rule in CLV equations, the retention rate \( r \) is either assumed or estimated by various mathematical or statistical methods (cf. Blattberg et al., 2001; Gupta and Zeithaml, 2006; Neslin et al. 2006; Villanueva and Hanssens, 2007). However, individual propensity to stay rates is used for each customer instead of retention rates in this paper (cf. Ranaweera and Prabhu 2003). The propensities to stay figures of this study are based on customers’ responses to a single item survey question: “How likely is it that in 12 month’s time The Bank is still your bank?” The use of a single item question as a measure of propensity to stay is here considered appropriate because it fulfils the criteria of being “concrete singular”, which means that the measure is “easily and uniformly imagined” (Bergkvist and Rossiter, 2007; Rossiter, 2002). The measures have been collected on a 10-point scale where 1 equals “not likely at all” and 10 equals “very likely” (cf. Anderson and Mittal, 2000; Fornell, 1992; Keiningham et al., 2007). The benefit of applying a 10-point scale instead of a typical 5- or 7-point Likert scale comes in the amount of detail acquired from letting customers make more precise decisions.

\* The appropriate discount rate can be estimated by using the firm’s weighted average cost of capital (WACC), which reflects the service provider’s debt and equity structure (see Gupta 2009).
assessments (Fornell 1992). The propensities to stay measures were then transformed into factors ranging from 0 to 1 for placement in the ACLV equation.

The constant profit (m) figures and propensity to stay figures (r) rates reflect a baseline scenario. The use of constant profit (m) figures is naturally a simplification of the cash flow, but there is conflicting evidence in the literature as to whether profits generated by customers increase, decrease, or stay constant over their lives (Gupta and Lehmann, 2005; Reichheld, 1996; Reinartz and Kumar, 2002). More importantly in this paper, the constant profit (m) figures reflect a prolongation of the current business model (service provision) and its competitive environment, or changes in the business that counterbalance each other (cf. Gupta and Lehmann, 2005).

The use of constant propensity to stay figures (r) for individual customers is also a simplification as customers might change their minds, but allows for heterogeneity in the retention rates between different customers (cf. Gupta and Lehmann, 2005). This heterogeneity reflects to a certain extent the differences between customers’ essential needs for a service over time (Gupta and Lehmann, 2005) as well as their reasons for buying and experiences using a service (Heinonen et al., 2010). Moreover, previous research has found that heterogeneity in retention rates between customers is consistent with actual data (Schmittlein and Peterson, 1994).

In summary, the use of constant profit (m) figures and propensity to stay figures (r) for individual customers makes it possible to study the effect of service provision and value facilitation on change in the financial value of customers.

**Measuring the added value of service provision**

The added value of service provision can be examined by converting the margin multiple into financial terms. This conversion of the margin multiple symbolises the change in the financial value of customers. The change in the financial value of customers represents the difference between the ACLV and the profit (m) generated by a customer (value in exchange). Accordingly, the added value of service provision can be measured by the $\Delta FV$, which can be expressed by the following equation:

$$\Delta FV = m \times (m - 1)$$

In effect, the $\Delta FV$ figures correspond to the increase ($+\Delta FV$) or decrease ($-\Delta FV$) of the financial value of each customer. Table 1 illustrates the conversion of the margin multiple into financial terms.

**Table 1: An illustration of $\Delta FV$**

<table>
<thead>
<tr>
<th>Propensity to stay (r)</th>
<th>Factor (0 to 1)</th>
<th>Interest rate (i)</th>
<th>Margin Multiple (mm)</th>
<th>Margin (m)</th>
<th>$\Delta FV$</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>1.00</td>
<td>0.12</td>
<td>8.33</td>
<td>100</td>
<td>733</td>
</tr>
<tr>
<td>9</td>
<td>0.89</td>
<td>0.12</td>
<td>3.85</td>
<td>100</td>
<td>285</td>
</tr>
<tr>
<td>8</td>
<td>0.78</td>
<td>0.12</td>
<td>2.27</td>
<td>100</td>
<td>127</td>
</tr>
<tr>
<td>7</td>
<td>0.67</td>
<td>0.12</td>
<td>1.47</td>
<td>100</td>
<td>47</td>
</tr>
<tr>
<td>6</td>
<td>0.56</td>
<td>0.12</td>
<td>0.98</td>
<td>100</td>
<td>-2</td>
</tr>
<tr>
<td>5</td>
<td>0.44</td>
<td>0.12</td>
<td>0.66</td>
<td>100</td>
<td>-34</td>
</tr>
<tr>
<td>4</td>
<td>0.33</td>
<td>0.12</td>
<td>0.42</td>
<td>100</td>
<td>-58</td>
</tr>
<tr>
<td>3</td>
<td>0.22</td>
<td>0.12</td>
<td>0.25</td>
<td>100</td>
<td>-75</td>
</tr>
<tr>
<td>2</td>
<td>0.11</td>
<td>0.12</td>
<td>0.11</td>
<td>100</td>
<td>-89</td>
</tr>
<tr>
<td>1</td>
<td>0.00</td>
<td>0.12</td>
<td>0.00</td>
<td>100</td>
<td>-100</td>
</tr>
</tbody>
</table>
The propensity to stay rates as provided in the survey are reported ranging from 1 to 10 in the table’s first column. In the second column, the propensity to stay rates are transformed into a factor ranging from 0 to 1. The interest rate, set at 12%, is reported in the third column. The margin multiple (mm) is then calculated applying the ACLV equation (1) in the fourth column. In the fifth column, the margin is set to 100 in all cases for illustrative purposes. Finally, in the last column the ΔFV is reported with a range from -100 to +733 depending on the propensity to stay figures. Thus, the variation of the change in financial value is quite substantial. Noteworthy here is that when applying a discount rate of 12%, the propensity to stay rate has to be 7 or higher in order for a positive change in the financial value of customers to come about.

Examine a customer segment as a customer portfolio

A customer base, or any particular segment of a customer base, can be examined as a customer portfolio (see Campbell and Cunningham, 1983; Elliott and Glynn, 1998). A customer portfolio is built up of individual customer relationships that can be considered as building blocks for understanding the dynamics of the value created within an entire customer portfolio (Johnson and Selnes, 2004).

One objective of customer portfolio analysis is to analyse the financial value of a service provider’s existing customers (Elliott and Glynn, 1998; Terho and Halinen, 2008; Yorke and Droussiatis, 1994). Correspondingly, a widespread approach for analysing the financial value of customers is to rank customers in deciles based on their profitability (e.g., see Mulhern 1999; Storbacka, 1994, 1997).

Accordingly, in this paper the customer portfolio is formed by ranking the customers in terms of their profitability into customer profitability deciles (cf. Elliott and Glynn, 1998; Mulhern, 1999; Storbacka, 1994, 1997; Terho and Halinen, 2008; van Raaij, 2005). The aim here is to examine the effect of value facilitation on change in the financial value of customers within the customer profitability deciles. Thus, the focus has been shifted in this paper from individual customers to groups of customers that represent a customer portfolio (cf. Elliott and Glynn, 1998; Terho and Halinen, 2008; Yorke and Droussiatis, 1994).

HYPOTHESES

Seven hypotheses are here put forward that stem from the theoretical framework.

The proposed value facilitation concept of this paper is built on four separate constructs consisting of three different forms of support from a service offering and the supportiveness of a service provider. Accordingly, the first hypothesis is as follows:

\[ H_1: \quad \text{The four value facilitation constructs are distinct.} \]

As put forward in the theoretical framework, customer profits (value in exchange) are here assumed to be unconnected to service provision, and hence unrelated to the value facilitation concept. Consequently, the second hypothesis is as follows:

\[ H_2: \quad \text{There is no relationship between customer profits (value in exchange) and the value facilitation constructs.} \]

Correspondingly, customer profits (value in exchange) are here also hypothesised to be unconnected to the propensity to stay. Hence, the third hypothesis is as follows:

\[ H_3: \quad \text{The propensity to stay is independent of customer profits (value in exchange).} \]
Nevertheless, as presented in the theoretical framework, the propensity to stay is hypothesised to be related to the value facilitation concept. Thus, the fourth hypothesis is as follows:

\[ H_4: \text{The propensity to stay has a positive relationship with the value facilitation constructs.} \]

The relationship between value facilitation and changes in the financial values of customers within the customer profitability deciles is hypothesised to be positive. Hence, the fifth hypothesis is as follows:

\[ H_5: \text{Value facilitation has a significant positive relationship to changes in the financial values of customers within each customer profitability decile.} \]

**STUDY DESIGN AND MEASURES**

Here the study design and operationalisation of the theoretical constructs into measures are discussed. The empirical data and sample are first discussed, followed by the operationalisation of the value facilitation constructs.

*Data and sample*

The data of this study consists of a large sample of a particular retail bank’s high relationship volume customers\(^9\). These high relationship volume customers represent the top customer segment of this retail bank. Accordingly, these customers have all been appointed a personal advisor at the bank as the primary customer value enhancing support element of the service offering.

