Evaluating the benefits and ROI of a comprehensive CRM service - Case Itella Asiakkuusmarkkinointi

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Evaluating the benefits and ROI of a comprehensive CRM service

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Abstract

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Objective of the study: Two distinctive marketing trends are rising: the increasing customer-centricity and the demand for marketing accountability. One way to rise to the challenge is to introduce a Customer Relationship Marketing (CRM) service in the business strategy and operations. The objective of this study is to examine how the return on investment of a comprehensive CRM service could be evaluated and of which elements the return consists of.

Research method used: The study uses a constructive approach to find a working solution for the research questions. The problem is approached via a literature review, which is the basis for identifying the structure and elements for a ROI calculation tool. The tool is then tested on a real-life case.

Summary of the findings: The benefits of analytic CRM were identified and a theoretical framework for transferring the benefits into customer and financial effects was suggested. In the framework a comprehensive CRM service affects the ROI both internally by decreasing costs in internal processes and externally by increasing revenues from outside customers. This is enabled through three means: by increasing the effectiveness, the efficiency and the competitive advantage of marketing operations. This framework is presented on the operational level by a spreadsheet ROI calculation tool, which was then tested successfully on a real-life company case.

Key words: Return on investment, ROI, customer relationship marketing, customer relationship management, CRM, customer experience management, constructive approach

Language: English

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1. INTRODUCTION

1.1. Background

The marketing environment has changed and continues to evolve in new directions, which forces the marketers focus on new ways of serving the customers. Marketing and communication channels have multiplied and brought along a revolutionary amount of information and marketing messages, competition has tightened due to globalization and the customer base has never been as fragmented as nowadays when technology and competition enables and necessitates one-to-one personalization and real-time communication. All these developments have educated the consumer to become more demanding and thus more difficult to capture as a customer, let alone a loyal customer.

Therefore it is vital for companies to learn to know their customer, know what they want and what they need – even if the customer itself does not yet acknowledge it. Through implementation of comprehensive analytics and business intelligence systems it is possible to find, track and predict patterns of customer needs and behavior. Nowadays further developed Customer Relationship Management (CRM) systems include this functionality. Customer knowledge alone, however, is useless if it is not used for new product and service development and customized offers on the customer touch point level. A high correlation of 0.8 between business performance and how customers are managed has been found – but with *people and actual CRM activities* being among the most significant factors contributing to this correlation relationship (Woodcock, 2000).

Another area which has been in the core of marketing and business research during the past few years is the area of marketing accountability and the return of investment (ROI) in marketing. ROI is appreciated by management especially for its simple composition and relativity, which makes ROI figures of very different investments comparable with each other. Even though these issues have been previously discussed in academic literature, especially regarding CRM technology, the field lacks generic tools and models to measure the return on CRM investment. There is a need to summarize the benefits of a comprehensive CRM system and build a calculation model for measuring the ROI of such system.

Therefore the goal of this thesis is to develop a ROI model for a comprehensive CRM system of the case company, Itella Asiakkuusmarkkinointi Oy. Itella's Customer Experience Management (CEM) service is designed to serve large and small businesses in their CRM and CEM activities, which will be further explicated later. The ROI model for CEM service will be especially developed for the use of Itella's sales team because customers are increasingly requiring convincing proof of concept backed up with financial figures for the investment. In addition, certain benefits of CRM services should be demonstrated to the potential client in order to gain interest and acceptance.

1.2. Research problem

In order to summarize the issues and concerns discussed in the previous section, I will sum the research problem of this thesis in the following:

> How should we evaluate the return on investment of a comprehensive CRM service?

The accountability of marketing and CRM investments have been major issues in the business world. Both the inputs and the outputs of the comprehensive CRM investment can be difficult to measure, which complicates the compilation of a business case for these projects. In the field of marketing, discussions have revolved increasingly around such concepts as marketing accountability and marketing ROI, which will be further examined topics in the coming chapters.

However, I aim not limit my work to include only monetary terms that can be included in a traditional ROI calculation. The concept of "return" in ROI will be dealt with in a broad manner, encompassing all the benefits that a comprehensive CRM system with database marketing abilities can realize for a company. Therefore part of the return on the investment will consist of non-monetary, potentially intangible effects, which –even though lacking a monetary metric– should be taken into account when making a sound investment decision.

With the intention of breaking the research problem into more easily examinable parts, I further the divided the topic into two research questions:

> What does a CRM service comprehend and what are its benefits to a business?

> How can profitability and return on investment be measured for a service, which has both quantitative and qualitative outcomes?

As stated previously, the goal of this thesis is to develop a generic ROI calculation model for the comprehensive CRM service i.e. CEM service provided by the case company, Itella Asiakkuusmarkkinointi Oy. The developed model will then be tested in real-life context by applying it to one Finnish company (a customer of Itella), who intends to use the CRM system in their every-day business.

This thesis has a practical orientation as it aims to create an actionable tool for marketing and sales for this kind of service. Because customers increasingly demand demonstrable financial evidence for CRM (and other similar) services, the application of the model with a real customer is important for model validation.

1.3. Research method

The objective of this thesis is to create a ROI calculation model for real-life business usage and implement it to the case company's service and therefore the study will use a constructive approach to tackle the issue. According to Kasanen, Lukka and Siitonen (1993), the constructive approach stands for "managerial problem solving through the Construction of models, diagrams, plans, organizations, etc", which has six separate phases:

1. Find a practically relevant problem which also has research potential.
2. Obtain a general and comprehensive understanding of the topic.
3. Innovate, i.e., construct a solution idea.
4. Demonstrate that the solution works.

5. Show the theoretical connections and the research contribution of the solution concept.

6. Examine the scope of applicability of the solution.

In order to follow the path of the constructive research approach, I will also outline the content of this thesis accordingly. The practically relevant problem has already been established in the previous sections and the general understanding of the topic will be demonstrated in the literature review in chapter 2. Then, in chapter 3, I will construct a framework for the CRM system benefits and create the ROI calculation tool based on that framework in chapter 4 and 5. The model will be tested on the case company's CEM service in context of a client firm, after which the results will be discussed and linked to the previously presented theory. Finally, the thesis will conclude in the final chapter by examining the scope and limitations of the created framework and calculation model.

1.4. Limitations and scope of research

First, the research on the benefits of a CRM system with analytical capabilities will be conducted in a general context but as the available CRM systems on the market are constructed in different ways and include different functionality, the ROI calculation model will be created only for the service package offered by the case company. The model will thus be bound to a certain context, which does not mean that at least parts of the model could not be used to measure ROI for other CRM services as well.

Second, the CEM service of Itella includes three different modules, all with increasing service features and application. In order to keep this thesis within reasonable limits as for length and scope, I will only be looking at the Analytic CEM module, which offers the analytical capabilities to analyze and e.g. mine customer data for actionable behavior patterns. Thus the ROI calculation model will not tell the entire truth of the returns expected from a fully implemented CEM service entity. However, it is noteworthy that the Analytics CEM module alone is a very comprehensive CRM service – the term "module" is misleading in this context.

Finally, because the ROI model has been developed to be a tool for the sales and marketing of CEM services, the model will need to make assumptions of the business model as adequate customer company and action data will not be available before the Analytic CEM module has been implemented and used for a sufficient period of time. These assumptions will be made based on literature and interviews of experienced sales people, but will probably differ somewhat from actual real-life figures.

2. LITERATURE REVIEW AND MOTIVATION FOR THESIS

In order to understand the motivation for implementing comprehensive CRM services and customer data analytics, it is essential to realize how the world of sales and marketing has changed over the past years. The development of new operating rules has been recognized in the field of marketing and the two most important changes are the shift from product-centric marketing to customer-centric marketing and the demand for marketing accountability. The motivation and consequences of this evolution are discussed in the following sections.

2.1. From product-centric to customer-centric business

Marketers have started to understand the importance of always looking at the customer and her needs first when planning for new marketing and sales efforts. The reason for this is the studied and established link between the customer experience and satisfaction to loyalty and customer profitability. This linkage, for one, has directed marketing efforts from the traditional mass marketing towards targeted direct marketing.

2.1.1. Linking customer satisfaction and loyalty to profitability

The importance of the customer experience and the resulting satisfaction in building loyalty can be examined by looking loyalty as a function of satisfaction. It is a studied fact that increasing satisfaction correlates with increasing loyalty (loyalty defined as customer retention and relationship longevity) but it is noteworthy that this relationship is not linear (e.g. Kassim & Ismail, 2009; Reinartz & Kumar, 2000). The more competitive the business environment is (low differentiation, low switching cost), the more exponential the relationship between satisfaction and loyalty is and thus the more significant is the difference in loyalty with only a small increase in satisfaction. (Jones & Sasser Jr., 1995).

Why then should a company be interested in increasing customer loyalty and retention? Besides the old marketing fact that acquiring a new customer costs approximately 5 times more than retaining an old customer, there are many studies, which show a clear connection between the length of customer relationship and increased profits. In their study across different industries, Reichheld and Sasser Jr. (1990) found that even a small improvement of 5% in the customer retention rate boosted profits from 25% to even 85%. This is possible because as the customer relationship is established, the customer continues to increase her purchases and buys from additional product groups - simultaneously the company begins to know the customer better and is able to serve the customer more efficiently and with lower costs. Increasing profits and decreasing costs result directly in an improved ROI for the business.

Another reason to be interested in loyal customers and their profitability is company valuation. A firm's value is considered to be the net present value of its future cash flows, and in most companies the cash flows come primarily from customers – the cumulative customer lifetime values (CLTV) reveal the firm's true value. The longer you are able to hang on to a good customer, the longer you get revenues from her. It is also easier to increase the share-of-wallet for retentive customers: becoming the preferred supplier for an existing customer is generally cheaper than winning entirely new customers (McCorkell, 1997, 72; Berry & Linoff, 1997, 13). Maintaining and developing an existing customer relationship is thereby cost-effective marketing (Chang 2007).

Even though there is evidence of the positive relationship between the length of customer relationship and increased profits (e.g. Reichheld & Sasser Jr., 1990), it is also important to recognize that the lifetime value of customers is not uniform across the customer base or even among the long-term customers. In their empirical study Reinartz and Kumar (2000, 2002) found out that some of the most profitable customers were one-timers who did not exhibit repeat purchase behavior. Thus non-retentive customers should not be forgotten entirely but the challenge is to recognize these customers and stop targeting them with expensive marketing efforts.

2.1.2. From mass-marketing to direct marketing

As the connection between customer satisfaction, loyalty and profitability has gained understanding among businesses, the focus of marketing efforts has also moved from the masses to the individual. Mass marketing did actually make sense before: In the UK, when ITV started to offer national coverage, it was possible to reach half of the adult population by placing one commercial on TV (McCorkell, 1997, 35). With the exploded number of media channels in today's world and with all the other products and services competing for the consumers' time and money, this kind of reach requires significantly more effort and targeting. The trend has moved from mass marketing to relationship marketing – treating each customer relationship as an individual entity.

One-to-one marketing is one orientation of relationship marketing, where the objective is to recognize customers individually and learn their behaviors and needs resulting in segments of one. One-to-one marketing can be basically divided into two areas: (1) learning about the customer and (2) personalization of the service, communications or even the product itself. Personalizing the product or service slightly according to individual customer characteristics is commonly referred to as mass customization. (Arantola 2003, 63-65). However, it is more common to customize the marketing communication than the entire product.

Direct marketing is often used as a synonym for one-to-one marketing. A formal definition of direct marketing according to Allen (1997, 10) is as follows:

> *"Direct marketing is any form of one-to-one communication with potential customers. The ultimate objective of using any of these promotional tools will be to effect a sale but much of the communication will be to keep open a dialogue that is vital in long term relationship building."*

McCorkell (1997, 52) follows Allen's reasoning but emphasizes also the role of data capturing and analysis in the process:

> *"Direct marketing is the process in which individual customers' responses and transactions are recorded… and the data used to inform the targeting,*

execution and control of actions... that are designed to start, develop and prolong profitable customer relationships."

Targetable marketing communication makes direct marketing attractive, because the marketing effort has consequently better results and these results are also measurable and verifiable. Mass marketing lacks this feature. An example of this is a study by Ehrenberg, Hammond and Goodhardt (1994), where untargeted price-related consumer promotions had no after-effect on the brand's sales or repeat-buying loyalty. The reason for this was mainly that the promotion responders were almost all from the brand's existing loyal customer base, not potential new customers.

2.2. Demand for marketing accountability

According to a study conducted by the Association of National Advertisers and Booz Allen Hamilton (2004), it seems as if in most companies the marketing agenda and CEO's agenda are not aligned. Whereas CEO's are concerned with top-line growth, flexibility and stimulating innovation, marketers are focused heavily on tactical decisions such as branding guidelines. The marketing function has gained importance over the past years and CEO's are expecting measurable outcomes from marketing. There is clear support for the idea of being able to manage only what you can measure and the sheer size of the marketing function underlines the importance of performance measurement: marketing related costs and investments constitute 20-25% of firm expenditures (Stewart, 2009). With such a large budget, no wonder that CEO's demand better accountability for marketing costs.

The American Marketing Association (AMA, 2005) defines marketing accountability as

"the responsibility for the systematic management of marketing resources and processes to achieve measurable gains in return on marketing investment and increased marketing efficiency, while maintaining quality and increasing the value of the corporation."

This definition emphasizes both shorter term financial gains and longer term overall corporate value (Ambler & Roberts, 2008). The challenge lies in finding appropriate performance measures: current marketing metrics are poor at measuring the right things. Especially a functional marketing ROI is still waiting to be defined and taken into use. (ANA & BAH, 2004).

Accountability requires the ability to measure performance. There are several benefits in performance measurement and accountability, all evolving around enhancing the business towards the better (Brewton, 2003):

- Measurement removes ambiguity and disagreement and facilitates understanding and consensus
- Measurement provides a common and precise language for communicating to all levels what is happening and what are the objectives
- Measurement enables continuous attention on the measures and actions that drive strategic performance
- Measurement helps to speed up the pace of successful change in the organization by providing quick and clear feedback
- Measurement of performance drivers increase the predictive capabilities of an organization and enable early action

2.3. Customer relationship management as a business strategy

The trend has been an ever globalizing marketing world, where the customers' choices have been multiplied and more and more instances fight over the customer's attention and share-of-wallet. Also the media is fragmented, including new channels among social (customized) media and C2C business portals. What is more, business people need to also take into account that their products have received new competitors from different product categories. A beauty parlor, for example, is not competing only against other salons or hairdressers; also other indulgence and leisure service providers such as holiday resorts and movie theaters are competing for the same share of consumer money. This kind of cross-

category buying behavior will grow: 35% of consumption is expected to be replaced by new products and new categories by 2020 (Allen & Rigby, 2005).

As previously stated, all this has lead to a shift in marketing: previously product-centric sales and marketing efforts are now customer-centric and are aiming to give value-added, customized solutions to customer needs (ANA & BAH, 2004). However, the precedent for conducting a customer-centric business is to understand the customer, having customer insight (Arantola, 2006, 28). This customer insight can be gained by implementing customer relationship management (CRM) systems and strategies in everyday operations of a company. In the following sections I will take a look at the definition and functionality of CRM in order to demonstrate, how it responds to the requirements of customer-centricity and marketing accountability.

2.3.1. Definition

Often customer relationship management is used in a context where it basically stands only for customer service software and customer database systems, but the concept is a lot broader than this. CRM should be seen as a management style and strategy – Kotler and Armstrong (2004, 16) define it as "*the overall process of building and maintaining profitable customer relationships by delivering superior customer value and satisfaction.* Sun, Li and Zhou (2006) manage to capture the very core of customer relationship management; according to their definition, CRM is about introducing the right product to the right customer at the right time through the right channel to satisfy the customer's evolving demands. CRM stands therefore often also for Customer Relationship Marketing, which emphasizes the operational side of relationship management.

However, applying CRM strategies is impossible without appropriate CRM systems. Looking at CRM from the IT system perspective, we can define CRM as an additional application for existing enterprise resource planning (ERP) or sales automation systems or as a comprehensive platform, which enables different degrees of utilization. Modern integrated CRM systems typically combine several information sources into one integrated database or

data warehouse: transaction data and account plans, the company's marketing programs, and competitive and market information (e.g. Stein & Smith, 2009). Also several CRM definitions incorporate the concept of IT. For example, Chang (2007) states that

> *"CRM aims to maximize customer value in the long term, by focusing business processes, marketing and customer service on client relationship maintenance, through the coordinating agency of an information technology (IT) system".*

Furthermore, CRM systems are often divided among operational CRM and analytical CRM. Operational CRM is about streamlining, automating and removing information silos: the objective is the effective and efficient utilization of the company resources. Analytical CRM, on the other hand, is about measuring, analyzing and managing resources and customer data, with the objective of generating e.g. customer profiles and segmentation, identifying behavior patterns and determining customer satisfaction levels. (Anton & Petouhoff, 2002, 4; Xu & Walton, 2005).