The data was originally collected in a customer satisfaction survey and augmented with a dataset on relationship volume and profitability figures at the individual customer level. This was done by using a running code for both the survey questionnaires and the dataset on relationship volume and profitability. All possibilities to identify any customer by name or address were eliminated in both datasets. Therefore, the confidentiality of the customers was not at risk at any point in the process of the study.

The bank has hundreds of thousands of customers in its countrywide branch network. A survey was sent out to a stratified random sample of high-volume customers throughout the country and the effective response rate was 32 percent, which corresponded to 21,584 respondents. Demographically, the respondents represent ages between 18 and 75, with women representing 42 percent and men 58 percent of the total respondents. The relatively larger percentage of men in this study corresponds fairly well to the population of this high relationship volume customer segment. The average duration of the respondents’ relationship with the bank was 19 years, ranging from less than 1 year to 74 years.

Given that the original data consisting of 21,584 respondents could not be used as such to form ten equally sized customer profitability deciles, a random sampling procedure was performed in SPSS. As a result, 20,380 customers were randomly selected. Thus, each of the ten groups of customers consisted of 2,038 customers.

*Operationalisation of the value facilitation constructs*

The value facilitation concept of this paper is comprised of four elements that correspond to three distinct forms of support from a service offering and the

\(^9\) The bank defines high relationship volume customers as those who have a bank account with a regular income stream, use products or services from a given number of different product groups, and have savings and/or loans at a certain minimum value.
supportiveness of a service provider. These support dimensions include enabling, enhancing, and economical support.

Enabling support is here represented by the ease of use of internet banking (Davis, 1989; Lin, Shih and Sher, 2007; McCloskey, 2006).

Enhancing support is operationalized by the value enhancing advice of a personal advisor (Hanna and Lindamood, 2010).

Economical support is represented by the competitiveness of terms and conditions (Grönroos, 2006; Webb, Webster and Krepapa, 2000).

Supportiveness is rooted in the following two dimensions: Creating added value for its customers (Gummesson, 2007), and focusing on customer interests and needs (Heinonen et al., 2010; Kohli and Jaworski, 1990; Slater and Narver, 1994).

ANALYSES AND RESULTS

In this section the analyses and results are presented. The analyses are divided into two main sections. First, the underlying relationships between the key constructs are examined. Second, the customer portfolio analysis will present the dynamic effects of value facilitation on AFV within the customer profitability deciles.

Underlying analyses

In this section hypotheses 1 to 4 are tested. First, the value facilitation constructs are examined. This is then followed by an examination of the relationships between customer profitability, the value facilitation constructs, and propensity to stay.

Examining the value facilitation constructs

In order to test hypothesis 1, the value facilitation constructs were examined using confirmatory factor analysis (CFA). The CFA was carried out by using LISREL 8.0. The measurement model consists of the following four factors: ease of use, advice, competitiveness, and supportiveness. The reliability estimates are reported in Table 2.

Table 2: Reliability estimates

<table>
<thead>
<tr>
<th>Construct</th>
<th>Item</th>
<th>Cronbach’s alpha</th>
<th>AVE</th>
<th>Composite reliability</th>
<th>Standardised loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ease of use</td>
<td>1</td>
<td>0.71</td>
<td>0.58</td>
<td>0.73</td>
<td>0.79</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advice</td>
<td>3</td>
<td>0.91</td>
<td>0.77</td>
<td>0.91</td>
<td>0.90</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td>0.86</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td>0.87</td>
</tr>
<tr>
<td>Competitiveness</td>
<td>6</td>
<td>0.86</td>
<td>0.75</td>
<td>0.86</td>
<td>0.88</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td>0.86</td>
</tr>
<tr>
<td>Supportiveness</td>
<td>8</td>
<td>0.93</td>
<td>0.87</td>
<td>0.93</td>
<td>0.94</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td>0.93</td>
</tr>
</tbody>
</table>

₁ = Enabling support, ² = Enhancing support, ³ = Economical support
The overall fit assessment of the CFA model indicates a good fit: Chi-square = 81.41, df = 21, (p < 0.001), RMSEA = 0.038, GFI = 0.991, AGFI = 0.981, NNFI = 0.995, CFI = 0.997, and SRMR = 0.013. RMSEA (root mean square error of approximation) values less than 0.05 indicate a good fit (Browne and Cudeck, 1993; Diamantopoulos and Siguaw, 2000; MacCallum, Browne and Sugawara, 1996). Likewise, SRMR (standardised root mean square residual) values below 0.05 are a sign of an acceptable fit (Diamantopoulos and Siguaw, 2000). All the other fit indices are well above the threshold value of 0.9, which speak to the good fit of the CFA model (Diamantopoulos and Siguaw, 2000).

The t-values of all the retained items of the four constructs are significant (at p < 0.05 or better), which denotes the validity of the indicators. Moreover, the standardised factor loadings are all above the commonly used threshold value of 0.70 for acceptable composite reliability (Hair et al. 1998). In addition, the internal reliability of all final constructs is supported by Cronbach’s alphas higher than 0.70 (Nunnally, 1978). Furthermore, as suggested by Fornell and Larcker (1981), the convergent and discriminant validity of the constructs were tested. All composite reliability values were greater than 0.6, which indicates the reliable measurement of the constructs (Bagozzi and Yi, 1988). The average variance extracted (AVE) was above 0.50 for all four constructs, which signifies high construct validity (Fornell and Larcker, 1981).

To conclude, discriminant validity was further assessed by calculating the square root of AVE for each construct. As reported in Table 3, all square roots of AVE for each construct are higher than the correlations between the construct in question and any other construct. This is a further indication of the constructs being distinct from each other (Fornell and Larcker, 1981). Consequently, hypothesis 1 is supported.

Table 3: Correlations and square roots of AVE

<table>
<thead>
<tr>
<th>Construct</th>
<th>C1</th>
<th>C2</th>
<th>C3</th>
<th>C4</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1   Ease of use1</td>
<td>.76</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C2   Advice2</td>
<td>.35*</td>
<td>.88</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C3   Competitiveness3</td>
<td>.31*</td>
<td>.48*</td>
<td>.87</td>
<td></td>
</tr>
<tr>
<td>C4   Supportiveness</td>
<td>.40*</td>
<td>.63*</td>
<td>.63*</td>
<td>.93</td>
</tr>
</tbody>
</table>

*p < .01 (2-tailed), n.a. = not applicable; Square root of AVE is reported on the diagonal

1 = Enabling support, 2 = Enhancing support, 3 = Economical support

Examining the relationships of the other constructs to customer profitability

The relationships between customer profitability and the other core constructs were examined using Pearson’s (2-tailed) correlations analysis. The results of the analysis are presented in Table 4. As hypothesised, there are no relationships between customer profitability and the value facilitation constructs. Also, the relationship between customer profitability and propensity to stay is approximately zero. Consequently, both hypotheses 2 and 3 are supported.
Table 4: Correlation analysis – hypotheses 2 and 3

<table>
<thead>
<tr>
<th>Construct</th>
<th>C1 – Customer profitability</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1 Customer profitability</td>
<td>1</td>
</tr>
<tr>
<td>C2 Ease of use</td>
<td>.0051</td>
</tr>
<tr>
<td>C3 Advice</td>
<td>-.0231</td>
</tr>
<tr>
<td>C4 Competitiveness</td>
<td>.0271</td>
</tr>
<tr>
<td>C5 Supportiveness</td>
<td>-.0101</td>
</tr>
<tr>
<td>C6 Propensity to stay</td>
<td>.0091</td>
</tr>
</tbody>
</table>

1 The correlation is not significant.

Examining the relationships of the value facilitation constructs to propensity to stay

The relationships between the value facilitation constructs and propensity to stay were also examined using Pearson’s (2-tailed) correlation analysis. Accordingly, as presented in Table 5, the relationships between propensity to stay and the value facilitation constructs are positive and significant (p < .01). Thus, hypothesis 4 is supported.

Table 5: Correlation analysis – hypothesis 4

<table>
<thead>
<tr>
<th>Construct</th>
<th>C1 – Propensity to stay</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1 Propensity to stay</td>
<td>1</td>
</tr>
<tr>
<td>C2 Ease of use</td>
<td>.347*</td>
</tr>
<tr>
<td>C3 Advice</td>
<td>.458*</td>
</tr>
<tr>
<td>C4 Competitiveness</td>
<td>.406*</td>
</tr>
<tr>
<td>C5 Supportiveness</td>
<td>.585*</td>
</tr>
</tbody>
</table>

*p < .01

Customer portfolio analysis

The empirical analysis of the customer portfolio began in ranking the customers by the customer profitability figures into ten equally large groups (i.e., deciles) (cf. Kumar et al., 2009; Mulhern, 1999; Storbacka, 1997).

Examining the dynamic effects of value facilitation

In this section, the relationships between the value facilitation constructs and changes in the financial value of customers are tested. Multiple regression analysis was
performed for each customer profitability decile in order to test hypothesis 5. Table 6a reports the results for the first five deciles, and Table 6b for the latter five deciles.

**Table 6a: Multiple regression analysis of customer profitability deciles 1 to 5**

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Decile 1</th>
<th>Decile 2</th>
<th>Decile 3</th>
<th>Decile 4</th>
<th>Decile 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ease of use1 (β)</td>
<td>.123*</td>
<td>.132*</td>
<td>.110*</td>
<td>.140*</td>
<td>.109*</td>
</tr>
<tr>
<td>Advice2 (β)</td>
<td>n.s.</td>
<td>.132*</td>
<td>.090***</td>
<td>.164*</td>
<td>.165*</td>
</tr>
<tr>
<td>Competitiveness3 (β)</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
</tr>
<tr>
<td>Supportiveness (β)</td>
<td>.326*</td>
<td>.320*</td>
<td>.418*</td>
<td>.354*</td>
<td>.378*</td>
</tr>
<tr>
<td><strong>F-value</strong></td>
<td>71.32 (df 4)*</td>
<td>107.60 (df 4)*</td>
<td>119.90 (df 4)*</td>
<td>116.39 (df 4)*</td>
<td>131.04 (df 4)*</td>
</tr>
<tr>
<td><strong>R²</strong></td>
<td>.20</td>
<td>.27</td>
<td>.31</td>
<td>.31</td>
<td>.33</td>
</tr>
</tbody>
</table>

* * p < .0005, ** p < .005, *** p < .05; β = Standardised coefficient
* 1 = Enabling support, 2 = Enhancing support, 3 = Economical support

The results from the multiple regression analyses show that the value facilitation construct, which consists of the three support dimensions of the service offering and the supportiveness of the service provider, has a significant positive linkage to changes in the financial values of customers within each customer profitability decile. Accordingly, hypothesis 5 is supported. The R² scores are between .20 for the first (lowest value) customer profitability decile and .33 for the fifth customer profitability decile. In other words, the value facilitation construct explains between 20% and 33% of the variance of the ΔFV. It is here noteworthy that not all individual support dimensions of the service offering had a significant direct effect on the variance of the ΔFV. In fact, the results differ quite substantially between the different customer profitability deciles. This can be seen as a further indication of the dynamic nature of the linkage between value facilitation and ΔFV within the customer portfolio.
Table 6b: Multiple regression analysis of customer profitability deciles 6 to 10

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Decile 6</th>
<th>Decile 7</th>
<th>Decile 8</th>
<th>Decile 9</th>
<th>Decile 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ease of use1 (β)</td>
<td>.159*</td>
<td>.107*</td>
<td>.084**</td>
<td>.072***</td>
<td>.123*</td>
</tr>
<tr>
<td>Advice2 (β)</td>
<td>.163*</td>
<td>.075***</td>
<td>.161*</td>
<td>.134*</td>
<td>.105**</td>
</tr>
<tr>
<td>Competitiveness3 (β)</td>
<td>n.s.</td>
<td>.075***</td>
<td>n.s.</td>
<td>.098***</td>
<td>n.s.</td>
</tr>
<tr>
<td>Supportiveness (β)</td>
<td>.322*</td>
<td>.376*</td>
<td>.328*</td>
<td>.315*</td>
<td>.347*</td>
</tr>
<tr>
<td>F-value</td>
<td>96.93 (df 4)*</td>
<td>93.03 (df 4)*</td>
<td>87.33 (df 4)*</td>
<td>86.83 (df 4)*</td>
<td>82.80 (df 4)*</td>
</tr>
<tr>
<td>R²</td>
<td>.29</td>
<td>.28</td>
<td>.27</td>
<td>.27</td>
<td>.26</td>
</tr>
</tbody>
</table>

*p < .0005, ** p < .005, *** p < .05; β = Standardised coefficient
1 = Enabling support, 2 = Enhancing support, 3 = Economical support

**Interaction effects**

Possible interaction effects were examined within those customer profitability deciles where one or two support variables did not show significant direct effects on the dependent variable. In line with Baron and Kenny (1986), the interaction effect was controlled for by introducing an interaction variable consisting of the product of the standardised support variable (or variables) and the standardised supportiveness variable. Accordingly, it was hypothesised that supportiveness would moderate the effect of the support variable in question.

The interaction effects are reported in Tables 7a and 7b. In customer profitability decile 1, the enhancing support variable advice is moderated by supportiveness (β = 0.093, p < 0.05). In the rest of the deciles, advice has a significant direct effect on ΔFV. Furthermore, supportiveness is found to moderate the independent variable competitiveness in all of the deciles where applicable, except for decile 1. Overall, the interaction effects are quite small.
Table 7a: Interaction effects of customer profitability deciles 1 to 5

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Decile 1</th>
<th>Decile 2</th>
<th>Decile 3</th>
<th>Decile 4</th>
<th>Decile 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advice: Interaction effect $^A$ ($\beta$)</td>
<td>.093***</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>Competitiveness: Interaction effect $^B$ ($\beta$)</td>
<td>n.s.</td>
<td>.105*</td>
<td>.092**</td>
<td>.073**</td>
<td>.107*</td>
</tr>
<tr>
<td>F-value</td>
<td>45.21 (df 6)*</td>
<td>82.45 (df 5)*</td>
<td>92.28 (df 5)*</td>
<td>87.62 (df 5)*</td>
<td>103.63 (df 5)*</td>
</tr>
<tr>
<td>R2</td>
<td>.20</td>
<td>.28</td>
<td>.32</td>
<td>.31</td>
<td>.34</td>
</tr>
</tbody>
</table>

* $p < .0005$, ** $p < .005$, *** $p < .05$; $\beta$ = Standardised coefficient  
$^A$ = Advice x supportiveness, $^B$ = Competitiveness x supportiveness

Table 7b: Interaction effects of customer profitability deciles 6 to 10

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Decile 6</th>
<th>Decile 7</th>
<th>Decile 8</th>
<th>Decile 9</th>
<th>Decile 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advice: Interaction effect $^A$ ($\beta$)</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>Competitiveness: Interaction effect $^B$ ($\beta$)</td>
<td>.098**</td>
<td>n.a.</td>
<td>.081***</td>
<td>n.a.</td>
<td>.096**</td>
</tr>
<tr>
<td>F-value</td>
<td>75.06 (df 5)*</td>
<td>n.a.</td>
<td>67.73 (df 5)*</td>
<td>n.a.</td>
<td>67.23 (df 5)*</td>
</tr>
<tr>
<td>R2</td>
<td>.29</td>
<td>n.a.</td>
<td>.27</td>
<td>n.a.</td>
<td>.27</td>
</tr>
</tbody>
</table>

* $p < .0005$, ** $p < .005$, *** $p < .05$; $\beta$ = Standardised coefficient  
$^A$ = Advice x supportiveness, $^B$ = Competitiveness x supportiveness

CONCLUSIONS AND IMPLICATIONS

In this final section, the contribution of the study and its theoretical and managerial implications, as well as limitations and suggestions for further research are presented.

Discussion

This paper contributes to the contemporary service marketing literature in conceptualising service from the service provider’s perspective as consisting of the service sales process and the service provision process. In effect, this paper focuses on the financial consequences of service provision as opposed to the consumption of a service, which has been the typical focus in prior studies in service marketing. In
In addition, focus has here been given to groups of customers that form a customer portfolio rather than individual customers. This paper examines the dynamic effect of value facilitation on change in the financial value of customers within a customer portfolio as a significant part of the added value of service provision. Still, this paper argues that the customer perspective is also a fundamental component in examining the added value of service provision. In fact, customers’ perceptions of the value propositions put forward during the service sales process, as well as of value facilitation during the service provision process, have a considerable impact on the financial value of customers. Accordingly, both the service sales process and the service provision process influence the financial value of customers.

The financial value of customers is measured in this study by the augmented customer lifetime value. From an ACLV perspective, the outcome of a service sales process reflects only the first part of the equation in the form of profits generated by customers (value in exchange), which is realised in the price customers pay at the point of purchasing a service offering (Bowman and Ambrosini, 2000). Therefore, a value proposition resulting in value exchange can be considered an initial indication of the financial value of customers. The remaining part of the ACLV, which is reflected by change in the financial value of customers, can be determined as a result of the realised service provision and value facilitation. Value facilitation is here conceptualised as enabling, enhancing, and economical support from a service offering and through the supportiveness of a service provider.

Out of the five hypotheses put forward in this paper, four hypotheses related to the primary relationships between the key constructs. The fifth hypothesis related to the effect of service provision and value facilitation on change in the financial value of customers. The empirical study was performed by examining a large dataset of high-volume customers belonging to the same customer segment of a retail bank. The first hypothesis, which examined the distinctiveness of the value facilitation constructs, was tested using confirmatory factor analysis in LISREL 8.0. The second and third hypotheses, which examined whether customer profits (value in exchange) are unrelated to the value facilitation constructs and propensity to stay, were tested using Pearson’s (2-tailed) correlations analysis. The forth hypothesis, which examined the positive linkage between propensity to stay and the value facilitation constructs, was also tested using Pearson’s (2-tailed) correlation analyses. The fifth hypothesis, which examined the relationship between the value facilitation constructs and change in the financial value of customers, was tested by conducting multiple regression analysis for each customer profitability decile. Lastly, the interaction effects between the support constructs and supportiveness were examined within the customer profitability deciles where applicable. As a result of the analysis, all hypotheses were supported. In summary, the empirical analyses of this study demonstrate that the facilitation of customers’ value-creation activities plays a significant part in the added value of service provision.