The widely adopted operational CRM enables organizations no more than sophisticated mass marketing - analytical CRM is the missing link moving towards true one-to-one marketing (Kelly, 2000). Therefore this thesis focuses on the benefits of analytical CRM in particular and the applications of analytical CRM are further examined in the following section.

2.3.2. Analytical CRM and Database marketing

According to Doyle (2007), analytical CRM often includes a marketing database, campaign management and reporting capabilities, data mining functionality and the ability to integrate communication delivery channels. The six main applications of these functions are sales analysis, customer profiling, campaign analysis, loyalty analysis, customer contact analysis and profitability analysis (Kelly, 2000). The foundation for these applications is the marketing database, which includes all the data needed in all the analytics and reports. A good marketing database includes data, which is relevant and has three important characteristics:

it is correct and up-to-date, as complete as possible and organized and managed so that it is easily accessed when needed (McCorkell, 1997, 76).

However, Kelly's (2000) classification of analytical CRM applications is in fact more of the today's basic CRM functionality. The distinction between basic CRM and business intelligent, analytical CRM as it is available today is that basic CRM looks in the rearview mirror and reports what customers did in the past whereas predictive analytical CRM uses database marketing (DBM) and Knowledge Discovery from Databases (KDD) to predict how they will behave in the future. Database marketing is a database-oriented process that explores database information in order to support marketing activities and decisions. (Pinto, Marques & Santos 2009; Tumanoff, interview). In addition, the process of Knowledge Discovery from Databases is well established in the scientific community and has three phases: data preparation, data mining and deployment (Pinto et al., 2009). Data mining is defined as *"the exploration and analysis, by automatic or semiautomatic means, of large quantities of data in order to discover meaningful patterns and rules"* with the objective of improving marketing, sales and customer support operations (Berry & Linoff, 1997, 5).

The ability to predict is material for every business: only the future behavior can be still affected and captured. Below is a graph from Davenport and Harris (2007, 8; Figure 1), where they define their view on the difference between backward and forward looking analytic capabilities. Many companies have the CRM capabilities to capture the lower levels of the depicted analytical hierarchy, but only a few with comprehensive CRM systems are able to reach the higher analytical levels needed for sustainable competitive advantage.
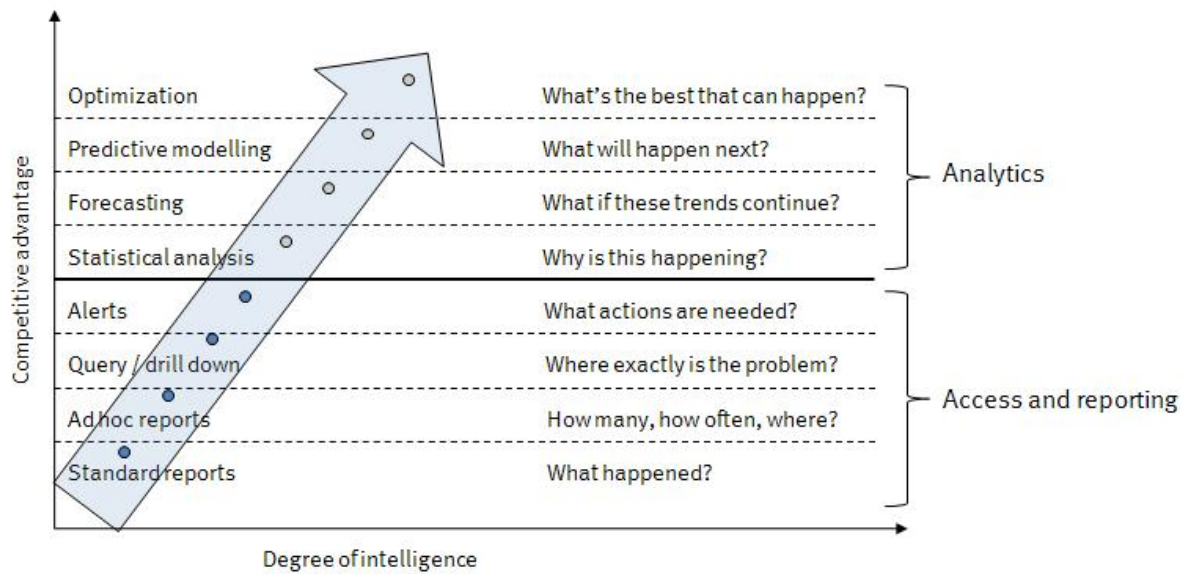
Figure 1: Business intelligence and analytics (Davenport & Harris, 2007)

Sun, Li and Zhou (2006) recognize this distinction in their framework for learning and proactive customer relationship management. They state that a successful CRM should comprise three components:

- Adaptive learning: analytical CRM, finding patterns in customer behavior and adapting firm strategies accordingly
- Forward-looking: being proactive, recognizing that the firm's actions affect customer reactions and value and choosing the strategy with the best outlook and
- Optimization: choosing that marketing action, which has the best probability for maximizing current and expected future profit

Xu and Walton (2005) created a step-by-step model for analytical CRM, which takes into account the more advanced capabilities of analytics. These steps can also been seen as the benefits of such a system: (1) identifying strategically significant customers, (2) segmenting customers to personalize services, (3) tracking and modeling customer behavior patterns, (4) tracking and generating emerging patterns and finally (5) predicting possible actions.

2.3.3. The benefits of analytical CRM and database marketing

As previously discussed, analytical CRM enables customer-initiated business and marketing accountability via the ability to measure performance, but it is useful to dig deeper in the benefits of analytical CRM and database marketing. In which things do customer analysis, forward-looking analytics and predictive abilities lead to? Blattberg, Kim and Neslin (2008) suggest three fundamental motivations for engaging into database marketing:

- Enhancing marketing productivity
- Enabling the development of a customer/firm relationship
- Creating a sustainable competitive advantage

The improved marketing productivity derives from the ability to identify and target wanted customers, being accountable via more specific cost and revenue calculation and the ability to learn via experimentation and thus being even better at targeting the desired customers. These capabilities enable customer relationship development, which leads to increased loyalty and financial performance. Sustainable competitive advantage derives the unique customer data and insight as well as the increasing knowledge in analytics and learning systems. (Blattberg et al, 2008). Naturally competitive advantage sources also from the unique and fostered customer relationships that are not easily copied by competitors (Roberts, Varki & Brodie, 2003).

The appropriate use of DBM thus enables firms to effectively leverage on knowledge about current customers and prospects. The effectiveness comes from maximizing the yield of the sales effort, minimizing the risk of annoying the customer with uninteresting offers, and strengthening the ties between the firm and the customer. (Kamakura, Wedel, de Rosa & Mazzon, 2003).

All in all, DBM basically helps to create sustainable and profitable customer relationships. One can therefore find similarity between the advantages of DBM by Blattberg et al. and the advantages that Hougaard and Bjerre (2003, 112-116) list for customer loyalty:

- Efficiency economy – creating cost advantages in the value chain

  Customer loyalty leads to more efficient processes and cost savings, which enhances marketing productivity – the first motivation for DBM according to Blattberg et al. (2008).

- Lifetime economy – retaining a customer for a longer period of time

  A loyal customer is a longer-term customer by definition, which means more cash flow for the company. The cash flows come from increased purchase frequency and up- and cross-selling, definable also as customer relationship development – the second motivation for DBM according to Blattberg et al. (2008).

- Value adding economy – customers participating in supplier's value generation

  Loyal and participating customers are more easily incorporated in the value creation process of the company, which not only helps to lower costs (productivity) and to support the customer relationship, but also helps to build a competitive advantage over other players in the market through unique customer engagement.

The driver of marketing productivity, identifying customers and customer values, allows the company to hold on to good customers i.e. recognize which customers should be offered incentives to stay with the business; weed out the bad customers; and learn how to target different customers with different up- and cross-selling offers (Berry & Linoff, 1997, 13-15). These abilities enable an increase in operating income via business intelligence and targeting as well as a decrease in operating costs with automation and better data quality (Doyle, 2007). But this kind of marketing investment also reduces business risk by differentiating the product or brand and creating thus a more monopolistic and less competitive market (Rust, Ambler, Carpenter, Kumar & Srivastava 2004).

In order to dig in deeper in the motivations for analytical CRM and DBM, it might be beneficial to take a look at the functionality of these systems. What are then the actual functions that enable identifying and targeting a certain customer segment? Berry and Linoff (1997, 51-55) described a good list of data mining capabilities:

- Classification (e.g. classifying credit applicants as low, medium or high risk)

- Estimation (e.g. a family's total household income)

- Prediction (e.g. which customers will leave within the next six months)

- Affinity grouping (e.g. assigning a probability for a person that buys cat litter to also buy cat food)

- Clustering (classifying/grouping individuals without predefined classes, e.g. market basket analysis)

- Description (e.g. "women support Democrats more often than men do")

Data mining brings significant benefits for the business. Besides making it possible to predict future customer needs and behavioral patterns, it reduces response times to minutes or hours from traditional weeks or months of observations and analysis, reduces significantly the need for human intervention (automation of analysis and decision making) and it focuses on actionable entities, not on artificial unities like organizational departments etc. (Berry & Linoff, 1997, 33; Davenport & Harris 2005).

It is also important to see the value in the IT infrastructure itself. IT can help automate processes and enable entirely new processes but it can also enhance the quality of existing processes. Kumar (2004) states that IT effectiveness can be evaluated with measures of reliability, flexibility and upgradability. The value of a maintained IT system should be therefore considered as the saved cost on down-time etc. These benefits have also been witnessed in real life context. According to the CRM study conducted by Stein and Smith (2009), CRM systems with so called higher order capabilities i.e. analytics and predictive modeling have statistically significantly better results with regard to the firm's performance. Also Starkey's and Woodcock's (2002) study supports this finding. The top quartile performer firms had adopted comprehensively database marketing and customer-centric principles both in their systems, processes and culture including features such as a full customer context view across channels and departments, consistent data capture and a common set of business rules across the company (ibid). Customer analytics is increasing its penetration also in Finland: 87% of large and middle-size companies use some kind of customer behavior tracking systems (TNS Gallup, 2010). To conclude the examination of CRM and DBM benefits, two case examples of real-life success stories are presented:

- Credit card company Capital One

  In the 1980's, a credit card company known today as Capital One started analyzing their customer database in order to find out more about their individual customers. They found out that their most profitable customers were actually people, who borrowed large sums quickly and paid their balances slowly. Capital One started to offer better suited products for these customers and continued to analyze their database in order to gain better customer insight and stay ahead of competition. Through such analyses, Capital One was able to increase their retention rate by 87% and decrease the cost of acquiring a new account by 83%. By 2007, Capital One was a Fortune 200 company, with a record of ongoing growth and profitability and stock value, which has increased by 1000% over the past 10 years. (Davenport & Harris, 2007, 41-42).

- Industrial equipment company

  A B2B company supplying industrial equipment used analytics to segment their customer base according to how they choose their suppliers. They found four segments: company-loyal, competitive, switchable and competitor-loyal. The B2B company then targeted the competitive and switchable segments with appropriate offerings – after one year, sales rose 18% while simultaneously the total industry declined 15%. (Gensch, Aversa and Moore, 1990 as cited in Ang & Buttle, 2002).

2.3.4. Critique of CRM

In the late 1990's and early 2000's there was a sort of CRM "boom" – consulting companies and software vendors were quickly actively selling CRM solutions to all kinds of companies with the message that "this is a must". The result was that many systems were implemented fast without proper business and context analysis or without appropriate follow-through and organizational change. But CRM success depends on its usage, and thus many systems failed

to deliver adequate business benefits. There were significant failure rates for these projects regarding unmet expectations and ROI's and CRM in general got a bad reputation. Depending on the way of measuring, the failure rate of CRM projects reached 33% or even 50% (Arantola, 2003, 106). Other sources report even higher failure rates (e.g. Ang & Buttle, 2006).

One of the best known criticism points regarding IT investments in general is the productivity paradox (Brynjolfsson, 1993). The paradox came from the fact that even though the computing power among white-collar workers had multiplied along the years, the productivity of these workers seemed to have stagnated i.e. IT was not delivering its promises.

However, the idea that IT should improve business results alone just by introducing it into a business environment is old thinking. It has been recognized that the value of IT is not intrinsic, but instrumental: IT and computerization enable improved business strategies and processes to take place (e.g. Brynjolfsson & Hitt, 1998; Davenport & Short, 1990). Also, the learning-by-doing must be taken into account: initial returns from IT investments might be lower due to the time needed in learning and experimenting (Brynjolfsson & Hitt 1996). Therefore any productivity calculations including CRM investments should take into account the extent to which the software and hardware is utilized, monetize the non-monetary benefits as well and have a long enough time span.

Still, globally there have been many CRM projects, which have not been able to return the expected financial objectives and benefits. This could be a matter of unrealistic scope requirements and budgeting, but the problem might also lie in the collection and processing of high-quality data. It seems that analytical CRM systems do encompass enough functionality and usability but not even the state-of-the-art analytical systems can deliver quality output, if the input data is useless.

2.3.5. Next step for CRM – moving towards CEM

Whereas customer relationship management and marketing concentrates on describing and modeling customer relationship processes and identifying and targeting those customers, who are valuable to the firm, Customer Experience Management (CEM) focuses on understanding the customer's experience and on identifying how the firm can be valuable to the customer. CEM is a concept developed and diffused by management consultants and CRM practitioners and it is gaining a firm foothold the field of customer relationship management. CEM not only takes customer knowledge but also the firm's sales and product information into account and based on this information defines all customer experience points (touch points) and makes sure that the communication and offered service are integrated along the entire experience chain and make good business sense. The comprehensive approach of CEM makes sure that the firm is doing profitable business and is able to reach the customer along those attributes that really matter from the customer's perspective. In addition, because CEM encourages to depict all customer experience points and to measure and keep track on them, it also makes the ROI computation more accurate (CustomerSat, 2000).

Customer Experience Management has also been defined as "*the process of strategically managing a customer's entire experience with a product or a company*" (Schmitt, 2003, 17). Schmitt also presents a CEM framework with 5 steps:

1. Analyzing the experiential world of the customer
2. Building the experiential platform
3. Designing the brand experience
4. Structuring the customer interface
5. Engaging in continuous innovation

The first step is to analyze the current situation of operations and service, whereas the second step is strategy formulation for better experience management. The steps from 3-5 are implementation steps, including e.g. the design for "look and feel" of the sold product or service. (Schmitt, 2003, 25-30).

CEM is about combining the traditional outbound marketing with relevant data and inbound marketing. Inbound marketing means on the other hand those marketing efforts that occur when a customer initiates contact with the firm; on the other hand it refers to the activity, which researches and analyzes the future state of the market and customer needs and brings the market and customer focus into decision making (Pawsey, 2005). The idea of customer centricity and customer experience management has been depicted as the following process (Accenture Nederland, 2007):
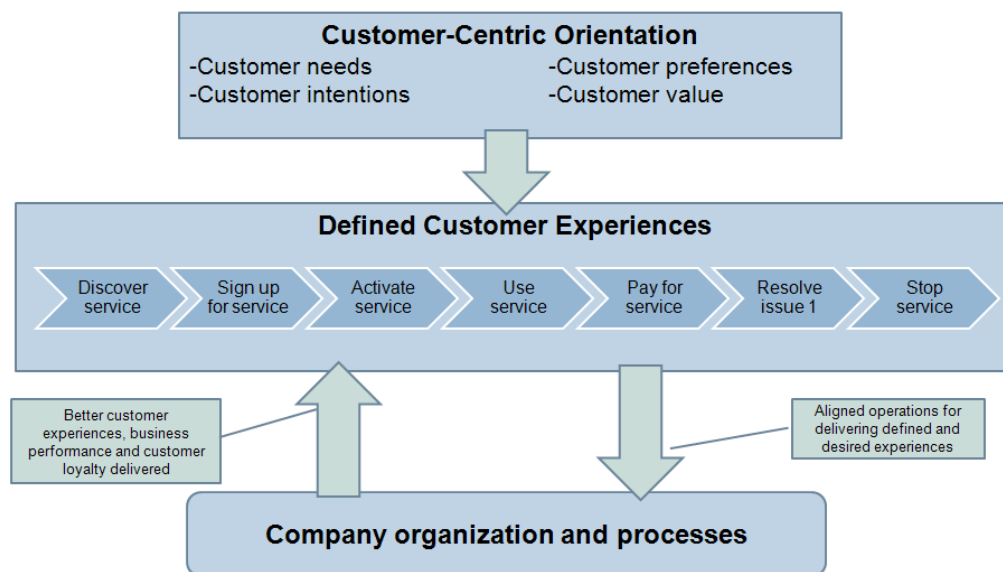
Figure 2: Customer Centricity and CEM (adapted from Accenture Nederland 2007)

Itella's CEM service incorporates these ideas in its principles and architecture. Whereas more traditional CRM services look at customer data and try to maximize up- and cross-selling, CEM services combines customer information with the firm's information regarding sales, operations and products and enables a 360 degree view on the customer experience and profitability of the firm. Itella's CEM begins with offering the module *Direct CEM*, which enables marketing automation and campaign management with basic targeting capabilities. The next module, *Analytic CEM*, includes Direct CEM and adds on BI and predictive analytics, which enable more sophisticated targeting and customer relationship development. Using CEM to its full extent means implementing the *Service CEM*, which incorporates Direct and Analytic CEM but also further builds inbound marketing capabilities and real-time marketing activities. (Itella website, 2010). However, Itella CEM and especially Analytic CEM will be further examined in chapter five.