**Theoretical implications**

This study has several theoretical implications for service marketing. First, this study extends the current service research agenda by focusing on the added value of a service provision. Second, by explicitly examining the outcome of value facilitation from the service provider’s perspective, this study moves beyond the conceptual debate amongst service marketing scholars to a more managerially relevant research agenda (cf. Edvardsson et al., 2005; Grönroos, 2008; Gummesson, 2007; Heinonen et al., 2010; Vargo and Lusch, 2004, 2008).

Third, this study also has implications for research in the field by applying a marketing-finance interface approach to integrating transaction data and survey data for the calculation of augmented customer lifetime value. More specifically, the propensity to
stay rates from this study’s customer surveys replaced traditional retention rates. Retention rates are usually estimated through various econometrical models, such as logistics models, probit models, bagging and boosting models, or Markov models (see Bolton et al., 2000; Gupta and Zeithaml, 2006; Lemmens and Croux, 2006). However, this study moves beyond the intrinsic limitations of transaction databases with no association to customer experience (cf. Gupta et al., 2006).

In summary, the ACLV approach strengthens the possibility of examining customer perceptions as drivers of the financial value of customers (cf. Persson and Ryals, 2010; Rust, Zeithaml and Lemon, 2000).

Managerial implications
The managerial implications of this study are here discussed with respect to service sales and service provision.

Managers in service businesses need to pay attention to the different outcomes of the financial value of customers in service sales and service provision. Customer profits (value in exchange) resulting from the service sales process can only be considered as an initial indication of the financial value of customers. A considerable part of the financial value of customers comes from the service provision process and the facilitation of customers’ value-creation activities.

Consequently, from a sales perspective, attention could be turned from merely the sales of standardised service offerings toward customised value propositions. Thus, from a managerial perspective, it is fundamental to establish an in-depth understanding of customers’ value-creation activities. In addition, it is essential to find out how well the current service provision supports customers’ value-creation activities. Similarly, it is important to establish an understanding of how customers’ value-creation activities can be further supported. Subsequently, these insights can be utilized to modify both the value proposition in service sales and for enhancing the service provision process in new service development.

Limitations and propositions for further research
This study has various limitations that speak to the potential for further research.

One limitation of this study is that its measurement items are based on items in a customer satisfaction survey developed for other purposes. Accordingly, one avenue for further research could be to develop measurement items based on qualitative research in order to have additional dimensions of enabling, enhancing, and economical support.

Similarly, a feasible direction for further research would be to expand on this study’s value facilitation framework by incorporating essential support. This could be done by conducting in-depth interviews with customers to find out their reasons for buying and using service offerings in the first place. With this, essential support could also be integrated into the value facilitation framework.

An additional limitation of this study is that it included only a single customer segment of a retail bank. Thus, a possible avenue for further research would be to study additional customer segments in a retail bank to find out how well the current service offerings facilitate the value-creation activities of customers.

A further limitation of this study derives from the underlying conditions of its contract-based and continuous business context with various exit barriers. Therefore, this study could be replicated in other contract-based and continuous business contexts. Also, studying the same phenomena as this study in a completely different context, such as a non-contractual and discrete business context, could lead to further insights into the
dynamics of ACLV in customer portfolios, as well as the linkage between service provision and value facilitation.
REFERENCES


APPENDIX 4  ESSAY 3

Nyman, H.: A Service Logic Perspective on Customer Profitability Analysis
A Service Logic Perspective on Customer Profitability Analysis

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ABSTRACT
The aim of this article is to present a service logic perspective on customer profitability analysis and to empirically test the proposed framework in a retail banking context. Service is operationalised as value facilitation consisting of enabling, enhancing, and economical support by the service offering and supportiveness by the service provider. Customer profitability is operationalised by augmented customer lifetime value (ACLV), capturing value in exchange, value in retention, and value in time. The analyses are conducted in three steps. The measurement model is first assessed by exploratory factor analysis (principal component analysis with varimax rotation) using SPSS, and then is further developed and tested by confirmatory factor analysis (CFA), using LISREL 8.0. All three support dimensions of the service offering have a direct effect on the supportiveness of the service provider. Referrals are found to moderate the relationship between the value facilitation constructs and ACLV. Only economical support and referrals have a direct effect on ACLV. From a managerial perspective, facilitating customers’ value creation activities opens up an avenue for profitable business development by establishing an in-depth understanding of the customers’ use experiences of the current service offering as well as their hidden needs.

Keywords Service logic, value facilitation, customer profitability analysis, value capture
1. INTRODUCTION

With the push for exiting services marketing and entering service marketing (e.g. Gummesson 2007; Vargo and Lusch 2004), this article claims that it is necessary to take a service logic perspective on customer profitability analysis. The existing conceptualisations of customer profitability in the marketing literature are either based on products (goods or services) or customer relationships, which are both significant but are not sufficient when taking a service logic perspective on customer profitability analysis. The reason is that product (goods or services) profitability and customer relationship profitability are both related to different paradigms of marketing than the contemporary perspectives on service (cf. Grönroos 1997; Sheth and Parvatiyar 2002; Vargo and Lusch 2004).

The conceptualisation of product profitability is primarily based on the price paid by customers for their purchases and on the cost efficiency of the development, production, distribution, and sales processes of these products. In the marketing literature, the product profitability perspective corresponds to the Four Ps (product, price, place, and promotion) in the marketing mix paradigm first introduced by McCarthy (1960).

Then again, the conceptualisation of customer relationship profitability is an extension of the product profitability concept, and it draws on the relationship marketing paradigm (e.g. Berry 1983; Grönroos 1997; Sheth and Parvatiyar 2002). In essence, revenues and costs are identified and allocated to individual customers by applying the activity-based costing technique. In doing so, it is possible to calculate the profitability of individual customers and to examine the distribution of profitability among customers in the customer base for segmentation purposes (Cooper and Kaplan 1991; Gleaves, et al. 2008; Gupta and Lehmann 2003, 2005; Mulhern 1999; Storbacka 1994, 1997; van Raaij 2005).

Conversely, the contemporary perspectives on service (singular) represent a way of thinking, thus representing logics or mental models on value creation from the customer’s point of view, in contrast to services (plural) as a distinct category of market offerings (e.g. Edvardsson, Gustafsson, and Roos 2005; Grönroos 2006, 2008; Gummesson 2007; Heinonen, et al. 2010; Normann and Ramirez 1993, 1994; Normann 2001; Vargo and Lusch 2004). Fundamental to service logic is the notion that service providers can either facilitate or hinder the customers’ value creation activities. In view of this, service offerings and service providers should support the customers’ value creation activities (Grönroos 2006, 2008; Heinonen et al. 2010; Normann and Ramirez 1994; Lusch, Vargo, and Tanniru 2010; Woodruff 1997).

Subsequently, following the line of reasoning in the contemporary service marketing literature (e.g. Edvardsson et al. 2005; Grönroos 2007; Gummesson 2007) in combination with the marketing-finance interface literature (e.g. Gupta and Lehmann 2005; Kumar, et al. 2009; Storbacka 1997), this article regards the concept of service profitability as a perspective on profitability based on a dual notion of customer value, while the concept of services profitability corresponds to the financial outcome of a category of market offerings. This dual notion of the concept of customer value represents the value that is derived by the customer from using the service offering and from the relationship with the service provider, as well as representing the value that is derived by the service provider from the relationship with the customer (cf. Gupta and Lehmann 2005; Woodall 2003).

However, in giving emphasis to value creation, the contemporary service marketing literature has paid considerably less attention to value capture. Consequently, value capture is dealt with mostly in the strategic management (e.g. Bowman and Ambrosini
2000; Lepak, Smith, and Taylor 2007; Priem 2007) and the marketing-finance interface streams of literature (e.g. Blattberg, Getz, and Thomas 2001; Rust, Zeithaml, and Lemon 2000). In these streams, value capture is, for the most part, set as equivalent to the financial value of customers. The financial value reflects the exchange value, which is realised through the price customers pay at the point of purchasing an offering (Bowman and Ambrosini 2000). However, Priem (2007) extends the value capture concept by arguing that it is also crucial to retain cash flows from customers (value in retention). Nevertheless, the financial value is seen as the main source of value captured from the customers.

This primary attention on financial value is shared by the retrospective approach to customer profitability analysis (Mulhern 1999; Storbacka 1994, 1997; van Raaij 2005) and by the prospective approach, with forecasts of customer lifetime value (CLV) (e.g. Donkers, Verhoef, and de Jong 2007; Gupta and Lehmann 2003; Hogan, Lemon, and Rust 2002; Venkatesan and Kumar 2004). The main difference between these two approaches comes from the time perspective; the retrospective approach is based on historical transaction data only (value in exchange), while the prospective approach, in addition to that, is based on predictions of retention rates (value in retention) and estimations of future profits discounted to the present value (value in time).