3. DEVELOPING A CONCEPTUAL FRAMEWORK FOR THE LINK BETWEEN ANALYTICAL CRM AND FINANCIAL PERFORMANCE

In the previous chapters the motives for analytical CRM and CEM were established as the increasing customer-centricity and marketing accountability in business, the benefits of analytical CRM were determined and the concept of CEM was introduced. Now it is possible to combine these concepts into a framework, which shows the links between these entities.

This chapter is divided into three parts. First, I will review previous research on frameworks connecting CRM and marketing with financial performance. Second, the causal models and concepts of these frameworks will be studied in order to determine their major contributions and to find similarities and finally I will construct my own hierarchical model to represent my view of the relationship between Analytical CEM and financial outcomes.

3.1. Previous research on models connecting customer relationship marketing and financial performance

There is abundantly literature on CRM and its benefits, but less on the connection between CRM and a firm's financial performance. In this section I will briefly introduce five studies, which turned out to be the most useful for this thesis. They do not explicitly intend to reveal the financial benefits of CRM as a concept or IT system, but they view issues like service quality, satisfaction of customer needs and marketing actions as precedents for the sound financial performance of a firm. These same issues frame the concept and content of CRM.

Storbacka, Strandvik and Grönroos (1994) presented a conceptual profitability model, which links service quality, customer satisfaction, relationship longevity and profitability with each other as shown in Figure 3. The framework broadens the traditional quality-satisfaction-loyalty chain by factoring other influencing aspects in the model. Storbacka et al. (1994) have included e.g. exit barriers (bonds) and critical episodes, which affect relationship strength and longevity, respectively. The contribution of this model is that it depicts the dynamics of service management and customer relationship marketing and it takes into

account the profitability of the relationship, which was often forgotten in previous research. In addition, it represents these dynamics in a hierarchy of causal relationships, which is of interest in this thesis.
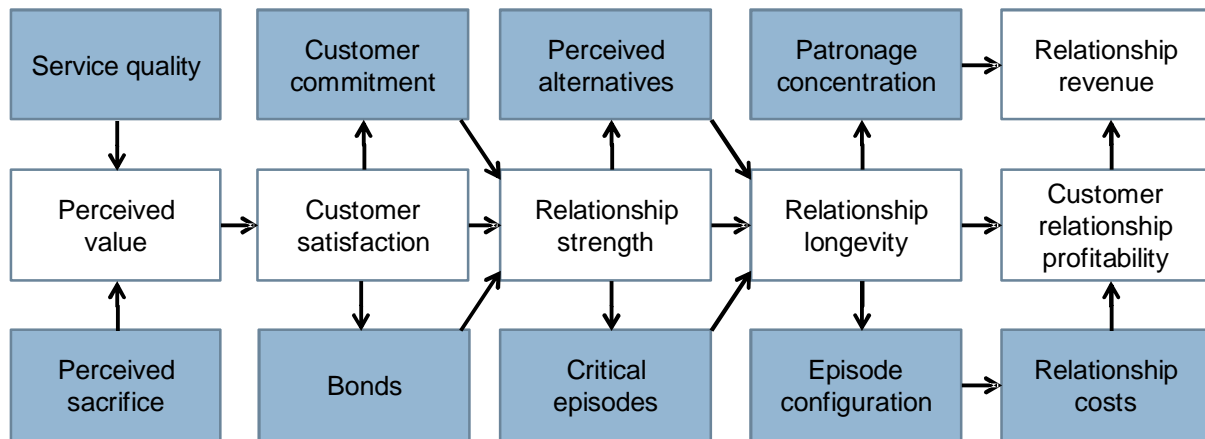
Figure 3: A relationship profitability model (Storbacka et al. 1994)

Rust, Ambler, Carpenter, Kumar and Srivastava (2004) constructed a broad conceptual model for evaluating marketing productivity in the context of expenditure on marketing activities and their influence on customers and the market and further on financial performance (see Figure 4). They recognized the need for non-financial measures and incorporated this into their model as the customer impact, which is often measured by attitudes and behavioral intentions. The causal relationships are also represented here as a hierarchy, with a separation between customer/market impact and the firm impact. However, the firm impact in this model is defined from a somewhat external point of view, such as e.g. market share and market capitalization. From the perspective of this thesis, there are other intra-firm impacts before they result in shifts in firm value.
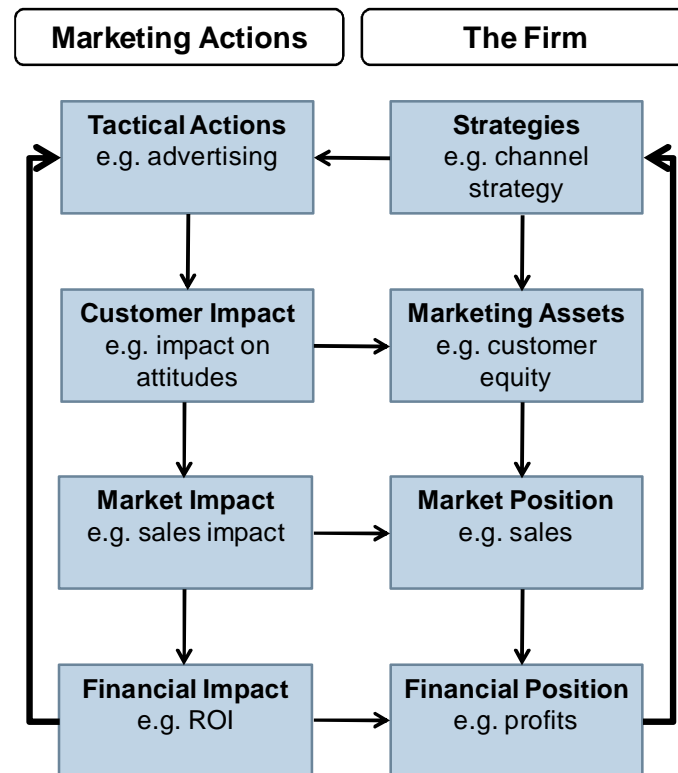
Figure 4: The chain of marketing productivity (adapted from Rust et al. 2004)

Stewart (2009), on the other hand, presented a simpler conceptual framework for marketing accountability, which links marketing actions with financial outcomes without as many interactions as the model of Rust et al. (2004). The framework states that marketing actions (e.g. TV ads) lead to intermediate marketing incomes (e.g. consumer's brand preference), which further lead to a financial result that affects cash flow, the ultimate marketing metric. Below Figure 5 depicts the framework. The intermediate step defines also which source of cash is affected with the marketing action and the following customer reaction. The three sources of cash are:

1) Customer acquisition and retention (increased number of customers)
2) Share of wallet within category (increased purchase frequency)
3) Share of wallet across categories (increased value of purchase via up- and cross-selling)

Furthermore, there are three basic business models, by which the cash flows are retrieved: margin, velocity (frequency) and leveraging existing assets. The strengths of this framework are the recognition of intermediate outcomes and particularly the identification of cash sources and basic business models needed to retrieve cash flows from these sources.

Marketing action	Intermediate marketing outcome	Financial results
Tactical decisions based on marketing strategy **Example: TV ads**	The effect of marketing actions on customers, which in turn affect what cash source is affected **Example: Consumer's brand preference** **(cash source: customer acquistion and retention)**	The financial outcome of the the entire process, represents the business model by which the cash flow is retrieved from its source **Example: Price premium** **= *increased margin***

Figure 5: Linking marketing actions to financial outcomes (adapted from Stewart 2009)

Davenport, Harris, De Long and Jacobson (2001) also examine the relationship between actions and financial performance but from a different point of view: the authors constructed a model for building analytical capabilities, which lead to behavioral and financial outcomes. Even though the model takes the perspective of analytic capabilities and their link to financial results, it clearly has the same process logic as the frameworks of Rust et al. (2004) and Stewart (2009) – strategies lead to decisions, which lead to actions, which lead to financial results. Davenport et al. (2001) just take a further look into the context of decisions and depict the analytical process in between the strategy and end behavior and results (see Figure 6). The model recognizes that not all solutions and management tactics are appropriate in different situations and the vital role of analytics in conducting profitable business decisions is emphasized.
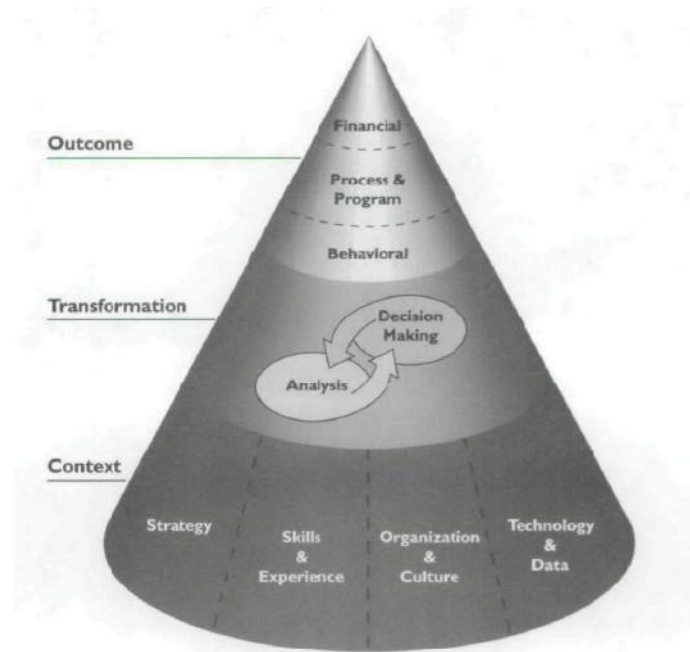
Figure 6: A model for building an analytic capability (Davenport et al. 2001)

Discussing performance measurement without looking at the Balanced Scorecard by Kaplan and Norton (1992) would be unusual. The Balanced Scorecard (BSC) recognized that simple financial reporting figures did not give managers enough information on the business and therefore also other metrics were needed to understand what was going on i.e. among customers and processes. Thus the BSC measures performance not only with financial measures, but also with operational measures, which are the drivers for financial performance. These drivers include the customer perspective, the internal process perspective and the perspective of innovation and learning in the organization. These four measurement areas bring together a comprehensive look into the overall business, looking both backwards and forwards, which forces managers to consider the business as a comprehensive entity and not resort to suboptimization in some area of operations.
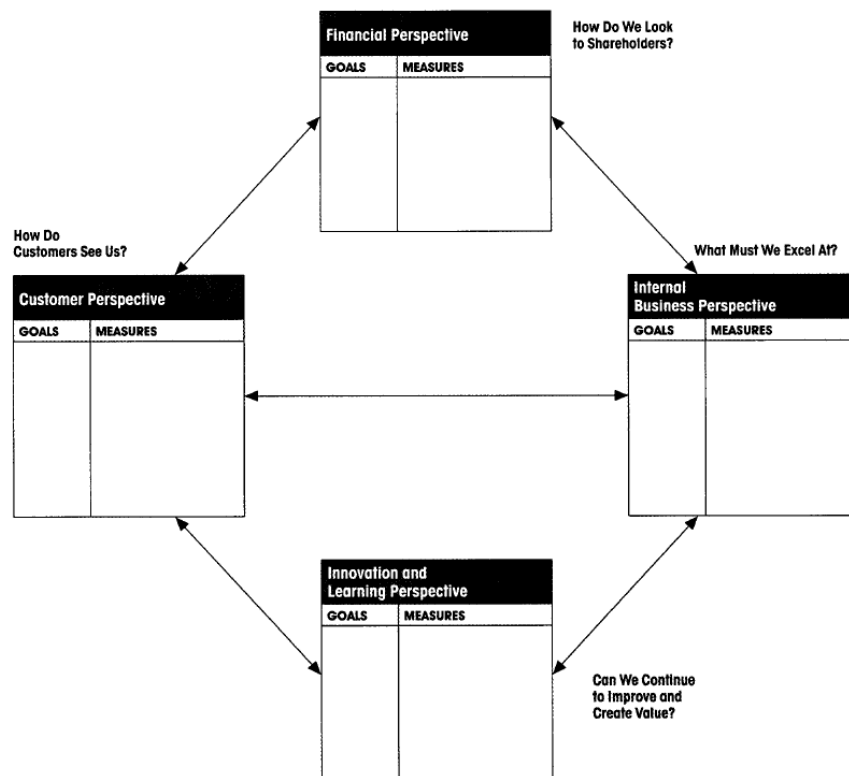
Figure 7: The Balanced Scorecard (Kaplan & Norton 1992)

Kim, Suh and Whang (2003) developed the BSC further in the CRM context by replacing the four original, company-centric measurement categories with four customer-centric measurement categories: customer knowledge, customer interaction, customer value and customer satisfaction. These categories exhibit also cause-effect relationships and contribute to a forward-looking comprehensive look over the business. The measurement objectives of these categories include e.g. data management, channel and service management, customer lifetime value and loyalty, and customer satisfaction. Kim et al. (2003) were able to show significant improvements in a case company, which started to use a CRM BSC they developed.

3.2. Comparison and contributions of previous research

In order to create a meaningful and actionable framework of the benefits of analytical CRM and their effect on the financial performance, I need to examine closely and summarize the findings of previous research introduced in the previous section. The first thing that is in common with all the frameworks presented above is the basic sequence: marketing actions lead to changes in customers' attitudes and behavior, which further result in some financial outcome for the firm. In other words, marketing stimuli do not directly increase sales but create an intermediate outcome, which then in its turn affects the financial performance. Some models also further divide the intermediate outcome into customer attitude change drivers and the actual attitudinal or behavioral change.

In the following table I have gathered some of the significant contributions of the previous studies.   Besides the similarities described above, the studies also exhibit distinctive features, which reflect the customer-centricity in analytic customer relationship marketing.

Study	Important contributions / findings
Storbacka et al. (1994)	• Incorporation of the quality-satisfaction-loyalty chain • Customer profitability as a precedent for the firm profitability
Rust et al. (2004)	• Including non-financial measures as intermediate outcomes • Preparatory division between internal firm and external customer effects
Stewart (2009)	• Basic sequence of marketing action - behavioral outcome - financial outcome • Classification of cash sources: customer acquisition and retention, purchase frequency, up-/cross-selling • Classification of business models: margin, velocity, leverage
Davenport et al. (2001)	• Basic sequence of marketing action - behavioral outcome - financial outcome • Including context to the connection between marketing and financial outcome • Defining analytics as a predecessor of effective marketing actions
Kaplan & Norton (1992) Kim et al. (2003)	• Introducing non-financial measures as their own measurement category with cause-effect relationship with financial metrics • Including both backward- and forward-looking metrics

Table 1: Contributions of previous research on the studied link between CRM and financial performance

These studies exhibit interesting findings, some of which are similar and some that are in relation to each other. They also reflect the motivation for customer-centricity in business operations and the cause-and-effect connections, which help in creating marketing accountability. In the next section, these findings will be the basis for the new hierarchical framework for Analytic CEM and financial performance.

3.3. Integrated hierarchical framework for Analytic CEM

After studying the contributions of previous research, I constructed a conceptual model of my own in order to visualize the connection between the functionality and benefits of Analytic CEM and a firm's financial performance, which is measured with ROI. Even though the model includes the benefits of the CEM service, it is applicable to all analytical CRM systems with similar functionality.

This chapter is divided into two parts. First, the new integrated hierarchical framework is presented and explained and after that the model's connections to the previously presented research is examined and clarified.

3.3.1. Introducing the new model

On the basis of the findings of previous research introduced earlier in this chapter, I summarized their key findings in a hierarchical framework with spices of my own. The framework integrates the CEM elements of analytics, marketing actions and the ensuing behavioral and financial effects. The model emphasizes the need for analytics in order to retrieve the internal and external CEM benefits and points out that an intermediate process and customer impacts precede the financial impact. Additionally, to incorporate the learning capability of Analytic CEM, there are feedback loops from the end results to the CEM service and its business intelligence.
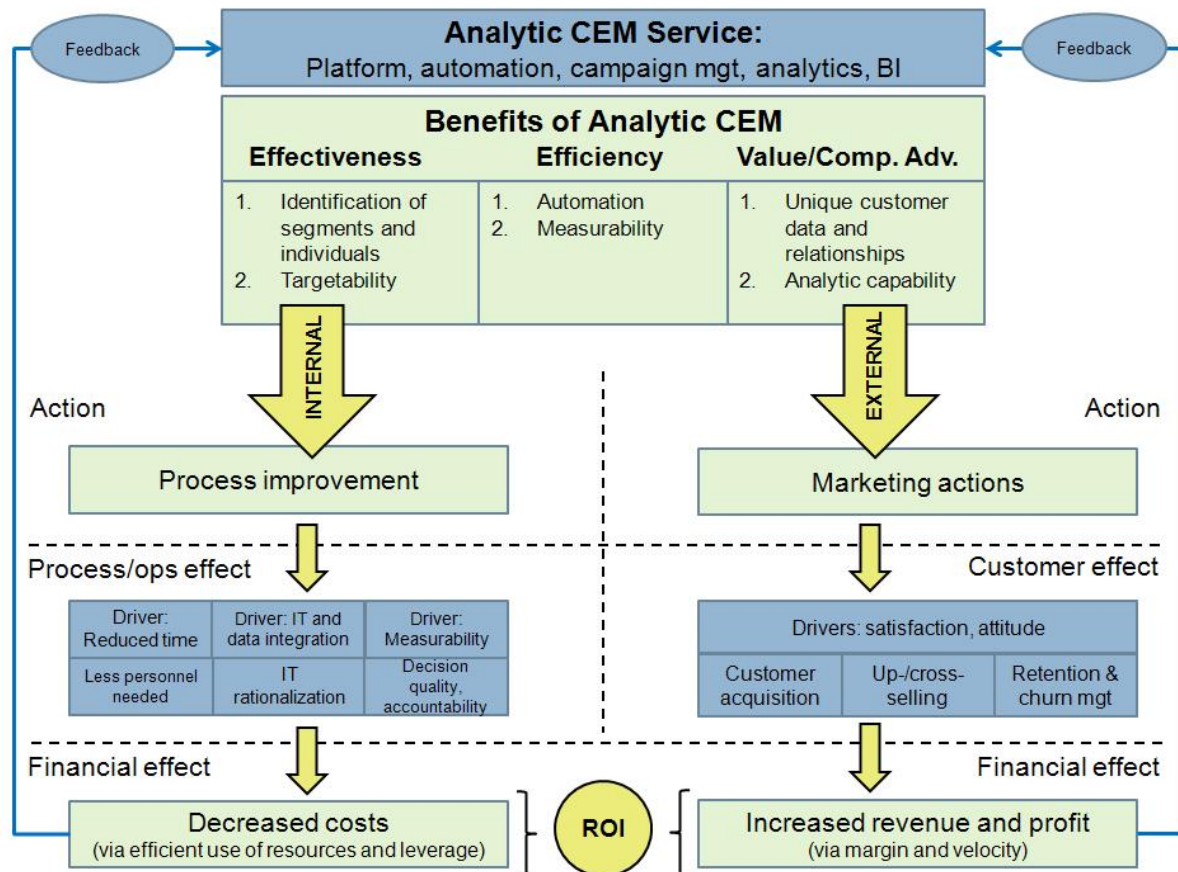
Figure 8: A model for CEM benefits and their hierarchy

The top layer of the model represents the Analytic CEM service and its functionality, which includes the CEM platform, marketing automation, marketing campaign management, analytics and business intelligence. These functions deliver benefits, which in turn can be categorized in three different classes: first, CEM improves marketing effectiveness through customer identification and targeting; second, CEM improves marketing efficiency through automation and measurability; and finally, it enables the creation of added value to the customer and thus represents possibilities to gain competitive advantage. Basically these three categories can be integrated in one sentence: doing the right things right in order to gain competitive advantage.

The second layer, "Action", describes the two ways CEM and its benefits enable improvement: through internal and external actions. The internal actions refer to process improvements, which help to streamline and redesign internal processes such as the R&D process, order process and delivery process. The external actions, on the other hand, refer

to the marketing actions, which aim to affect customers (and agents) outside the organization. Marketing actions include various operations, such as different marketing campaigns and customer relationship management actions. One campaign, for example, can contain various actions with different treatments to different customer groups.

The third layer, "Effect", portrays the first-hand effect of the internal and external actions – this is the intermediate effect, which was discussed earlier. Internal improvements make visible changes in the process cycle time and quality, where as external marketing actions influence customer attitudes and behavior. Customers' attitudes, satisfaction and beliefs can be seen as the drivers for customer behavior. Furthermore, the behavior can be classified again into three categories: related to customer acquisition, up- and cross-selling or retention. For example, if a customer tries out a new product as an effect of a direct mail campaign, the event can be classified either as a customer acquisition (mail was sent to a prospect) or as cross-selling (mail was sent to an existing customer of another product line).

The measures of the first effect layer may not be monetary as such, even though they might have a direct effect on cash flow. The effects are shown on the last layer called "Financial effect", where the process effects are transformed into decreased costs and the customer effects are transformed into increased profits. These financial effects, on their turn, change the marketing ROI, hopefully for the better.

3.3.2. The link between the model and previous research

Chapter 3.2 defined the similarities between and contributions of the models created in previous research – the same features can be seen in this new model. The benefits of CEM are divided into three categories, and the sequence of action-intermediary effect-financial effect takes place also in this hierarchical model. The three-fold customer behavioral effect, i.e. customer acquisition, up-/cross-selling and retention/churn, was not incorporated in the other models as such, but it is widely recognized in the field of sales and marketing and was also acknowledged in the literature review of this thesis.

What is totally new in this model compared to previous research is the concept of internal effects of CEM functionality and benefits. Even though the model of e.g. Rust et al. (2004) had the firm's side acknowledged in their framework, the outcomes were organized around external market outcomes, such as market share or assets. In the model depicted in Figure 8, internal process improvements are recognized as a vital part contributing to the ROI – without internal change, also the ROI effect will remain restricted. I find this aspect to be especially important in the context of CRM and CEM, which have faced considerable criticism on their productivity and actualized ROI in the past. Measuring and tracking operational performance and costs restrains from pursuing customer retention and loyalty at non-profitable levels. This is partly the idea that Kaplan and Norton (1992) aimed to bring forward with their balanced scorecard.

As the conceptual modeling of Analytic CEM, its benefits and effects on the firm's performance is completed, the next step is to transfer this model into a ROI calculation model. The following three chapters will concentrate specifically on the calculation and measurement side of this framework.

4. ROI CALCULATION IN CRM CONTEXT

Having mapped out the benefits of analytic CEM and their dynamics in a hierarchical model, it is possible to start transforming the conceptual model into an actionable tool. In the introduction of this thesis it was already stated that the performance measure to be calculated in this tool is return on the investment, a.k.a. ROI. This is because it is a relative metric, which enables comparison of very different projects and because it is widely used and understood in all industries and levels in the organization. However, it might be that there are also other measures that could be of use in performance measurement. It has been showed that ROI is difficult to calculate in the field of marketing and according to Kaplan and Norton (1992), senior executives do rely also on other measures because no single metric can provide a clear picture of the business performance.

Therefore this chapter will discuss business performance measurement and formerly used metrics. First, performance measurement will be examined on a broader level, after which the ROI, its characteristics and calculation are discussed. Finally, this chapter will end with some practical considerations to be taken into account when constructing a ROI calculation tool.

4.1. Performance measurement in today's business environment

For comprehensive CRM investments specifically, there are usually five measures that are commonly used: profit and loss for 5 years, ROI, payback period, NPV at a specific WACC and the monthly cost of delaying the project by one month (Doyle, 2007). The last metric is noteworthy, as it represents the cost of dropping the investment and keeping status quo for one month more. These measures affect the company's financial statement by increasing revenue and operating income and by increasing market capitalization and the share price (ibid). Other metrics are common as well: according to an AMA study (2005), the most used performance metrics among surveyed top- and middle marketing managers were incremental sales revenue, ratio of cost to revenue and cost per sale generated. And as the

concepts of CRM and CEM are customer-centric by definition, customer-centric measures defend their place on the dashboard. Hard financial metrics should be accompanied with softer metrics like customer satisfaction and purchase intentions (e.g. Ang & Buttle, 2002).

The problem with the metrics above is their poor traceability: how can a marketer distinguish between sales revenue resulting from a specific campaign and revenue gained without additional marketing effort? Pinpointing incremental revenue or costs to a comprehensive CRM service, for example, can be very tricky or even misleading and represents a major challenge in performance measurement.

Furthermore, according to a study by Ballow, Thomas and Roos (2004), traditional performance measures such as earnings per share etc only explain approximately 50 % of a firm's market capitalization. Because traditional performance measures are calculated from the income and balance statement, which base themselves on tangible assets, one can conclude that intangible assets such as customer loyalty and retention and tacit knowledge count for at least half of a firm's value. (ibid.) Both researchers and practitioners have also recognized that the performance and successive value of IT systems depend heavily on the way they are utilized (Kumar, 2004). This conclusion represents the second challenge in CRM performance measurement: how to monetize intangible and non-financial benefits?

Another issue to think about is the motivation of marketing overall. The marketing function tries to predict and influence future customer activities, such as purchases, visits and other contact activities. Therefore it is also important to include predictive, i.e. leading performance metrics in a performance measurement tool, such as retention and churn rates and change in CLTV. Forward-looking metrics measure more clearly the activities and performance of customer relationship management and signal that changes also in financials are about to happen. Later these metrics will turn into lagging metrics, such as market share or sales, and investment decisions are based on future trends, not history. (Sturm Jr., 2007; Stewart, 2009; Wiesel et al., 2008). The principle of predictive effects and resulting lagging financial performance was strongly present in the previously constructed hierarchical theory model of Analytic CEM benefits (Figure 8). Furthermore, this idea can be described also as the "metric funnel", which is based on the concept of a sales funnel describing how a vast amount of customers turn into a smaller number of prospects, customers and loyal

customers (e.g. Kotler, Rackham & Krishnaswamy, 2006). A change in one metric level will sooner or later result in a change in the next metric levels.

4.2. Measuring and reporting ROI

As has been discussed, ROI has an established position in the performance measurement of marketing actions and investments – the traditional computed ROI is the ratio of investment net present value to investment costs. The net present value, then, is usually defined as the sum of discounted future inbound net cash flows, i.e. profits. There are several definitions of "profit" and "return" in different fields of business, but in this thesis return is understood as the NPV of gross margin less marketing investment costs. Consequently, a ROI figure of 0% would indicate a break-even point – the profit is sufficient to cover the marketing investment costs but does not bring in additional cash flow.

If both the investment cost and net cash flows can be decomposed on different parts or levels of the overall investment, the ROI can also be computed separately for each part. In the customer relationship marketing context, this could mean that ROI can be assessed to a certain marketing campaign or separately to each different treatment belonging to that campaign. This would help to determine e.g. channel-specific profitability. Or likewise, ROI can be computed separately for inbound and outbound marketing activities.

In reality, however, a company's value consists also of non-monetary benefits, such as increased customer and worker satisfaction or high productivity and good resource utilization rate. For example, NPV methods are likely to underestimate the value of IT infrastructure and flexibility as investment benefits (Kumar, 2004). Therefore, to represent a more realistic point of view on ROI, the traditional NPV of the investment can be considered as the overall NPV of benefits of the investment. This concept has been recognized also as the Benefit-Cost-Ratio but again the challenge is the monetization of all benefits. ROI necessitates euro figures.

Ambler and Roberts (2008) brought up additional critique concerning the ROI and NPV valuation in the marketing context. First, ROI assumes that marketing activities should

always result in incremental profit even though marketing can be needed for customer relationship maintenance in order to maintain even the current level of profits. Second, usually the activities that produce maximum ROI do not produce maximum profit because of the law of diminishing returns – there is often incremental profit to be obtained but with a lower level of ROI. Third, defining incremental revenues and investments in the ROI calculation assumes that the base case without marketing is known. This is usually not the case, even though the current profit level serves as a good proxy for the base case. In addition, one major flaw of all NPV based calculations is the fact that future cash flows cannot be reliably estimated and even if an estimate can be computed, it does not serve as a benchmark for excellent performance: it merely represents the expected performance (Ambler & Roberts, 2008).

One way of looking at marketing ROI could be to see it as the return on customer acquisition investment. Thus the ROI would be the ratio of discounted future contribution of a customer i.e. the customer lifetime value to the cost of acquiring that customer. (McCorkell, 1997, 68-69). However, this approach does not take into account the intra-firm benefits outside of the cash flow and easily mixes up the costs of acquiring and keeping the customer. For example, inbound marketing via contact center and internet customer contacts can be very effective in maintaining profitable customer relationships, but the effect can be difficult to measure accurately in numbers. Still, the ROI calculation should take into consideration all the elements in the CRM system, including data from all customer touch points and both inbound and outbound marketing channels (Anton & Petouhoff, 2002, 132).

The challenge in determining the ROI for a comprehensive CRM system such as Itella's Analytic CEM is determining what can be considered as the return of such an investment. What are all the benefits resulting from CEM, can they all be measured and can they all be pinpointed primarily to CEM's credit? Therefore the "R" on ROI needs a clear definition. On the other hand, the investment part of ROI is relatively easily determined: it is the initial investment on CEM implementation plus the monthly service fees for the time span covered in the model. Of course, there are additional service and transaction costs that are realized when using the CEM service for e.g. printed direct mail, but their role in the investment calculation needs to be carefully determined. Transaction costs i.e. contact costs can be

included in the ROI by deducting them from campaign revenues, but additional services would probably take place with or without CEM and should thus be discarded from the investment decision.

Ang and Buttle (2002) brought also forward some of the potential indirect costs, which could also be considered as investment costs, i.e. training and recruitment of people, consultant fees and organization restructuring costs. At least in the implementation of CEM these points are either irrelevant or incorporated in the investment cost; e.g. user training costs are included in the CEM implementation fee.

All in all, it is realistic to assume that an absolute ROI figure is impossible to compute because an investment's return depends on a complex set of determinants. Some parameters will need to be approximated but that is acceptable in this context, where the figures act as support in the pre-purchase process of selling CEM. Having a smart approximation of the ROI is definitely better than having nothing at all. A good reference point could be the ROI of 50-200%, which was suggested by Anton and Petouhoff (2002, 131) as common for customer service investments. Even though Analytic CEM is by far more comprehensive system than the systems Anton and Petouhoff had in mind, it is also above all a customer experience improvement investment.

4.3. Issues to consider in a ROI calculation tool

There are challenges in transforming the conceptual model (Figure 8) from chapter 3 into an actionable ROI calculation tool. Lenskold (2003, 57, 96) points out a few important things to be considered when constructing ROI in a marketing context:

- The "return" in the ROI calculation should be incremental profit.

  In order to retrieve more accurate ROI figures, the profit needs to be cut down to the incremental profit from the marketing action compared to the appropriate base case ("before" situation). Therefore, if a normal campaign results in a 1000 € profit now and is expected to result in 1400 € profit with an additional investment, the

incremental profit is 400€. Consequently, if the previous marketing investment was 900 € and the latter 1100 €, the incremental investment is 200 €. Thus the incremental ROI for the latter campaign is (400 € - 200 €) / 200 € = 100 %.

- All returns should be converted into financial terms, i.e. euros.

A ROI calculation cannot deal with other than monetary measures, because only return euros can be compared with investment euros. The challenge arises from the intangible benefits, which should affect the investment decision but which are very difficult to transfer reliably into euros. At least as long as both the person who performs the ROI calculation and the person who uses the calculation for decision support agree on the metric background assumptions, creative approximations with subjective parameters are applicable as well.

- Performance indicators can and should be used to estimate financial metrics, but cannot be directly converted into euros.