Ryals (2002, 2008) points out that there is a further dimension of value capture in addition to the value generated by the cash flow from customers. This dimension of value capture comprises the relationship benefits, which are a source of hidden value. There are four main sources of relational benefits: references, referrals, learning, and innovation. The first two are related to the reduction of customer acquisition costs, while the latter two are related to efficiency improvement.

However, of these four forms of relational benefits, only the (value in) referrals form is relevant for this article. Referrals, that is, positive word of mouth, are a well-recognised form of value capture in a business-to-consumer context (cf. Arndt 1967; Reichheld 2003). Moreover, some scholars argue that by connecting referrals to the calculation of CLV, the quality of the estimates improves (e.g. Bechwati and Eshghi 2005; Rust et al. 2000).

Nevertheless, none of these perspectives on customer profitability analysis and value capture incorporate the linkage to value facilitation and the support of customers’ value creation activities. These perspectives are one-sided in their views, as they leave out the customer’s perspective on value. Therefore, these perspectives fall short of a service logic perspective of customer profitability analysis. Consequently, the aim of this article is to introduce a service logic perspective of customer profitability analysis and to empirically test the proposed framework in a retail banking context with current customers.

Fundamental to the framework is the conceptualisation of value facilitation in multiple support dimensions by the service offering and of the supportiveness by the service provider, using a positive linkage to value capture as a multidimensional concept measured by (the value in) referrals and augmented customer lifetime value (ACLV; that is, value in exchange, value in retention, and value in time). Essentially, this article finds that the value in referrals goes beyond the traditional notion of only reducing the acquisition costs and additional sales to new customers (e.g. Ryals 2002, 2008; Stahl et al. 2003), and it moderates the linkage between value facilitation and augmented customer lifetime value. Accordingly, referrals fundamentally explain the ACLV of current customers. Thus, the value of referrals goes beyond having an effect on the value of new customers as traditionally put forward. Overall, this article contributes to the contemporary service marketing literature by expanding the current research...
agenda. In particular, the contribution of this article is derived from linking value facilitation to value capture and, thus, presenting a service logic perspective on customer profitability analysis.

2. CONCEPTUAL FRAMEWORK

The conceptual framework is composed of three parts, as presented in Figure 1. The first part represents value facilitation conceptualised as the support by the service offering and the supportiveness of the service provider, which both serve as input for the customers’ value creation activities. The second part stands for value capture conceptualised as value in exchange, value in retention, value in time, and value in referrals, which equal the value outcome to the service provider. The third part symbolises customer profitability analysis as augmented customer lifetime value (ACLV), which this article puts forward as the measurement of value capture.

![Figure 1: The conceptual framework](image)

2.1 Value facilitation

This article takes as a foundational premise the notion that service providers can either facilitate or hinder their customers’ value creation activities (Grönroos 2006, 2008; Woodruff 1997). However, value facilitation has only received limited attention in the service marketing literature. Recently, contemporary service marketing has focused primarily on value co-creation (e.g. Vargo and Lusch 2004, 2008) and value in use (e.g. Edvardsson, Gustafsson, and Roos 2005). Nonetheless, an exception is Grönroos (2008), who argues that the role of the service provider is to act as a value facilitator and to support the customers’ value creation activities in interactive processes, as an integral part of the service offering.

Moreover, according to Normann (2001), the emphasis of offerings changes when applying service logic. The emphasis changes from the production process to the value-creating process of the customer, from production to use, from output to input, from the past to the future. This means that the service offering should be considered an input for the customer’s resource integration and value creation activities (Gummesson 2007; Normann 2001; Vargo and Lusch 2008).
This article defines value facilitation as the extent to which the service offering and service provider are perceived by the customers to support or hinder their value creation activities (cf. Grönroos 2008; Normann and Ramirez 1994; Woodruff 1997). Accordingly, this article proposes three different forms of support by the service offering as a focal unit of the value facilitation concept.\(^{10}\) The first form of support, named enabling support, makes it possible to use the service offering and thereby brings about the customers’ value creation activities (cf. Grönroos 2007; Normann and Ramirez 1994). The second form of support, labelled enhancing support, advances the customers’ value creation and makes it possible to get more out of the service offering (cf. Grönroos 2007). The third form of support, termed economical support, corresponds to the competitiveness of the service offering and thereby advances the cost-effectiveness of the customers’ value creation (cf. Bowman and Ambrosini 2000; Hauser and Wernerfelt 1990; Normann and Ramirez 1993; Kenyon and Mathur 2002).

In addition, this article proposes that an additional focal unit of the value facilitation concept is the supportiveness of the service provider. The term supportiveness refers to the extent to which customers perceive the service provider as supporting or hindering the customers’ general creation of value. More specifically, the term “supportiveness” corresponds to how well the service provider takes the customers’ interests into consideration (cf. Heinonen et al. 2010; Kohli and Jaworski 1990; Slater and Narver 1994) and to what extent the service provider adds value to the customers’ value creation activities (cf. Gummesson 2007).

### 2.2 Value capture

The value outcome to the service provider from facilitating the customers’ value creation activities is here termed “value capture”. The concept of value capture has its origin in the strategic management literature, but it is also dealt with in the marketing-finance interface stream of literature.

Typically, value capture equals the exchange value that customers pay for a service or product (e.g. Bowman and Ambrosini 2002). However, Priem (2007) extends the reasoning by arguing that value capture is a function of receiving (value in exchange) and retaining (value in retention) cash flow from customers. In addition, according to the marketing-finance interface perspective on value capture, the received and retained cash flow needs to be discounted to the present value (value in time), in order to establish an understanding of actual value capture and to compare the value of cash flows derived at different points in time (e.g. Srivastava, Shervani, and Fahey 1998).

Traditionally the value of referrals, that is, positive word of mouth, has been connected to the cost efficiency of customer acquisition, to the cash flow generated by additional sales to these new customers, and to the improved effectiveness of advertising and promotion campaigns (e.g. Ryals 2002, 2008; Stahl et al. 2003). However, this article argues that the value of referrals goes beyond the sole effect on cash flow related to the acquisition of new customers. In particular, an overlooked value of referrals comes from moderating the linkage between value facilitation and the augmented customer lifetime value.

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\(^{10}\) A fourth type of support by the service offering is proposed to be essential support, which is directed towards the customers’ reasons for buying and using a service offering. However, the essential support is excluded from the framework, because the examination of the customers’ reasons for buying and using a service offering is beyond the scope of this article.
Correspondingly, as depicted in Figure 2, the value capture concept is multidimensional and consists of value in exchange, value in retention, value in time, and value in referrals. This article argues that this multidimensional conceptualisation of value capture is a function of value facilitation, that is, the support by the service offering and the supportiveness of the service provider.

![Value capture diagram](image)

**Figure 2** Value capture—a multidimensional concept

### 2.3 Customer profitability analysis

In order to measure value capture conceptualised as a multidimensional construct and as a function of value facilitation, this article argues that the traditional conceptualisations of customer profitability analysis fall short and, thus, need to be extended into augmented customer lifetime value. See Table 1 for the different scopes of the three approaches to customer profitability analysis.

<table>
<thead>
<tr>
<th>Approach to customer profitability analysis</th>
<th>Value in exchange</th>
<th>Value in retention</th>
<th>Value in time</th>
<th>Value in referrals</th>
<th>Value facilitation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retrospective</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prospective</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Augmented</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

Traditionally, customer profitability analysis can be divided into two main approaches, the accounting-based retrospective approach and the finance-based
prospective approach (Gleaves et al. 2008; Jacobs, Johnston, and Kotchetova 2001; van Raaij 2005). Common to both approaches is a narrow focus on the monetary value of customers. The main difference between these two approaches comes from the time perspective; the retrospective approach is based on historical transaction data only (value in exchange), while the prospective approach, in addition, is based on predictions of retention rates (value in retention) and estimations of future profits discounted to the present value (value in time).

However, neither traditional approach to customer profitability analysis can directly be linked to value in referrals or value facilitation. The reason is that both the retrospective and prospective approaches to customer profitability are based on transaction data only. Consequently, the customer side of the transaction and the factors that drive customer behaviour are normally excluded from these models (Gupta et al. 2006).

Gupta et al. (2006) call attention to the importance of recognising the intrinsic limitations of transaction databases. The transaction databases do not tell anything about the underlying motives or requirements that have led to the realised purchases. Accordingly, Gupta et al. (2006) suggest augmenting transaction data with surveys that provide attitudinal information. Kamakura et al. (2003) and Kamakura and Wedel (2003) are among the few researchers who have augmented transaction data with surveys. However, they have not used the input from the surveys to determine the customer lifetime value (CLV) per se.

Contrary to this earlier research which applied data augmentation and to the retrospective and prospective approaches to customer profitability analysis, the augmented approach to customer profitability analysis, as proposed in this article, uses customer-specific profitability data from a transaction database and individual retention rates from a survey as input for the calculation of the customer profitability as augmented customer lifetime value.