The hierarchical model in Figure 8 had also a clear link between performance indicators i.e. process and customer effects and financial metrics but that connection cannot be reliably modeled. Therefore financial measures cannot be directly derived from effect metrics. However, it might be worthwhile to include those metrics into a separate table to be viewed along the ROI figure – performance indicators and their trends can give valuable insight into the interpretation of ROI.

- Both returns and investments should be collectively exhaustive and mutually exclusive

This requirement means that both the return figure and investment figure should cover the entire situation but without double-counting the same euro amounts into several return batches, for example. This can be very tricky: already spotting all the measurable benefits is a vast task to accomplish but making sure that there are no overlapping return euros can be very challenging. Even though one might recognize that a customer's lifetime value figure includes euro streams that are also measured in cross-selling effectiveness, there is no way of determining how large this overlap

is. Therefore caution should be used when constructing a calculation model and all used assumptions should be clearly laid out.

5. CREATING A ROI CALCULATION TOOL FOR ITELLA ASIAKKUUSMARKKINOINTI AND THE CEM SERVICE

With the knowledge gained from the insights of the previous chapter, this chapter will represent the calculation model starting points, assumptions and structure as far as confidentiality restrictions allow. Before going into more detail, however, I will start by introducing the case company Itella Asiakkuusmarkkinointi, the structure of their CEM service and the functionality of Analytic CEM in particular. CEM has been brought up several times already, but a detailed description is in order, as the structure of the service brings along its own requirements for the ROI calculation model.

5.1. Itella Asiakkuusmarkkinointi company presentation

Itella Asiakkuusmarkkinointi is a part of the Itella Group, which comprises of three business groups: Itella Mail Communication (including Itella Asiakkuusmarkkinointi), Itella Information and Itella Logistics. The corporation had net sales of EUR 1 898 million in 2009 and personnel of 30 000 professionals. The corporation is 100 per cent owned by the Finnish State. (Itella website, 2010).

Itella Asiakkuusmarkkinointi provides solutions for customer experience management. The flagship product is the *CEM* Service, which offers a common platform for integrating CRM data, marketing communications and sales management. CEM can therefore be defined also as a comprehensive CRM service and consequently the terms analytic CEM and comprehensive CRM are used interchangeably in this thesis. Itella offers CEM with two different operating models: either as Software as a Service (SaaS), where the customer accesses the software via internet and operates the CEM themselves or as a Marketing Service Provider (MSP), where the customer company outsources parts of or the entire marketing function to Itella and CEM Services. Itella Asiakkuusmarkkinointi is one of the first companies in Finland to offer these kinds of comprehensive CEM services with a SaaS model. Itella Asiakkuusmarkkinointi offers also consulting services and direct marketing services,

which are offered as separate solutions also outside the CEM service. (Itella website, 2010; Tumanoff, interview).

5.2. CEM service presentation

Customer Experience Management (CEM) is a service, which brings automation and business intelligence into targeted marketing. Because the service provider, Itella Asiakkuusmarkkinointi, belongs to the same group as the national post of Finland, Direct Marketing services are also smoothly integrated into the CEM platform.

Companies, who operate in several sales and marketing channels, are able to best utilize the CEM functionality. There is also researched evidence on the motivation to serve customers in several channels: nine out of ten Finnish consumers use internet for information search even when the final purchase is done through a different channel. Also, the average purchase in monetary terms was almost four-fold in the cases, when consumers had used the internet to support their purchase decision in comparison with the case where the internet had not been used in the purchase process. (Kokko, 2008). Similar results have also been observed in international context (Arikan, 2008, 12).

Itella's CEM service is modularized into three modules: Direct CEM, Analytic CEM and Service CEM. The simplest version is the Direct CEM, which enables marketing automation and campaign management with simple targeting capabilities according to e.g. basic demographics. The next module, Analytic CEM, includes Direct CEM and adds on BI and predictive analytics, which enable more sophisticated targeting and customer relationship development as has been previously discussed in this thesis. Using CEM to its full extent means implementing the Service CEM, which incorporates Direct and Analytic but builds also inbound marketing capabilities and real-time marketing activities.

The CEM service is priced modularly: each module implementation requires some set up work and data integration and therefore each implementation costs an implementation fee. This fee does differ somewhat across the different modules, as the work amount and additional benefit s are different. In addition, the customer pays a monthly maintenance fee,

which covers the costs of the basic maintenance, data upgrades and analytic specialist work. The monthly fee in a MSP model, for example, can also include the work time of a database marketer and customized, ongoing analytic reports and marketing campaigns.

The calculation tool will focus on Analytic CEM, which enables the firm not to only calculate the value of a customer but also to recognize in which part of the customer life cycle or purchase decision making the customer is and accordingly plan the outbound marketing and communication plan. It is possible to develop customized customer processes and communication series, which take advantage of the knowledge the firm has on the customer as well as the different marketing channels CEM supports. Different online and offline channels suit better different stages of the purchase decision process, direct mail being effective in cross- and up-selling, for example (Arikan, 2008, 9).

5.3. Deeper look into Analytic CEM functionality

The backbone of the CEM system is naturally the data warehouse, which gathers all the customer and transaction data in a single source in a consistent form. Upon this data warehouse there are three applications: SPSS Clementine, which helps to automate the marketing process; the Campaign Management (CM) module, which handles marketing campaigns; and a dashboard of customer reactions, which helps the company to learn and improve marketing efforts. The data that comes to the data warehouse can be affected by a CM module called "Interaction advisor", which makes offer and product recommendations to customers based on behavior patterns and customer profiles. Thus the learning from previous transactions and touch points can be utilized in future analytics, see Figure 9 below. (Tumanoff, interview).
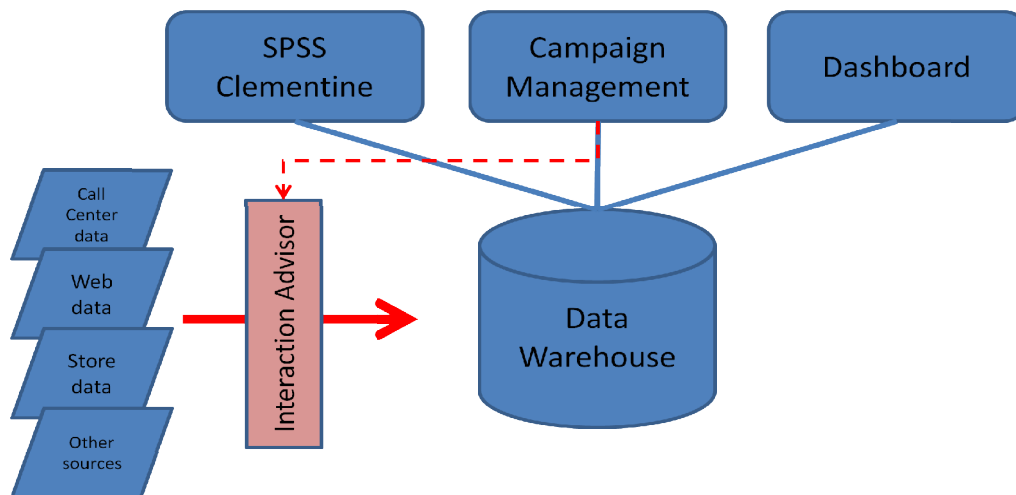
Figure 9: CEM Architecture (Tumanoff 2010)

CEM supports both inbound (customer-initiated) and outbound (company initiated) marketing. The characters of these two ways of marketing are very distinctive. Inbound marketing reacts to the contacts initiated (mostly) by existing customers and represents up- and cross-selling opportunities as well as retention enhancing opportunities (Goldstein & Lee, 2005). Outbound marketing basically starts from the needs and objectives of the marketing company and uses several targeted and mass communication channels in order to get the message through to the prospect or existing customer. Even though proaction and reaction can and should use the same analytic results, the required tools are slightly different and this is incorporated also in the CEM functionality. CEM has separate interfaces for inbound and outbound marketing, and e.g. the Interaction Advisor is included into the inbound interface (Nevalainen, interview).

Because Itella Asiakkuusmarkkinointi has already a strong experience in designing, printing and distributing addressed and non-addressed direct mail, the company has integrated direct mail campaign management and ordering seamlessly into the same CEM platform. Thereby Itella CEM incorporates a greater part of the value chain – both electronic and non-electronic campaigns can be implemented with a few clicks.

5.4. Structure requirements and time scope of the ROI calculation tool

The modularity of the CEM service and the two-sided structure of Analytic CEM (both outbound and inbound marketing) impose their own requirements on the ROI calculation model. Below are gathered the most influential structure requirements for the framework of the calculation tool in Microsoft Excel.

1. The input data in the calculation tool need to include the general background information of the company's clientele – parameters such as number of customers, average purchase value and annual employee costs, which are commonly used in other customer and product profitability calculations as well. Also the information of current marketing campaign figures should be included as a reference point in order to satisfy the base case need introduced by Lenskold (2003, 57, 96). In addition, the company should specify some model related parameters like the ROI evaluation period and preferred amount of inbound and outbound marketing actions to be executed via CEM. After all, these figures affect strongly the ROI figure and often vary across various industries and companies.

2. As CRM and CEM implementations often require also a shift in the way of conducting business and customer relationship operations, it is realistic to assume that this shift takes some time. Consequently, the benefits of CEM will realize over a longish period of time, suggesting that the ROI model should also span a longer period of time. However, the longer the time span, the more difficult it is to pinpoint specific benefits solely to CEM as the competitive and internal environment do not stay constant (Ang & Buttle, 2002). One suggested time frame for assessing these kinds of investments is 3 years with a minimum of 18 months, which is affected by e.g. the CRM maturity of the firm (Woodcock, Starkey, Stone, Weston & Ozimek, 2001 as cited in Ang & Buttle, 2002).

3. Analytic CEM includes both inbound and outbound marketing readiness and these two sides of CEM are very different by character: inbound marketing actions react to customer-initiated contacts, where as outbound marketing takes a proactive approach to influence the customer. Also, not all companies take advantage of inbound marketing

channels yet by treating them as up- and cross-selling channels, which also affects the ROI of CEM. Therefore, the calculation tool should separate the benefits coming from inbound and outbound marketing activities and show their decomposition before representing the final ROI of Analytic CEM.

4. The return-side of the ROI model will constitute of two different kinds of income: new incremental cash flow from increased revenue streams and savings from decreased process costs. The incremental revenue is basically external and customer-originated, whereas cost savings are internal and process-originated. With additional revenue streams, it is important to recognize the incremental revenue resulting from the marketing activity in question. Therefore the ROI is not calculated directly from the new numbers after a campaign but from the difference between the new numbers and the base case or "before" case.

5. Patterson (2007) recognized three main marketing functions, around which ROI framework metrics should be built: customer acquisition, keeping customers and growing customer value. The calculation model will incorporate this idea by dividing the customer effect (resulting from marketing activities) into three separate effects where possible: customer acquisition effect, cross- and up-selling effect and customer loyalty/attrition effect. These three sub-effects cover the entire customer lifecycle from acquiring a new customer to growing the customer value and taking care of customer loyalty and attrition. These lifecycle stages are distinctive and thus also marketing efforts vary across these stages.

5.5. Other model assumptions

Besides the restrictions and model choices based on the definition and calculation of ROI, the calculation model has a few other assumptions as well. These assumptions relate to the outbound and inbound division of returns and costs and the handling of risk in the model.

5.5.1. The outbound and inbound returns and investments

Outbound marketing return refers to incremental cash flow and cost savings resulting from using CEM in proactive outbound marketing campaigns. Outbound campaign channels include email, phone, SMS and direct mail i.e. company-originated contacts with customers and prospects. The incremental revenue results from enhanced targeting and offer design, whereas cost savings in internal processes result from e.g. process automation and optimization. The model will assume that all companies conduct some sort of outbound marketing, i.e. the outbound marketing cannot be excluded from the calculations. However, variables could be set to zero when necessary, decreasing thus the effect of outbound marketing in the final ROI.

Whereas outbound marketing deals with firm-initiated contacts with the customers, inbound marketing return indicates all the incremental revenue and cost savings resulting from using CEM in the context of inbound customer contacts, such as customer calls or website visits. The incremental cash flow results from using inbound channels as outbound marketing channels by up- and cross-selling during customer contacts and process savings result from more accurate information and decisions and automation. Because the inbound marketing functionality is optional in Analytic CEM, the ROI model will allow the exclusion of inbound marketing from the analysis.

The Analytic CEM modularity allows the customer to choose to invest either in the outbound marketing interface or in both the outbound and the inbound marketing interface. Therefore the monetary investment into CEM is also divided among inbound and outbound marketing investment. Both of these investments consist of a lump sum implementation fee and a monthly maintenance fee. The euro amounts on both depend e.g. on whether the customer is already using some part of CEM and on the functionality and operating model (SaaS or MSP) the customer chooses for its CEM implementation.

5.5.2. Dealing with risk and variability

For simplicity's sake, the ROI model in this thesis will assume that the CEM service is utilized at an as-good-as-possible level, i.e. at optimality given the chosen functionality. This is because it would be practically impossible to model different usage patterns in the ROI model. Consequently, risk in the model will not derive from internal processes. Related to this simplification is also the choice not to try to include the effect of the message content of marketing communications into the calculations. In order to model the effect of the message quality and performance, the marketer needs to do some experimental marketing, which is enabled and supported by Analytical CEM (Almquist & Wyner, 2001). However, as many input variables in the model require estimation, variables can be chosen in a way that reflects non-optimal CEM usage.

Furthermore, the variability in e.g. campaign effectiveness caused by exogenous economic factors on the macro-level (e.g. recession) should be excluded from the model, as it would be impossible to construct a reliable enough prediction of those factors. Also, factors such as industry life cycle and level of competition are difficult to include but relevant for the end metrics. A simple way to include risk in the model is to introduce different scenarios, being e.g. either "optimistic" or "pessimistic".

5.6. The complete ROI calculation model for Analytic CEM

After gathering all the necessary model assumptions and restrictions in the previous chapter, it was possible to create the conceptual ROI model structure and implement it in a calculation tool based on a spreadsheet application. Fortunately I had the opportunity to explore an older ROI approximation model of Itella CEM, which included already some basic information that builds the basis for ROI calculation. However, the scope of the older model was different from the scope of the one currently under consideration and was not suitable for ROI approximation for current CEM customers, for example. This section is divided into three subparts. To start with, below is an upper level compilation of the ROI calculation model as it is structured also in Microsoft Excel. After that the calculation model worksheets

are described in further detail, and finally some choices and approach decisions of the model are discussed and justified.

5.6.1. The structure of the ROI model

The calculation model has a relatively simple structure: one sheet includes all the input data needed for the calculations; two sheets are reserved for the ROI calculations (separately for outbound and inbound marketing); and finally the calculation output is summarized on the Total ROI –sheet and the Cash Flow analysis –sheet.
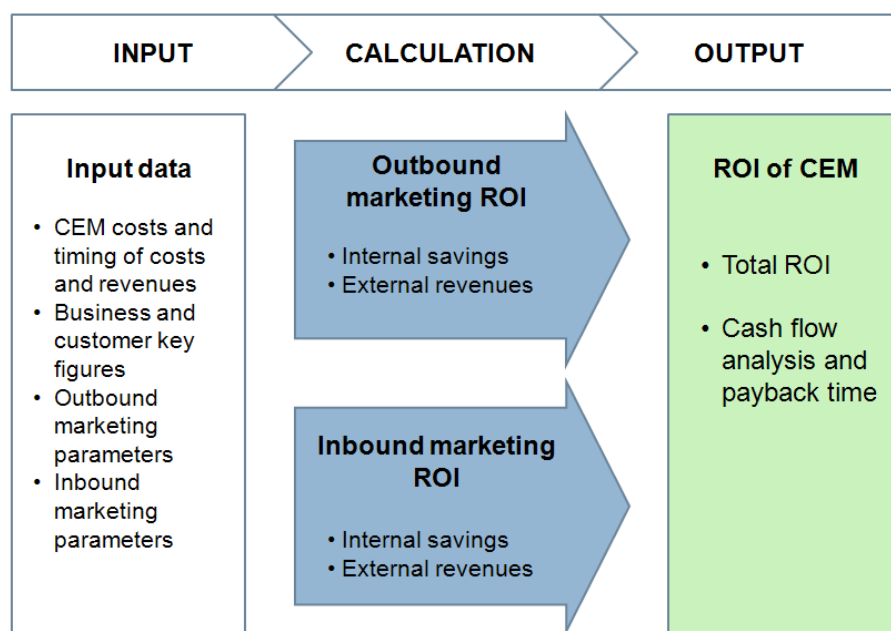
Figure 10: Structure of the ROI calculation model

The point of this structure is to make the use of the tool simple: all inputs are located on a single sheet, after which calculation summaries and graphs can be examined on other sheets. Because it is possible to purchase the CEM service exclusively as an outbound marketing service (or inbound service, respectively), the calculation sheets for outbound and inbound ROI include their own brief ROI summaries for grasping their separate effects on the total ROI.

Figure 11: Snapshot of ROI calculator worksheets in excel

5.6.2. Description of the worksheets of the ROI calculation model in MS Excel

Due to confidentiality reasons, this thesis will not represent the detailed calculation formulas of the ROI calculation model. The five sheets of the calculation tool are therefore presented below relatively briefly by their content, structure and purpose. It is noteworthy that all the numbers shown in the figures of this chapter are artificial numbers and do not represent any actual company figures or actual scale investments, either.

1. Variables –worksheet

   This sheet includes all the input data needed for the ROI calculations. Therefore this sheet is the only sheet where changes and adjustments are done. In order to get more realistic figures from the ROI calculator, several inputs are required and these altogether 153 variables are divided under four different titles: *(1) CEM related costs and timing of costs and revenues; (2) Business and customer key figures; (3) Outbound marketing parameters and (4) Inbound marketing parameters.* Because businesses are very different by character, the input variables are designed for a wholesale or retail company, which sells products or services to different customer groups. The goal here is to take a customer point-of-view – the business and customer key figures are all divided among a maximum of 6 customer groups. For example, annual sales and sales margins should be reported according to customer segments and not according to e.g. product lines.

   Approximately two thirds of the inputs are retrieved from the customer company and the rest is determined by Itella's CEM unit based on the customer's data. For example, if the customer reports that their annual customer attrition is 8 % (one

variable), then the CEM unit defines the range of improvement for this figure (additional variables) based on the individual business characteristics and previous customer cases. These input variables that face uncertainty are determined for three different risk scenarios: optimistic, expected and pessimistic. These risk scenarios are consistently present in all the calculations and also in the final total ROI and Cash Flow analysis.

Figure 12: Snapshot of the Variables -worksheet

The Variables –sheet does not at this point have the functionality to totally exclude either the outbound or the inbound side of the calculations automatically, but includes always all the variables for both sub-parts. However, one can manually set e.g. the inbound parameters to zero, which sets also the inbound returns and ROI to zero in the successive worksheets. However, there is one variable called "Inbound marketing included", which needs to be set to either "Yes" or "No". By setting it to "No", the Cash flow analysis –sheet does not take into account any revenues or costs

related to inbound marketing, even if one does not remember to set the inbound parameters to zero in the input data. For a more detailed look in the input variables, see Appendix 1.

2. OB –worksheet

This sheet includes all the calculations related to outbound marketing and its effect on the ROI of CEM. The OB –sheet is also divided into four parts: first come the needed variables, which refer directly to the input data on the Variables –sheet and are displayed here only for easier understanding and checking; second comes the customer effect, which includes the CEM-originated additional revenue streams stemming from customer acquisition, up- and cross-selling and retention and churn reduction; third comes the internal process effect, which includes the effects of channel optimization, transition from mass to targeted marketing, reduced process time, IT rationalization and process measurability; and finally the sheet ends in a short outbound ROI summary, which allows the separate reviewing of the outbound. In order to make this possible, the Analytic CEM investment is divided among the outbound and inbound channels on the Variables –sheet in the first place. As stated before, the three different scenarios (optimistic, expected, and pessimistic) are included in all calculations.
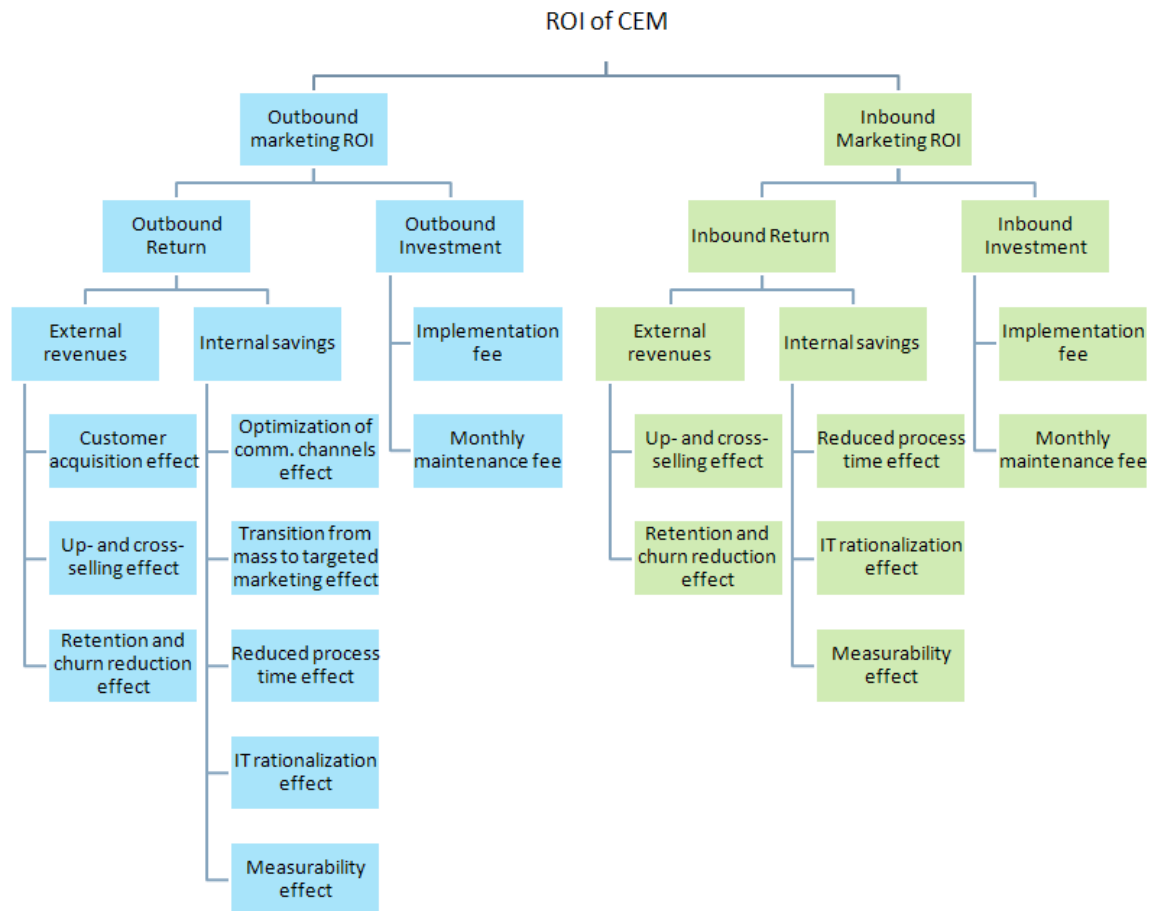
Figure 13: More detailed composition of the outbound and inbound ROI

Figure 13 represents the OB- and IB –worksheet hierarchies. In essence, the calculator measures separate and mutually exclusive effects and then sums them as external revenues or internal cost savings. The revenues and savings are once again summed to form the outbound/inbound return, which is then compared with the respective investment to calculate the outbound or inbound marketing ROI. Finally the two partial ROI's are combined into the total ROI of CEM. Unfortunately the lower-level effects are not entirely collectively exhaustive, because some effects are challenging to determine or monetize and therefore the total ROI of CEM does not necessarily tell the entire story of the benefits of CEM.

The customer acquisition effect on the OB –sheet consists of two sub-effects: (1) the additional revenue created by better targeted marketing (increased pull on marketing messages) and (2) the expected customer lifetime value to be retrieved

from the customers that specifically CEM brought in the company. In order to be careful with assumptions and to keep the revenue expectations modest, the second sub-effect takes into account the expected customer lifetime value only from one year's period – further spanning CLTV is excluded from this effect as overlapping with e.g. the up- and cross-selling effect later on.

3. IB –worksheet

    Whereas the OB –sheet calculates the effect of outbound marketing on the ROI, the IB –sheet focuses on the inbound marketing's perspective. The composition of the sheet is same: variables first, external returns and internal process savings second and inbound ROI summary at last. However, the contents of the external and internal effect differ slightly due to the different characteristics of outbound and inbound customer contacts. For example, the external customer effect on the inbound side does not include major customer acquisition effects, because almost all customer-initiated contacts come from existing customers, not prospects. On the other hand, this is a strong assumption and does not necessarily reflect the nature of all industries.

4. ROI summary –worksheet

    The OB- and IB –sheets represented separately two partial ROI figures, which are then combined into a total ROI figure for Analytic CEM as a whole when used to its full extent. This sheet displays first the outbound and inbound ROI's separately according to their composition of different external and internal effects (Figure 13) and then combines these two into a single total ROI (Figure 14). Again, also the total ROI consists of three ROIs for three different scenarios. The total ROI assumes constant returns on the investment i.e. that the returns during the first year of investment will be the same as in the second and third year. This is not a realistic assumption, but was chosen due to its simplicity and easiness to understand. On the other hand, the boxed total return, total investment and total ROI in figure 14 do take into account that no revenues cannot be retrieved before the service is up and ready to run – this time frame is determined in the Variables –sheet and can be set

according to business specific characteristics. Thus the ROI of the evaluation period (e.g. 24 months, determined in the Variables -sheet) takes into account that even though costs may incur already during the first months, CEM-originated revenue flow begins only after the service implementation is ready. This may take a few months, if the implementation is extensive.

	per	optimistic	expected	pessimistic
OUTBOUND MARKETING ROI				
	year	optimistic	expected	pessimistic
Customer acquisition effect	year	273 705 €	82 112 €	18 247 €
Up- and cross-selling effect	year	84 047 €	29 866 €	5 622 €
Retention and churn reduction effect	year	134 840 €	81 160 €	31 953 €
EXTERNAL CUSTOMER EFFECT	year	492 592 €	193 137 €	55 821 €
	year			
Channel optimization effect	year	37 023 €	53 018 €	73 011 €
From mass to targeted marketing effect	year	50 048 €	15 276 €	6 221 €
Reduced process time effect	year	103 708 €	52 307 €	905 €
IT rationalization effect	year	0 €	0 €	0 €
Measurability effect	year	2 625 €	2 625 €	2 625 €
INTERNAL PROCESS EFFECT	year	193 404 €	123 225 €	82 763 €
CEM implementation	one time	30 000 €	30 000 €	30 000 €
CEM monthly maintenance fee	year	72 000 €	72 000 €	72 000 €
TOTAL INVESTMENT	1. year	102 000 €	102 000 €	102 000 €
TOTAL RETURN DURING EVALUATION PERIOD		1 200 493 €	553 635 €	242 522 €
TOTAL INVESTMENT DURING EVALUATION PERIOD		156 000 €	156 000 €	156 000 €
		optimistic	expected	pessimistic
ROI during evaluation period	%	670 %	255 %	55 %
Payback time (theoretical)	months	6,1	9,8	18,4
INBOUND MARKETING ROI				
	per	optimistic	expected	pessimistic
Up- and cross-selling effect	year	815 240 €	392 092 €	196 046 €
Retention and churn reduction effect	year	7 707 €	5 780 €	3 853 €
EXTERNAL CUSTOMER EFFECT	year	822 947 €	397 872 €	199 899 €
Reduced process time effect	year	-86 538 €	-90 865 €	-98 077 €
IT rationalization effect	year	0 €	0 €	0 €
Measurability effect	year	2 625 €	2 625 €	2 625 €
INTERNAL PROCESS EFFECT	year	-83 913 €	-88 240 €	-95 452 €
CEM implementation	one time	20 000 €	20 000 €	20 000 €
CEM monthly maintenance fee	year	72 000 €	72 000 €	72 000 €
TOTAL INVESTMENT	1. year	92 000 €	92 000 €	92 000 €
TOTAL RETURN DURING EVALUATION PERIOD		1 046 964 €	438 644 €	147 967 €
TOTAL INVESTMENT DURING EVALUATION PERIOD		122 000 €	122 000 €	122 000 €
		optimistic	expected	pessimistic
ROI during evaluation period	%	758 %	260 %	21 %
Payback time (theoretical)	months	9,8	13,7	26,8

Figure 14: Snapshot of the ROI summary -worksheet, 1/2
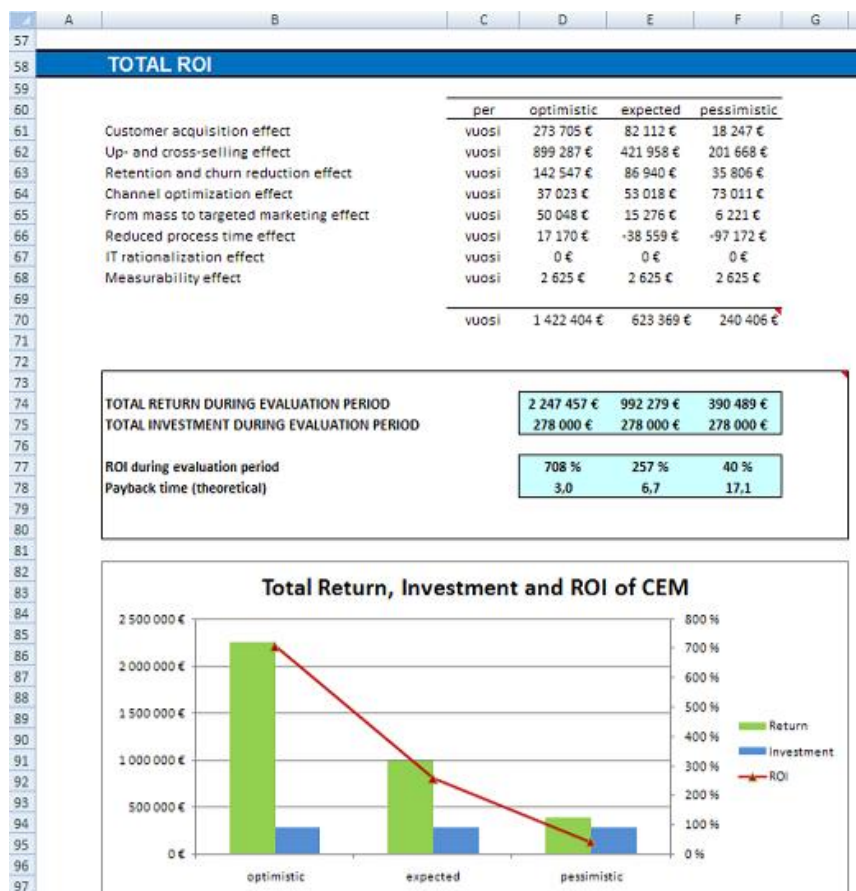
Figure 15: Snapshot of the ROI summary -worksheet, 2/2

5.   Cash flow analysis –worksheet

The Cash flow analysis –sheet gathers the information from the ROI summary figures and represents how the in-coming and out-going cash flows spread across successive months during the determined ROI evaluation period. The input variables also include "Interest rate", according to which the monthly net cash flows are discounted to the project kick-off point. Even though the ROI summary –sheet already introduced theoretical payback times, this cash flow analysis shows more realistic payback times by showing the break-off point for the cumulative discounted net cash flow (see Figure 16). The theoretical payback times assume, as explained previously, that revenue flows to its full extent already from day 1, which is unrealistic but easier for quick indicative calculations.
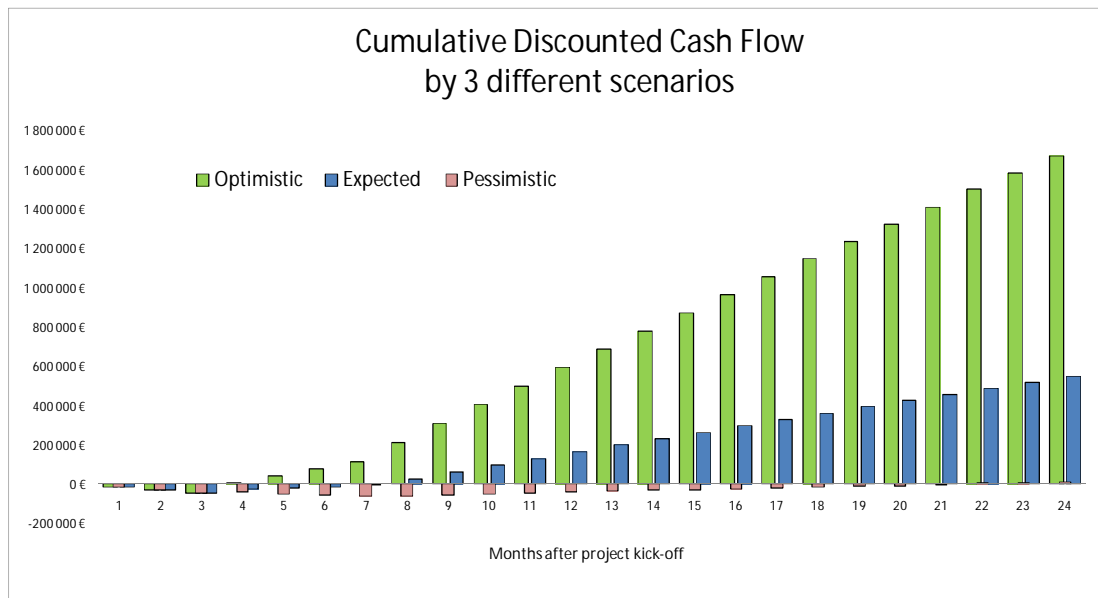
Figure 16: An example of the Cash Flow analysis outcome

5.6.3. Justification of choices made during model construction

Input variables. Because many variables (e.g. CEM's improvement on campaign pull) are impossible to determine specifically, it would be useful to have the input variables following some kind of realistic probability distributions. Unfortunately, there are not enough CEM user and result data, using which reliable distributions could be approximated. Also, these probability distributions would differ considerably among different industries and even individual businesses. Because the uncertainty was needed to be incorporated in the model, several input variables are given three values: the optimistic, the expected and the pessimistic scenario. For example, instead of determining a single improved campaign pull figure, Itella's CEM unit determines an optimistic, an expected and a pessimistic pull percentage. These three scenarios are consistently present in all the calculations and also in the final ROI summary and cash flow analysis. However, when presenting the pessimistic results to the customer, the assumptions behind the pessimistic scenario should be explained thoroughly i.e. the decision makers should be aware of the possible events that could turn the result toward the pessimistic result instead of the expected or optimistic result.