3. RESEARCH MODEL AND HYPOTHESES

In this section, the research model and hypotheses are presented (see Figure 3). The research model consists of value facilitation and value capture. Value facilitation is portrayed by enabling support, enhancing support, economical support, and supportiveness. Value capture is represented by referrals and customer profitability, which is operationalised by the augmented customer lifetime value.

Essential support is excluded from the research model because the customers’ reasons for buying or using the service offering are beyond the scope of this article. Nevertheless, from a purely value capture perspective, the purchase of the service offering is always reflected in the exchange value, regardless of the reasons for buying or using the service offering. Consequently, the value outcome to the service provider also reflects the essential support.
With the aim of examining the effect of value facilitation on value capture, the next three sets of hypotheses are presented.

First, the value facilitation concept is proposed to be built of the support by the service offering and the supportiveness of the service provider. These constructs are interrelated, and it seems plausible that the support by the service offering would have an impact on the supportiveness of the service provider. Accordingly, the three support dimensions of the service offering are hypothesised to have a positive effect on the supportiveness by the service provider.

Hypothesis 1: Enabling support has a positive effect on supportiveness
Hypothesis 2: Enhancing support has a positive effect on supportiveness
Hypothesis 3: Economical support has a positive effect on supportiveness

Second, each dimension of the value facilitation concept is hypothesised to have a positive effect on referrals. The rationale stems from the notion that customers who perceive the support by the service offering and the supportiveness of the service provider as beneficial are also likely to spread positive word of mouth information about the service provider.

Hypothesis 4: Enabling support has a positive effect on referrals
Hypothesis 5: Enhancing support has a positive effect on referrals
Hypothesis 6: Economical support has a positive effect on referrals
Hypothesis 7: Supportiveness has a positive effect on referrals
Third, all the dimensions of the value facilitation concept and referrals are hypothesised to have a positive effect on augmented customer lifetime value.

Hypothesis 8: Enabling support has a positive effect on ACLV
Hypothesis 9: Enhancing support has a positive effect on ACLV
Hypothesis 10: Economical support has a positive effect on ACLV
Hypothesis 11: Supportiveness has a positive effect on ACLV
Hypothesis 12: Referrals have a positive effect on ACLV

4. EMPIRICAL SETTING
The empirical data comes from a large sample of high volume customers in a retail bank in one of the Nordic countries. These high volume customers represent the “key” customer segment of the bank. The bank has hundreds of thousands of customers in the countrywide branch network. A survey was sent to high volume customers all over the country and the effective response rate was 32%, corresponding to 21,584 respondents. Demographically, the respondents represent ages between 18 and 75, and the share of women is 42% and men 58%. The relatively larger share of men corresponds fairly well to the population of this high volume customer segment. The average duration of the respondents’ relationship with the bank is roughly 19 years, with a range from 1 year to 74 years.

5. MEASURES
All constructs, except for customer profitability, are measured on a 10-point scale. The customer profitability figures are recalculated from the original monetary figures in the bank’s database by letting the mean customer profitability figure correspond to 100. This is done in order to make the comparisons easier and to maintain the confidentiality of the actual profitability figures.

5.1. Operationalisation of the value facilitation construct
The value facilitation concept is built on the customers’ perceptions of the enabling, enhancing, and economical support by the service offering, as well as on customers’ perceptions of the supportiveness of the service provider. The measures consist of multiple items anchored in previous research.

Enabling support is operationalised by:
- Ease of use of internet banking (Davis 1989; Lin, Shih, and Sher 2007; McCloskey 2006)

Enhancing support is operationalised by:
- Value enhancing advice by the personal advisor (see Hanna and Lindamood 2010)

Economical support is represented by the factor:
- Competitiveness of terms and conditions (Grönroos 2006; Webb, Webster, and Krepapa 2000)

Supportiveness is anchored in the following two dimensions:
- Creating added value for customers (Gummesson 2007)
- Focusing on customer interests and needs (Heinonen et al. 2010; Kohli and Jaworski 1990; Slater and Narver 1994)

5.2. Operationalisation of referrals
Referrals are operationalised by the following two items:
The likelihood to recommend the Bank to friends, acquaintances, and colleagues (e.g. Keiningham et al. 2007; Reichheld 2003)
Commenting on the Bank to friends, acquaintances, and colleagues (e.g. Verhoef, Franses, and Hoekstra 2002; Zeithaml, Berry, and Parasuraman 1996)

5.3. Operationalisation of augmented customer lifetime value

Drawing on the simple CLV equation proposed by Gupta and Lehmann (2003, 2005), this article proposes an augmented customer lifetime value model (ACLV), in which \( m \) equals margin or profit from a customer, \( r \) equals the customer’s propensity to stay, and \( i \) equals the discount rate. The factor \( (r / (1+i-r)) \) multiplied with the profit figure \( m \) equals the margin multiple.

\[
ACLV = m \times (r / (1+i-r))
\]

Normally, CLV equations either assume or estimate a constant retention rate over time (Blattberg et al. 2001). However, this article differs from common CLV approaches in that rates of the individual propensity to stay are used for each customer instead of retention rates. The figures of propensities to stay are based on the customers’ statements in a survey, regarding the single-item question: “How likely is it that in 12 months’ time The Bank is still your bank?” The use of a single item as a measure of the propensity to stay is here considered appropriate because it fulfils the criteria of being “concrete singular”, which means that the measure is “easily and uniformly imagined” (Bergkvist and Rossiter 2007; Rossiter 2002). The measures are collected on a 10-point scale, where 1 equals not “likely at all” and 10 equals “very likely” (cf. Anderson and Mittal 2000; Fornell 1992; Keiningham et al. 2007).

6. ANALYSIS AND RESULTS

In this section, the analysis and results are presented. The measurement model is first assessed by exploratory factor analysis (EFA) and then is further developed and tested by confirmatory factor analysis (CFA). The tests of the hypotheses by the structural model are divided into two distinct parts. To start with, the analysis and results of the seven first hypotheses are presented in a regular structural equation model (SEM). Then, the analysis and results of the remaining five hypotheses concerning the linkages to customer profitability are put forward in a separate indexed model. The reason for applying indexed modelling is that customer profitability is not a latent variable.

6.1. Measurement model

Firstly, in order to establish the three independent support constructs, exploratory factor analysis (principal component analysis with varimax rotation) was carried out using SPSS. The Kaiser-Mayer-Olkin measure of sampling adequacy (KMO) was high (.876), and Bartlett’s Test of Sphericity was significant, indicating the suitability of using factor analysis (Hair, Anderson, Tatham, and Black 1998). Altogether, 11 items were retained from the exploratory factor analysis as indicators of the three support constructs: ease of use, advice, and competitiveness. The items of the three support constructs are reported in Appendix A. Secondly, derived from exploratory factor analysis (EFA), the dependent constructs supportiveness and referrals formed two distinct factors consisting of two items, respectively. The items of the dependent construct are reported in Appendix B.

In addition, a preliminary assessment of the item reliability of the constructs established by the EFA was made. The Cronbach’s alpha for all five multi-item constructs exceeds the threshold value of 0.7, as recommended by Nunnally (1978). In
addition, the item-to-total correlations are all above 0.5, as recommended by Hair et al. (1998). Thus the preliminary scales can be considered internally reliable (Hair et al. 1998; Nunnally 1978).

Then, in order to further evaluate the reliability and validity of the complete measurement model, confirmatory factor analysis was carried out using LISREL 8.0. The complete measurement model consists of the five factors: ease of use, advice, competitiveness, supportiveness, and referrals. The overall fit assessment of the CFA model indicates a good fit: $\chi^2 = 134.16, df = 34, (p < 0.001)$, RMSEA = 0.038, GFI = 0.988, AGFI = 0.977, NNFI = 0.995, CFI = 0.997, and SRMR = 0.012.

RMSEA (root mean square error of approximation) values less than 0.05 indicate good fit (Browne and Cudeck 1993; Diamantopoulos and Siguaw 2000; MacCallum, Browne, and Sugawara 1996). Likewise, SRMR (standardised root mean square residual) values below 0.05 are a sign of acceptable fit (Diamantopoulos and Siguaw 2000). All the other fit indices are well above the threshold value of 0.9, which substantiate the good fit of the CFA model (Diamantopoulos and Siguaw 2000).

As a result of the CFA, four of the eleven items forming the three support constructs were omitted (see Appendix A). The $t$-values of all the retained items of the five constructs are significant (at $p < 0.05$ or better), which denotes the validity of the indicators. Moreover, the standardised factor loadings are all above the commonly used threshold value of 0.70 for acceptable composite reliability (Hair et al 1998). In addition, the internal reliability of all final constructs is supported by Cronbach’s alphas higher than 0.70 (Nunnally 1978). Furthermore, as suggested by Fornell and Larcker (1981), the convergent and discriminant validity of the constructs was tested. All composite reliability values were greater than 0.60, which indicates reliable measurements of the constructs (Bagozzi and Yi 1988). The average variance extracted (AVE) was above 0.50 for all five constructs, which signifies high construct validity (Fornell and Larcker 1981). The reliability estimates are reported in Table 2. Discriminant validity was further assessed by calculating the square root of AVE for each construct.
Table 2: Reliability estimates

<table>
<thead>
<tr>
<th>Construct</th>
<th>Item</th>
<th>Cronbach’s alpha</th>
<th>AVE</th>
<th>Composite reliability</th>
<th>Standardised loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ease of use¹</td>
<td>1</td>
<td>0.71</td>
<td>0.58</td>
<td>0.73</td>
<td>0.79</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td>0.74</td>
</tr>
<tr>
<td>Advice²</td>
<td>3</td>
<td>0.91</td>
<td>0.77</td>
<td>0.91</td>
<td>0.90</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td>0.86</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td>0.87</td>
</tr>
<tr>
<td>Competitiveness³</td>
<td>6</td>
<td>0.86</td>
<td>0.75</td>
<td>0.86</td>
<td>0.88</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td>0.86</td>
</tr>
<tr>
<td>Supportiveness</td>
<td>8</td>
<td>0.93</td>
<td>0.87</td>
<td>0.93</td>
<td>0.94</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td>0.93</td>
</tr>
<tr>
<td>Referrals</td>
<td>10</td>
<td>0.92</td>
<td>0.88</td>
<td>0.94</td>
<td>0.92</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td></td>
<td></td>
<td></td>
<td>0.96</td>
</tr>
</tbody>
</table>

¹ = Enabling support, ² = Enhancing support, ³ = Economical support

Table 3: Correlations and square roots of AVE

<table>
<thead>
<tr>
<th>Construct</th>
<th>C1</th>
<th>C2</th>
<th>C3</th>
<th>C4</th>
<th>C5</th>
<th>C6</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1  Ease of use¹</td>
<td>.76</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C2  Advice²</td>
<td>.35*</td>
<td>.88</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C3  Competitiveness³</td>
<td>.31*</td>
<td>.48*</td>
<td>.87</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C4  Supportiveness</td>
<td>.40*</td>
<td>.63*</td>
<td>.63*</td>
<td>.93</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C5  Referrals</td>
<td>.38*</td>
<td>.54*</td>
<td>.54*</td>
<td>.77*</td>
<td>.94</td>
<td></td>
</tr>
<tr>
<td>C6  ALCV</td>
<td>.15*</td>
<td>.18*</td>
<td>.19*</td>
<td>.23*</td>
<td>.28*</td>
<td>n.a.</td>
</tr>
</tbody>
</table>

* p < .01 (2-tailed), n.a. = not applicable. Square root of AVE is reported on the diagonal
¹ = Enabling support, ² = Enhancing support, ³ = Economical support

As reported in Table 3, all square roots of AVE for each construct are higher than the correlations between the construct in question and any other of the constructs. This is a further indication of the constructs being distinct from each other (Fornell and Larcker 1981).

6.2. Structural model

The results of the structural equation modelling for the hypothesised relationships (H1 to H7) are reported in Table 4. The overall fit assessment of the structural model indicates a good fit: Chi-square = 139.70, df = 35, (p < 0.001), RMSEA = 0.038, GFI = 0.988, AGFI = 0.977, NNFI = 0.995, CFI = 0.997, and SRMR = 0.012.
All other hypotheses are supported except for the direct relationship between economical support (competitiveness) and referrals (H6). However, economical support (competitiveness) had a significant indirect effect on referrals ($p < 0.01$), mediated by supportiveness.

Based on the standardised loadings, economical support (competitiveness) had the strongest influence on supportiveness ($0.48$). Enhancing support (advice) also had a strong influence on supportiveness ($0.37$). Even though enabling support (ease of use) also had a positive relationship to supportiveness, it was weaker ($0.13$). Out of the three support constructs, only enabling support (ease of use) and enhancing support (advice) had positive but relatively weak relationships to referrals ($0.07$ and $0.10$ respectively). Then again, supportiveness had a strong influence on referrals ($0.76$).

**Table 4: Structural equation modelling results**

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Standardised loadings</th>
<th>t-value</th>
<th>Support of hypothesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>H 1 Enabling support (ease of use) -&gt;</td>
<td>0.13</td>
<td>5.96**</td>
<td>Yes</td>
</tr>
<tr>
<td>Supportiveness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H 2 Enhancing support (advice) -&gt;</td>
<td>0.37</td>
<td>16.66**</td>
<td>Yes</td>
</tr>
<tr>
<td>Supportiveness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H 3 Economical support (competitiveness)</td>
<td>0.48</td>
<td>19.48**</td>
<td>Yes</td>
</tr>
<tr>
<td>&gt; Supportiveness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H 4 Enabling support (ease of use) -&gt;</td>
<td>0.07</td>
<td>3.77**</td>
<td>Yes</td>
</tr>
<tr>
<td>Referrals</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H 5 Enhancing support (advice) -&gt;</td>
<td>0.10</td>
<td>4.64**</td>
<td>Yes</td>
</tr>
<tr>
<td>Referrals</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H 6 Economical support (competitiveness)</td>
<td>n. s.</td>
<td>n. s.</td>
<td>No</td>
</tr>
<tr>
<td>&gt; Referrals</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H 7 Supportiveness -&gt; Referrals</td>
<td>0.76</td>
<td>30.38**</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:** **p < 0.01, n. s. = not significant

### 6.3 Structural model—Indexed model

The indexed model builds on item parcel theory (Cattell 1956) in order to create single indicators of the constructs. A parcel can be defined as an aggregate-level indicator comprised of the sum (or average) of two or more items, responses, or behaviours (Little et al. 2002).

The item-level responses formed into single-unit, aggregate-level parcels can be used as indicators in structural equation models for theoretical and empirical reasons (Hall et al. 1999). Accordingly, the indexed model is used because customer profitability does not form a latent variable. Therefore, an ACLV index is created as corresponding to a value between 0 and 10. All the other indexed indicators are created by calculating the average of the corresponding items. Accordingly, the latent variables for enabling, enhancing, and economical support, supportiveness, and referrals are replaced by the indexed indicators.
The composite reliability of the ACLV index is calculated as the mean value of the composite reliability figures for the other indexed indicators (cf. Fornell and Larcker 1981). The composite reliability figures are then used for calculating the error variances of all the indexed indicators.

The results of the structural equation modelling for the hypothesised relationships (H8 to H12) are reported in Table 5. Only two of these five remaining hypotheses, indicating direct relationships between the independent variables and the dependent variable, customer profitability, are supported (H10 and H12). According to the standardised loadings, referrals had the strongest influence (11.24) on customer profitability (augmented customer lifetime value), while economical support (competitiveness) had a weaker influence (2.60).

Even though the other hypotheses were rejected, enabling support (H8: ease of use), enhancing support (H9: advice), and the supportiveness (H11) variable all had significant indirect effects (p < 0.01) on customer profitability mediated by the referrals variable.

The overall fit assessment of the indexed model also indicates a good fit: Chi-square = 7.11, df = 4, (p < 0.13), RMSEA = 0.020, GFI = 0.999, AGFI = 0.994, NNFI = 0.998, CFI = 1.00, and SRMR = 0.009.

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Structural equation modelling results—Indexed model</th>
</tr>
</thead>
<tbody>
<tr>
<td>H 8</td>
<td>Enabling support (ease of use) -&gt; Customer profitability (augmented customer lifetime value)</td>
</tr>
<tr>
<td>H 9</td>
<td>Enhancing support (advice) -&gt; Customer profitability (augmented customer lifetime value)</td>
</tr>
<tr>
<td>H 10</td>
<td>Economical support (competitiveness) -&gt; Customer profitability (augmented customer lifetime value)</td>
</tr>
<tr>
<td>H 11</td>
<td>Supportiveness -&gt; Customer profitability (augmented customer lifetime value)</td>
</tr>
<tr>
<td>H 12</td>
<td>Referrals -&gt; Customer profitability (augmented customer lifetime value)</td>
</tr>
</tbody>
</table>

Notes: * p < 0.05, ** p < 0.01, n.s. = not significant

7. DISCUSSION

The aim of this article is to introduce a service logic perspective of customer profitability analysis and to empirically test the proposed framework in a retail banking context. With the push for exiting services marketing and entering service marketing (e.g. Gummesson 2007; Vargo and Lusch 2004), this article argues that it is necessary
to move beyond the current conceptualisations of customer profitability in the marketing literature. The existing conceptualisations are either based on products (goods or services) or customer relationships, which are both still highly relevant but are not sufficient from a service logic perspective. The reason is that both these customer profitability conceptualisations are based on other perspectives on marketing than service logic. Imperative to this article is value facilitation (Grönroos 2008), which is a central but overlooked tenet of service logic. In addition, value facilitation has not been further conceptualised in the literature but has only been proposed as a general principle. Consequently, this article conceptualises value facilitation as a multidimensional concept, which consists of essential, enabling, enhancing, and economical support by the service offering and supportiveness by the service provider.