Three risk scenarios. For simplicity, the optimistic and pessimistic scenarios represent risk extremes in the calculation model. This means that e.g. the ROI of the pessimistic scenario assumes that throughout the pessimistic input values are used i.e. all negative risks actualize, setting thus a lower bound for the output results. Consequently, there can be a major difference in the end results between these three scenarios. It might be useful to be able to have more risk scenarios for ROI so that one could examine how the ROI would look if e.g. outbound marketing would go well (optimistically) but inbound marketing would not perform so well (pessimistically) but at the moment this feature is not included in the model. However, sensitivity analysis can be conducted in the ROI model by making changes in individual variable values in the Variables-sheet – the three risk scenarios and their variable values can be adjusted according to the needs of the decision maker. After sufficient historical data on CEM results have been collected, the appropriate input variable probability distributions can be approximated and the expected ROI can be calculated using e.g. Monte Carlo simulation.

Discarding some CEM benefits from the calculations. In order to have a comprehensive ROI calculation, all the possible benefits of Analytic CEM should have been included in the tool. Unfortunately this is not the case, because some intangible benefits, such as increase customer loyalty or satisfaction cannot directly be transformed into a monetary measure, as was observed in chapter four. Therefore I chose not to try to monetize all identified intangible factors. However, according to the theoretical framework presented in chapter 3, many intangible benefits act as drivers to more tangible and monetary benefits like increased purchase volume or average purchase amount – so in a way these intangibles are incorporated in the calculations.

Timing of revenues and costs. The cash flow analysis shows monthly profits and costs and based on these items calculates the cumulative net cash flow in the company. The timing of the investment costs can be defined in the Variables-sheet; the only requirement is that there cannot be any zero-cost periods once the costs have started to run. This is realistic: once the implementation has been started or the service is up and running, the costs should be invoiced from the customer. The problem regarding timing relates to the profits – the calculator assumes that profits start to flow in as soon as the service is up and running, even

though In reality this might take some time. In addition, the calculator assumes that profits cumulate at a constant pace, even though in reality CEM profits would probably follow an increasing growth function. These calculation principles were chosen for their simplicity and lack of data that would have enabled the assessment of a growth function. Because of this, the payback time in the cash flow analysis will probably be slightly optimistic.

6. TESTING: ITELLA AND CEM SERVICE FOR COMPANY X

The ROI calculation model is implemented in a real customer case of Itella Asiakkuusmarkkinointi in order to evaluate the performance of the ROI calculation tool suggested as well as identifying aspects for improvement in future development. This customer faces some challenges in its business and wanted to start a project with Itella for building the CEM service for their usage. During the pre-consultation of this project the business challenges were specified and a ROI figure was computed in order to determine the monetary consequences of a potential CEM investment.

In the following sections the case company and its business will be presented briefly, and then a suitable CEM implementation is suggested and ROI calculated using the calculation tool developed in the previous section. Because this is an ongoing project at Itella, the company name will be excluded and referred to only as "Company X". Additionally, the figures in the calculations are altered in a way that recognition is not possible but the ROI and growth figures are retained practically the same. Consequently, the figures related to the CEM investment do not reflect actual CEM investments but are altered without largely changing the resulting ROI.

6.1. Company X presentation

Company X is a Finnish company, which operates an e-commerce web site in Finland. They sell non-perishable items, which are purchased both by consumers and companies. The item assortment includes one main product XYZ, which alone constitutes for almost 70 % of total revenue. Company X has also other selling channels available, but this thesis focuses solely on the web store business as it is operated separately from the rest of the business. However, the CEM service could relatively easily be extended to include the other channels as well in the future, which would increase the retrievable benefits of CEM. The long-term goal of company X is indeed to develop a united customer experience across all possible transaction channels.

The main product XYZ yields excellent revenue and good margin and company X would like to increase the sales volume via web even further. The challenge is that the web store customer base is limited in size and customer prospects are not well aware that this product is sold also online along the more traditional selling channels. In addition, the overall demand for product XYZ has started to exhibit a slight downwards trend due to technological development in the product market. The main challenge is therefore to substantially increase the conspicuousness of the web store and increase the size of the active customer base.

6.2. Company X and their motivation for using Analytic CEM

Company X opened their renewed web store at the beginning of 2009, which improved the usability of the web site significantly. Consequently the web store was able to increase the web site visits by almost 25 % compared to the previous year but unfortunately that growth did not extend to the revenue side, i.e. the average purchase amount per visit decreased at the same pace. In order to overcome the issue, company X is planning to renew its e-commerce business by developing its product offering and explore the possibilities of customer relationship marketing.

One challenge of the web store is its below-target penetration among the target market despite the site visit growth. Company X would like to gain better customer understanding in order to develop their product offering and acquire more users for their web store. In addition, they would like to increase the web store's up- and cross-selling by making their other product lines better known among the customers – at the moment a large amount of customers buy only the main product. Furthermore, the purchase process on the web site does not require registration, which results in poor customer recognition. In order to better target their offerings and campaigns, company X seeks a solution for this problem, too.

Finally, a major challenge remains in increasing the retention of customers and trying to decrease the high customer attrition of web site customers. Currently the majority of visits at the web store originate from one-time buyers, who do not return to the site. Company X

recognizes the cross-selling potential for repeat customers – actualizing that potential needs customer analysis and work on increasing customer loyalty.

Company X set two main business objectives for the coming year, during which CEM would be taken into use:

1. Increase sales by 35 %
2. Increase conspicuousness of the web store and its products

6.3. Calculating the expected ROI

For company X to tackle these issues with the help of CEM, Itella CEM unit suggested the usage of *Analytic CEM*, which includes the web site interaction advisor from the inbound marketing side, analytics for customer understanding and access to automatic targeted outbound marketing (e.g. email, direct mail). This shows on the ROI calculation in such a way that both outbound and inbound marketing are enabled, but from inbound channels only the website is included.

Here is an exempt of the perturbed input data retrieved from the customer:

Figure 17: Example of Company X's input figures in the ROI calculation

According to the actual input figures of company X in the ROI calculation model it is possible to draw some conclusions of the current state of marketing and customer knowledge in the company:

- The overall marketing budget has been very low, neither the targeted marketing nor mass marketing efforts have required a lot of money.

- The current campaign pull has been quite poor, which indicates that either the offers or the campaign material have not been targeted accurately according to the target market

- The customer segmentation is on a very rough scale: only companies and consumers. This division does not enable targeted marketing of good quality, even if some analysis could be done on the customer data.

All the input variables retrieved from the customer were thoroughly examined by the CEM unit and remaining input variables were defined according to the business characteristics and tentatively planned marketing operations. Some noteworthy assumptions made during this process are the omission of personnel cost savings and customer CLTV revenues. The final ROI results are presented below. A ROI of zero percent indicates a break-even point, which could in some cases be enough for the investment decision to be reasonable. In this calculation already the pessimistic scenario is able to fulfill this requirement.

	Optimistic	Expected	Pessimistic
Outbound marketing	659%	331%	196%
Inbound marketing	297%	169%	106%
Total	550%	283%	169%

Table 2: The CEM ROI calculation results for Company X

We return to the first goal of increasing sales by 35 %. According to the ROI calculation, Analytic CEM seems like a sound investment but the benefits stem also from internal process cost savings, not only from increased customer revenue. In order to find out whether or not the sales growth target can be achieved with CEM, I isolated the external

customer effect from the outbound marketing figures and omitted the customer retention and attrition effect. The result is the additional sales from customer acquisition and up-/cross-selling campaigns, which are incremental to the base case of current annual sales. According to this calculation, the expected increase in sales is 45%, which is 10% more than the target. If everything turns out in the optimistic way, company X would be able to more than double their sales with the help of CEM.

	Optimistic	Expected	Pessimistic
Current annual sales	1 148 600 €	1 148 600 €	1 148 600 €
Incremental annual sales via CEM	1 253 560 €	522 225 €	201 724 €
Annual sales growth	109 %	45 %	18 %

Table 3: The annual sales growth for company X with the help of CEM

As far as company X's other objective is concerned, CEM cannot really measure whether or not the conspicuousness of the web store and its products has been increased and to what level. However, things such as number of site visits, average purchase amount and amount of different items per purchase can be tracked and an increase in these figures indicate also increased conspicuousness of the store and its products. Altogether, these figures were faced with great interest at company X and a contract on the CEM service is currently under negotiation.

6.4. Calculation tool concerns unfolded with case Company X

Even though the ROI figures retrieved from company X's calculation were realistic within the range provided by the three different scenarios, several issues for future development arose during the computation.

- The original model classifies websites as an inbound channel, which in general is used by existing customers. However, company X is operating a web store, which attracts also customer prospects. Web sites can also use e.g. banner advertising to attract site

visitors, which further blurs the boundary between outbound and inbound marketing. So, in a way, it was difficult to differentiate outbound and inbound marketing in this case.

- Partly because of this overlap of outbound and inbound marketing, it was challenging to determine which marketing actions and effects belong to which category. For example, the calculations allow the customer attrition to decrease on account of both outbound and inbound marketing actions and if the user of the calculation tool is not aware of the calculation formulas, it is possible that attrition reduction can be over- or understated. The problem can be passed by setting e.g. inbound attrition reduction to zero and put all the improvement for the credit of outbound marketing actions – but this will probably contort the ROI results for the benefit of outbound marketing.

- Another issue to be solved is the allocation of personnel costs. The calculation tool assumes that marketing personnel costs increase at the same pace as the number of marketing campaigns, which is probably realistic in a traditional marketing environment. However, with CEM marketing campaigns are greatly automated, which enables the execution of tens of campaigns with minimal personnel contribution. This proofed to be a problem in the calculation tool, as it increased CEM's personnel costs disproportionally because of the large amount of campaigns, which actually do not need that much working hours. However, in company X's calculation I was able to bypass the problem by assuming that the increased amount of campaigns with CEM could be executed by exactly the same human resources as previous campaigns – setting thus marketing personnel savings (and extra costs) to zero for CEM.

- In addition, it was noted that the CLTV calculations do not tolerate well negative customer lifetime values. Negative customer values are present in many businesses, but with the tools of marketing and customer relationship management this value can be turned into a positive one. However, at the moment the calculation tool does not allow this kind of improvement, which results as a negative effect in customer

acquisition. Again, this problem can be bypassed by omitting the CLTV from calculations altogether, but this move might decrease the lifelikeness of the ROI figures.

- Finally, it was noted that it would be useful to be able to look at the results in more terms than just additional profit. Many companies set goals according to sales and not margin, which was also the case with company X.

7. CONCLUSIONS

In the introduction two major trends of marketing were identified: the movement from mass marketing towards customer-centric direct marketing and the increasing demand for marketing accountability. After that the research problem was clarified to be the determination of the ROI for a comprehensive CRM service such as Itella's CEM. The relationship between the trends mentioned and Itella's CEM service is relatively clear – CEM has all the functionality needed to conduct intelligent and effective one-to-one marketing. Marketing accountability, again, can be achieved via the CEM service in two ways: by making marketing more efficient and by measuring marketing profitability.

Efficiency comes from intelligently automating direct marketing campaigns with the help of different business rules and timing. Also creating a generic customership program for different customer groups and redesigning marketing processes decreases the overall time needed to plan marketing operations. Profitability measurement, on the other hand, is enabled by the traceability of marketing results to different CEM marketing actions. In addition, the CEM platform learns from the results of previous marketing operations, which enables even better marketing actions and results in the future. The effects of these actions were incorporated in the theoretical and calculation model created in this thesis.

This final chapter summarizes the contributions of this study. The chapter is divided into four sections. First, the research problem and the study are briefly revisited. Second, the main findings and results are discussed to analyze the contributions of this study. Third, the limitations of the study are reviewed from the theoretical framework's and calculation model's point of view. Finally, the chapter finishes off by pulling forward topics for further research.

7.1. Summary of the study

The research method used in this study was the constructive approach, which aims to find a working solution for a relevant problem. The starting point for this thesis was the problem related to the justification of investing into a comprehensive CRM service such as the case

company Itella's CEM, which enables intelligently targeted marketing. The general motivation for such a service has been noticed already through the strengthening trends of customer-centricity in business strategy and operations as well as the demand for marketing accountability, but the CEM service was still in need of a system supporting the financial analysis of the investment. Therefore this thesis aimed to determine the ROI of a comprehensive CRM service as defined in chapter 3.

Before the ROI could be defined and calculated, a literature review was conducted on the background motivation for targeted marketing and CRM. With the literature review and previous research on CRM and its effect on financial performance as a basis, a hierarchical theoretical framework was created to depict the relationship between a comprehensive CRM service and financial performance measured with ROI. The framework identified a dual effect of the comprehensive CRM service the ROI: internal decrease of costs in internal processes and external increase of revenues from outside customers. This dual effect functions via three means: by increasing effectiveness of marketing, by increasing efficiency of marketing and by creating added value and competitive advantage for the company.

Based on the framework, a ROI calculation tool was built on the spreadsheet software Microsoft Excel. The calculation model has three main parts: the input of variables (related to the firm's business and customers); the calculation part (based on the theoretical framework); and the output (summary of ROI and a cash flow analysis for the investment). In order to find out how the model works in a real-life business case, it was used to estimate the ROI for a customer of Itella, who intends to invest in Itella's CEM service. The results were promising, even though they revealed some model areas, which still need further development.

7.2. Discussion

The objective of Itella Asiakkuusmarkkinointi was to quantify the benefits of their comprehensive CRM service called CEM and to demonstrate those benefits to potential customers to support the sales process. The goal of this thesis was to plan a tool for this objective. This goal was achieved through defining the comprehensive CRM service and its benefits for the user; by creating a conceptual and calculation model for constructing the ROI for a CRM service; and by testing the model with a real-life case and determining future research directions.

At the moment, the ROI model produces basically an estimate of ROI, which is based on certain assumptions. Because the model is intended to be utilized in the sales process before the actual service purchase, adequate information will not be available and a ROI estimate is acceptable. The main benefit of this study and the model for Itella Asiakkuusmarkkinointi is actually the identification of different items and variables that can affect the ROI of their CEM service – the reliable quantification of the effect of these items will be left for further research.

One of the benefits of the model developed is the possibility to view different scenarios at once and do sensitivity analysis by varying the input variable values. This kind of sensitivity analysis is useful in the selling process, because it allows evaluating the risks of investing into Itella's CEM services. Once enough data has been retrieved from CEM usage, the probability distributions of the input variables can be approximated, enabling the simulation of the expected outcome, the ROI figure. This decreases the investment uncertainty considerably.

7.3. Limitations of the study

Some limitations of this study were discussed already in the introduction chapter. The calculation model employs a number of assumptions and estimates due to lack of data, the scope does not include the CEM service in its entirety and the calculation model is in principle bound to the context of Analytic CEM alone. However, there are some additional limitations one should discuss here in the end of the thesis. Below I have specified some

significant limitations, broken down to framework related and calculation model related limitations.

7.3.1. Limitations related to the theoretical framework

Conceptual framework. The constructed hierarchical model of the benefits of Analytic CEM (as presented in chapter 3) was made up by summarizing the findings of previous research into a collective theoretical model. However, not all concepts across previous studies were unequivocal nor were the connections between different variables always studied in order to prove the strength and significance of those connections. There was no test setting to proof that e.g. drivers of the process and customer effects are positively related to the financial outcomes. Therefore the hierarchical model introduced in this thesis remains on a conceptual level and cannot be treated as an established framework. The future research suggestions include e.g. studying these factor connections in deeper detail.

The intangible effect of Analytic CEM. The theoretical framework suggests that the CEM service affects both internal processes and (external) customers, which in turn either decrease overall costs of increase revenues. Between actions and the resulting financial effect there are drivers like customer satisfaction or data integration, which can be categorized as intangible and which are intermediate effects before the monetary effect. However, the utilization of the CEM service may result in many other intangible effects, which cannot directly be linked to a future monetary return and are not present in the framework. One example could be increased employee satisfaction, which is an intangible benefit of CEM, but which does not necessarily lead to cost savings or revenue increases. On the other hand, increased employee satisfaction could be argued to lead to reduced employee turnover, which leads to cost savings in the recruitment process – the point is, many intangible effects were omitted in the theoretical framework.

7.3.2. Limitations related to the calculation model

Potentially overlapping return items. The ROI calculation tool was constructed to calculate the ROI as a result of different summed effects, such as the customer acquisition effect and retention effect. All these effects were assigned a euro value through calculations based on input variables. However, some of the effects may be slightly overlapping with each other, which then exaggerates the return and the final ROI figure. This is especially the case with CLTV approximations in the various effects, because the so called CLTV mass can be classified under several effects. In order to avoid too much overlaps I have been very prudent with incorporating CLTV figures in the calculations. The model still needs a validation round with historical case data: the model's ROI should be compared with an actualized ROI from a real case by using historical CEM marketing operations as the basis for input variables and comparing the model ROI with actual ROI. If they differ significantly, the model needs to be redesigned.

Using average and aggregate parameters. Throughout the literature and best practices of customer relationship management it has been emphasized that analysis and decisions should be based on detailed data from individual customers and e.g. marketing campaigns. However, the ROI calculation tool uses numerous average and aggregate figures in the calculations – mainly because of the predictive nature of the model. The more detail the model tries to capture in the input figures, the more probable it is that those figures turn out faulty as accurate individual-level data will not be available before extensive use of the CEM service. Because this model is created for the use of sales of Itella CEM, aggregate approximations are acceptable.

Basing growth and improvement estimates on different industry characteristics. Because there is no comprehensive history of growth and improvement figures from the usage of Analytic CEM, no reliable figures are available to be inserted in the model's input as constants. Furthermore, many parameters vary across different industries: the website conversion rate is larger for Amazon than for a marketer of refrigerators, for example. Therefore the post-CEM improvement parameters at the moment are left to be defined by the model user. The problem of uncertain values is mitigated by the introduction of

"optimistic" and "pessimistic" scenarios. It is worthwhile to notice the fact that the intended users are customer relationship marketing experts with experience from several targeted marketing campaigns and programs. Furthermore, CEM customers often participate in a pilot use of CEM, the results of which can be used to better evaluate model parameters on the ROI calculation model.

Assuming constant return. In the calculations, constant future profit flows are assumed, which base on the current sales situation and estimated growth resulting from CEM. These cash flows have been equally divided across the entire ROI evaluation period and the discounted according to a predefined cost of capital. The problem with this approach is that the profit growth rate will not be constant across the entire time period. Consequently the future cash flows are inaccurately represented and discounted in the ROI cash flow analysis. This issue is not easy to overcome: the growth rates can be defined as a function of time, which generally divides the cash flows differently but not necessarily any more accurately. In addition, such a function would be very difficult to approximate. However, it could seem reasonable to suggest that the return would be greater as information accumulates and this is a characteristic of CEM, which would be useful to take into account in the future versions of this calculation model.

Inadequate presence of non-monetary returns. Because the calculation of ROI requires that all the parts constituting the return are expressed in the same measure, i.e. money, there are some important factors left out of the calculation model. For instance, the quality and accuracy of customer and sales data is crucial for making sound decisions in the daily business but it is very difficult to express the negative effect of inaccurate data in the ROI calculation. Poor data can result in image-deteriorating marketing campaigns, loss of customers and time-consuming data correction, but all these phenomena are difficult to determine in absolute monetary terms and have different impacts across different industries, for example. However, if this ROI calculator will be used as a more in-depth investment evaluator, it can relatively easily be customized for a particular customer according to industry and company specifics. After that the calculation model will not be applicable to other companies but it will give a better view in the CEM investment for that specific customer.

7.4. Suggestions for future research

Because of the limited scope of this thesis, there remained several issues that could be topics for further research. To conclude this paper, I have summarized the most interesting research suggestions in this section.

As far as the ROI calculation model is concerned, the most motivating research suggestion would be approximating the appropriate probability distributions for the various input variables, which are not retrieved directly from the customer. This would require the gathering of data from companies using CEM for different purposes, and the data would need to be held industry-specific. This data will become available in a few years, but until then many variables rely on rough approximations by CEM professionals.

As was stated in the section of study limitations earlier, the theoretical framework remains on a conceptual level because this study did not have the opportunity to test the strength and significance of factor interdependences in the hierarchical model. Studying the connections between actions, effects and financial results as represented in the conceptual model would lead to interesting results and improvement suggestions for the model.

In addition, the incorporation of more diverse, softer metrics that represent indicative measures and intangible benefits would bring great added value to the ROI calculation. The creation of a BSC type of dashboard was not included in the scope of this study but also the monetary ROI figure will gain back-up from this kind of "qualitative ROI", which has been emerging in the reviews by consulting and market research professionals. Moreover, finding ways to monetize currently intangible or difficult-to-monetize benefits of the CEM service would improve the comprehensiveness of the calculation model and possibly help in pricing the CEM service in the future. For example, data quality affects the ROI of CEM significantly and could use further analysis of its effects on the processes and results related to CEM.

Finally, the calculation model should be updated regularly to reflect correctly the evolving business environment. For example, companies are already using invoices as an outbound marketing communication channel and magazine pull-outs could be customized according to

the subscriber information. Also SMS will probably evolve as a marketing channel: not only will messages be sent to a certain customer segment but they will be sent real-time as a prospect or customer approaches a product in the store or gets closer to a service provider. Marketing banners on other web pages can also be treated as a hybrid of mass and targeted marketing: on the other hand, the marketer does not have total control over who sees the ad and who does not; on the other hand web pages are able to gather profile information of all visitors and the banner clickers can be easily monitored also by the marketer via specified landing pages. All these marketing developments bring along interesting possibilities, most of which can be integrated in CEM and offer new ways to measure marketing responses – and consequently marketing ROI.

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Appendix 1: The ROI calculation model input variables

Snapshots (7) of the Variables-worksheet in the ROI calculation model

	ROI CALCULATION MODEL VARIABLES	Input	Unit
2		Input	Unit
4	Customer fills the green cells in the "Input"-column		
5	Itella CEM unit fills the yellow cells in the "Input"-column		
6	White cells are calculations, do not fill or edit		
8	**CEM RELATED COSTS AND TIMING OF REVENUES AND COSTS**		
10	**ROI evaluation period**		
11	Evaluation period		months
12	Work days per year		d/year
13	Project kick-off		month-year
14	Interest rate (WACC)		%
15	Inbound marketing included?		Y/N
17	**Outbound marketing interface**		
18	CEM implementation fee (lump sum)		€
19	CEM monthly maintenance fee (per month)		€
20	**Timing of OB costs (months after kick-off)**		
21	Implementation costs		
22	First installment		
23	Last installment		
24	Monthly fees		
25	First installment		
26	Last installment		
28	**Inbound marketing interface**		
29	CEM käyttöönotto		€
30	CEM kk-maksu		€
31	**Timing of IB costs (months after kick-off)**		
32	Implementation costs		
33	First installment		
34	Last installment		
35	Monthly fees		
36	First installment		
37	Last installment		
47	**BUSINESS AND CUSTOMER KEY FIGURES**		
49	**Annual sales by customer group**		
50	Customer group A		€
51	Customer group B		€
52	Customer group C		€
53	Customer group D		€
54	Customer group E		€
55	Customer group F		€
56	Total annual sales		

Variables-sheet, 1/7

57	
58	**Annual sales by customer group**
59	Customer group A % of sales
60	Customer group B % of sales
61	Customer group C % of sales
62	Customer group D % of sales
63	Customer group E % of sales
64	Customer group F % of sales
65	**Total**
66	
67	**Number of purchases per year**
68	Customer group A per year
69	Customer group B per year
70	Customer group C per year
71	Customer group D per year
72	Customer group E per year
73	Customer group F per year
74	**Total** per year
75	
76	**Share of customer group of total purchases**
77	Customer group A % of purchases
78	Customer group B % of purchases
79	Customer group C % of purchases
80	Customer group D % of purchases
81	Customer group E % of purchases
82	Customer group F % of purchases
83	**Total**
84	
85	**Average purchase amount by customer group**
86	Customer group A €
87	Customer group B €
88	Customer group C €
89	Customer group D €
90	Customer group E €
91	Customer group F €
92	**Average purchase (weighted by sales in euros)** €
93	**Average purchase (weighted by number of purchases)** €
94	
95	**Average profit margin by customer group**
96	Customer group A % of sales price
97	Customer group B % of sales price
98	Customer group C % of sales price
99	Customer group D % of sales price
100	Customer group E % of sales price
101	Customer group F % of sales price
102	**Average profit margin (weighted by sales in euros)**

Variables-sheet, 2/7

103		
104	**Number of customers**	
105	Customer group A	
106	Customer group B	
107	Customer group C	
108	Customer group D	
109	Customer group E	
110	Customer group F	
111	**Total**	
112		
113	**Sales per customer per year by customer group**	
114	Customer group A	€
115	Customer group B	€
116	Customer group C	€
117	Customer group D	€
118	Customer group E	€
119	Customer group F	€
120	**Average sales per customer per year**	€
121		
122	**Purchase frequency (per year)**	
123	Customer group A	times/year
124	Customer group B	times/year
125	Customer group C	times/year
126	Customer group D	times/year
127	Customer group E	times/year
128	Customer group F	times/year
129		times/year
130		
131	**Average length of customership by customer group**	
132	Customer group A	years
133	Customer group B	years
134	Customer group C	years
135	Customer group D	years
136	Customer group E	years
137	Customer group F	years
138	**Average length of customership**	years
139		
140	**Customer attrition (% per year)**	
141	Customer group A	%
142	Customer group B	%
143	Customer group C	%
144	Customer group D	%
145	Customer group E	%
146	Customer group F	%
147	**Average customer attrition**	

Variables-sheet, 3/7

148			
149	**Cost of customer acquisition per new customer, by customer group**		
150	Customer group A		€
151	Customer group B		€
152	Customer group C		€
153	Customer group D		€
154	Customer group E		€
155	Customer group F		€
156	**Average cost of customer acquisition per new customer**		
157			
158	**CLTV per customer by customer group**		
159	Customer group A		€
160	Customer group B		€
161	Customer group C		€
162	Customer group D		€
163	Customer group E		€
164	Customer group F		€
165	**Average CLTV per customer**		
166			
167	**Annual personnel costs**		
168	Per IT professional		€ / year
169	Per Marketing professional		€ / year
170	Per Call Center agent		€ / year
171			
172	**OUTBOUND MARKETING PARAMETERS**		
173			
174	**Number of customer acquisition campaigns per year currently**		
175	Number of campaigns per year		
176	Average size of target group per campaign		
177	Average pull-% per campaign		%
178	Average sales per response		€
179			
180	CEM: Future number of customer acquisition campaigns per year		
181	Optimistic		
182	Expected		
183	Pessimistic		
184			
185	CEM: Future average size of target group per campaign		
186	Optimistic		
187	Expected		
188	Pessimistic		
189			
190	CEM: Future average pull-% per campaign		
191	Optimistic		%
192	Expected		%
193	Pessimistic		%
194			

Variables-sheet, 4/7

196	**Number of up-/cross-selling campaigns per year currently**
197	Number of campaigns per year
198	Average size of target group per campaign
199	Average pull-% per campaign
200	Average sales per response
201	
202	CEM: Future number of customer acquisition campaigns per year
203	Optimistic
204	Expected
205	Pessimistic
206	
207	CEM: Future average size of target group per campaign
208	Optimistic
209	Expected
210	Pessimistic
211	
212	CEM: Future average pull-% per campaign
213	Optimistic
214	Expected
215	Pessimistic
216	
217	CEM: Future increase in average sales per response
218	Optimistic
219	Expected
220	Pessimistic
221	
222	**Customer attrition**
223	CEM: Future total customer attrition per year
224	Optimistic
225	Expected
226	Pessimistic
227	CEM's improvement to the current attrition percentage
228	Optimistic
229	Expected
230	Pessimistic
231	
232	**Personnel resources - Marketing**
233	Current person work weeks needed per campaign
234	CEM: Decrease in required personnel resources
235	Optimistic
236	Expected
237	Pessimistic
238	
239	**Outbound marketing channels**
240	Targeted: cost per contact by channel
241	Email
242	Direct Mail
243	SMS
244	Phone

Variables-sheet, 5/7

246	Targeted: current distribution of contacts by channel
247	Email — %
248	Direct Mail — %
249	SMS — %
250	Phone — %
251	**Total**
252	
253	Mass marketing: Current budget
254	Annual costs — €
255	Annual profit — €
256	
257	
258	Targeted: Future distribution of contacts by channel (with CEM)
259	Email — %
260	Direct Mail — %
261	SMS — %
262	Phone — %
263	**Total**
264	
265	Mass marketing: Future budget (with CEM)
266	Optimistic — €
267	Expected — €
268	Pessimistic — €
269	
270	**Personnel resources - IT**
271	Current number of persons needed for IT maintenance per year
272	CEM: Decrease in required personnel resources
273	Optimistic — %
274	Expected — %
275	Pessimistic — %
276	
277	**Rationalization of IT systems (outbound)**
278	Decrease in software license fees per year (with CEM) — €
279	Decrease in maintenance costs per year (with CEM) — €
280	**Total** — €
281	
282	**Reporting**
283	Current working hours per week needed for reporting — h/week
284	CEM: Future working hours per week needed for reporting — h/week
285	
286	**INBOUND MARKETING PARAMETERS**
287	
288	**Number of contacts per month by channel**
289	# of contacts in Call Center
290	# of contacts on Web site
291	# of visits in Brick-n-mortar store

Variables-sheet, 6/7

293	Current conversion-% in Call Center		%
294	Current conversion-% on Web site		%
295	Current conversion-% in Brick-n-mortar store		%
296			
297	**CEM: future lift-% in conversion rates**		
298	% lift in conversion in Call Center		
299	Optimistic		%
300	Expected		%
301	Pessimistic		%
302	% lift in conversion on Web site		
303	Optimistic		%
304	Expected		%
305	Pessimistic		%
306	% lift in conversion in Brick-n-mortar store		
307	Optimistic		%
308	Expected		%
309	Pessimistic		%
310			
311	**Customer attrition**		
312	CEM: Decrease in current attrition rate in the inbound channels		
313	Optimistic		%
314	Expected		%
315	Pessimistic		%
316			
317	**Personnel resources - Marketing**		
318	Total current person work weeks needed per year		
319	CEM: Decrease in needed personnel resources		
320	Optimistic		%
321	Expected		%
322	Pessimistic		%
323			
324	**Personnel resources - Call Center**		
325	Number of personnel in Call Center		
326	Average length of call		minutes
327			
328	CEM: Change in average duration of call (+/-)		minutes
329	CEM: Virtual number of Call Center personnel		
330			
331	**Rationalization of IT systems (inbound)**		
332	Decrease in software license fees per year (with CEM)		€
333	Decrease in maintenance costs per year (with CEM)		€
334	**Total**		€
335			
336	**Reporting**		
337	Current working hours per week needed for reporting		h/week
338	CEM: Future working hours per week needed for reporting		h/week
339			

Variables-sheet, 7/7