The contemporary service marketing literature has, to a large extent, focused on value creation from the customer’s perspective, based on value in use (e.g. Edvardsson et. al 2005). The contemporary service marketing literature has paid considerably less attention to value capture. Typically, value capture is dealt with in the strategic management literature (e.g. Bowman and Ambrosini 2000; Lepak, Smith, and Taylor 2007; Priem 2007) and in the marketing-finance stream of literature (e.g. Blattberg, Getz, and Thomas 2001; Rust, Zeithaml, and Lemon 2000). As a rule, in these streams of literature, the generated (value in exchange) and retained (value in retention) cash flow from customers is considered equivalent to value capture. This sole attention on financial value is also typical of the current conceptualisations of customer profitability. Only the prospective approach with forecasts of customer lifetime value (CLV) adds a further dimension by discounting the estimated future cash flows to the present value (value in time). However, Ryals (2002, 2008) argues that relational benefits such as positive word of mouth (value in referrals) are also an important form of value capture.

Nevertheless, none of these perspectives on value capture and customer profitability analysis incorporate the link to value facilitation and the support of the customers’ value creation activities. Therefore, this article argues for applying an augmented customer lifetime value (ACLV) approach to customer profitability analysis. More specifically, this article argues that only the ACLV approach can incorporate value facilitation and value capture as a multidimensional concept, consisting of value in exchange, value in retention, value in time, and value in referrals.

Consequently, this article contributes to the contemporary service marketing literature in general by expanding the research agenda and particularly by linking value facilitation to value capture. This article takes a service logic perspective on customer profitability analysis.

7.1. Implications for research

The results from this study have a number of implications for research. The empirical results are summarised in Figure 4, which shows the direct and indirect links between the constructs.
Figure 4  The final model

All three support dimensions of the service offering have a direct effect on the supportiveness of the service provider. However, out of the support dimensions, only enabling support and enhancing support have a direct effect on referrals. Economical support has an indirect effect on referrals via supportiveness. On the other hand, only economical support and referrals have a direct effect on customer profitability (augmented customer lifetime value). The enabling and enhancing support dimensions have indirect effects on customer profitability via referrals. Notably, supportiveness also has an indirect effect on customer profitability via referrals. Consequently, referrals can be considered of fundamental importance in linking value facilitation to customer profitability.

7.2. Further research

This study has some limitations that can be addressed in further research. First of all, the omission of essential support represents a limitation of this study and, thus, an interesting area for further research. In addressing the essential support, a fruitful avenue would be to establish a link to previous research on consumer goals (e.g. Bagozzi and Dholakia 1999; Huffman, Ratneshwar, and Mick 2000; Sheth, Newman, and Gross 1991; Woodruff 1997).

Another potential area for further research could be to study the reasons for customers not spreading positive word of mouth when the service offering is perceived to be competitive (cf. rejected hypothesis #7).

Overall, the generalisability of the results would require further studies in the same and in other contexts. Additional studies could be conducted in retail banking, for instance, by expanding the scope into additional customer segments. Studies in other contractual and continuous business settings could also be a fruitful avenue for further research.

7.3. Managerial implications

This article calls attention to the fact that value capture as a concept encompasses more than just cash flow; referral value is also an important aspect of value capture.
From a managerial perspective, this article calls attention to the shortcomings of the scope of the traditional approaches to customer profitability analysis. In so doing, this article argues for applying the augmented customer lifetime value (ACLV) approach to customer profitability analysis. The application of the augmented customer lifetime value (ACLV) approach requires a combination of transaction databases with survey data on an individual customer level. This calls for managerial attention in planning and executing customer analyses. Only then is it possible to link value facilitation and value capture into a measurable customer profitability construct.

In conclusion, from a managerial perspective, it is also important to discover how the current service offering can be developed even better, facilitating the customers’ value creation activities. This requires establishing an in-depth understanding of the customers’ experiences in using the current service offering as well as establishing an understanding of their hidden needs.
REFERENCE LIST


## APPENDIX A

### Exploratory Factor Analysis: Factor loadings and cross-loadings for the measurement items of the service offering support constructs

<table>
<thead>
<tr>
<th>Form of support:</th>
<th>Enabling support</th>
<th>Enhancing support</th>
<th>Economical support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constructs / Measurement items:</td>
<td>Ease of use</td>
<td>Value enhancing advice</td>
<td>Competiveness</td>
</tr>
<tr>
<td>How easily understandable is the content</td>
<td>.80**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How easy is the information you are looking for to find</td>
<td>.77**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How easy are the self-services to use</td>
<td>.77</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How faultlessly the self-services work</td>
<td>.72</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Giving you advice on how to make your banking easier</td>
<td></td>
<td>.87</td>
<td></td>
</tr>
<tr>
<td>Giving you advice and hints on how you can improve your personal finances</td>
<td></td>
<td>.86**</td>
<td></td>
</tr>
<tr>
<td>Giving you sufficient information about the characteristics of different investment alternatives</td>
<td></td>
<td>.84</td>
<td></td>
</tr>
<tr>
<td>Proposing suitable solutions to you</td>
<td></td>
<td>.84</td>
<td></td>
</tr>
<tr>
<td>How competitive are the interest rates on savings and investments</td>
<td></td>
<td></td>
<td>.87</td>
</tr>
<tr>
<td>How competitive are the returns from investment funds</td>
<td></td>
<td>.31*</td>
<td>.82</td>
</tr>
<tr>
<td>How competitive are the bank’s interest rates on loans</td>
<td></td>
<td></td>
<td>.74**</td>
</tr>
</tbody>
</table>

* = The cut-off value for the factor loadings is typically 0.5, thus this cross-loading value is considered practically insignificant (Hair et al. 1998).

** = The item is excluded from the measurement model as a result of the Confirmatory Factor Analysis.

---

** Factor loadings and cross-loadings less than .3 are excluded from the table.
APPENDIX B
Exploratory Factor Analysis: Factor loadings and cross-loadings for the measurement items of the dependent constructs

<table>
<thead>
<tr>
<th>Dependent construct:</th>
<th>Supportiveness</th>
<th>Referrals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measurement items:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The bank is creating added value for its customers</td>
<td>.87</td>
<td>.43*</td>
</tr>
<tr>
<td>The bank is genuinely focusing on its customers’ interests and needs</td>
<td>.87</td>
<td>.42*</td>
</tr>
<tr>
<td>The likelihood to recommend the Bank to friends, acquaintances, and colleges</td>
<td>.41*</td>
<td>.87</td>
</tr>
<tr>
<td>Commenting on the Bank to friends, acquaintances, and colleges</td>
<td>.44*</td>
<td>.86</td>
</tr>
</tbody>
</table>

* = The cut-off value for the factor loadings is typically 0.5, thus these cross-loadings values are considered practically insignificant (Hair et al. 1998).


HENRICH NYMAN

SERVICE PROFITABILITY: AN AUGMENTED CUSTOMER LIFETIME VALUE APPROACH

To twist an old saying into ‘service logic’, one could express the ongoing paradigm shift in service marketing as – ‘service is not as usual, anymore’. This thesis argues for adopting service logic on profitability and, thus, for studying ‘service’ (singular) profitability as a divergent concept from ‘services’ (plural) profitability.

For the uninitiated into the recent theoretical development within service marketing, the concepts of service and services might at a first glance appear indistinguishable. However, there is more to the concept of service in contrast to services and, hence, to the rationale for conceptualising service profitability as distinct from services profitability, than just omitting the letter -s from the word ‘service’.

An increasingly growing body of the service marketing literature challenges the traditional services paradigm, in which services have been characterised as different from goods by four distinguishing ‘IHIP’ characteristics: ‘intangibility’, ‘heterogeneity’, ‘inseparability’ and ‘perishability’. The definitions of the IHIP characteristics are found to be too narrow and outdated as generic service characteristics. What is more, the ‘IHIP’ characteristics are not universally applicable to all services during all stages of the service process and fail to set apart services from goods in general. Most severely, the ‘IHIP’ characteristics are still based on the same goods- or manufacturing-centred logic that they are claimed to differ from.

In contrast to services (plural) as a distinct category of market offerings, the contemporary perspectives on service (singular) represent various ways of thinking and, thus, logics or mental models on value creation from the customer’s point of view, founded on ‘value in use’.

However, in emphasising value creation from the customers’ perspective, the contemporary perspectives on service pay considerably less attention, if at all, to the financial value of service from the service provider’s perspective and, as a result, to service profitability.

Purposely, this thesis adopts a provider perspective on service by conceptualising service as consisting of two distinct processes: the service sales process and the service provision process. Nevertheless, the customer perspective on these processes is imperative for the financial consequences of the service. From the customers’ perspective, the service sales process deals with value propositions, which indicates that service offerings are not the final result of an economic activity but should add value for customers. Moreover, from the customers’ perspective, the service provision process comprises value facilitation, i.e. the facilitation of the customers’ value-creation activities. Consequently, this thesis argues that the concept of service profitability could be characterised as the financial outcome of service sales and service provision, wherein the service provider’s facilitation and support of the customers’ value creation activities is paramount.