PERFORMANCE MEASUREMENT OF CRM IN FINANCIAL SERVICES

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Abstract

Customer Relationship Management (CRM), a management philosophy that focuses on the nurturing of customer relationships, emerged as a response to decreasing customer loyalty and increasing competition. Implementing CRM is expensive, as it demands high investment in organizational change activities and information technology (IT) and companies thus expect visible, measurable results. But companies not only have trouble assessing the results of their CRM initiatives but also with managing the performance of their CRM initiatives.

The majority of financial services companies in Germany and Switzerland have, with varying success, conducted customer relationship management implementation projects. In this paper we analyze several case studies on CRM in Swiss and German banks with regards to performance measurement and related challenges. We aim to reveal the reasons for and consequences of common practices and shortcomings regarding CRM implementation.

1 Customer Relationship Management and Performance Measurement

1.1 CRM: strategy, processes and systems

CRM is a management philosophy focusing on customer orientation. It emerged as an answer to decreasing customer loyalty in competitive markets, and was enabled by new technologies. Shaw and Reed (Shaw/Reed 1999, p.4) provide a comprehensive definition of CRM that captures its multiple aspects as well as deftly describing what CRM is about. Our work is in line with their definition of CRM as an *interactive approach that achieves an optimum balance between corporate investments and the satisfaction of customer needs to generate maximum profit*. It entails measuring inputs like marketing, sales, and service costs as well as outputs in terms of customer revenue and it entails acquiring, continuously updating and applying knowledge on customers to improve performance. This demands an integration of marketing, sales, and service activities and the implementation of appropriate systems to support customer knowledge acquisition, sharing, and the measurement of CRM effectiveness.

Processes and information systems help to implement the strategic objectives of CRM. We therefore provide a brief overview of CRM processes and systems.
CRM architecture (Geib et al. 2004) is comprised of CRM processes which have been identified through a comprehensive analysis of research literature from the areas of Relationship Marketing (e.g. Gummesson 1999), process-oriented CRM (e.g. Shaw/Reed 1999), and technology-oriented CRM (e.g. Swift 2000). We distinguish between different

categories of CRM processes: *CRM delivery processes* are those processes with direct customer contact (i.e. *campaign management, sales management, service management, and complaint management*). *CRM analysis and support processes* are processes that consolidate and analyze the customer knowledge that has been collected in other CRM processes. The findings of the analysis are passed on to the CRM delivery processes to improve the latter's effectiveness (i.e. *customer scoring, lead management, customer profiling, customer segmentation, feedback management, and knowledge management*).

CRM processes are supported by information systems in order to handle huge amounts of customer data and ensure efficient workflows. CRM systems can be classified into the following three sub-categories (Shahnam 2000): *Operational CRM systems* improve the efficiency of CRM delivery and support processes. They entail solutions for marketing, sales and service automation. *Analytical CRM systems* store and evaluate knowledge about customers, e.g. data warehousing and data mining systems. They therefore support the CRM analysis processes. *Collaborative CRM systems* manage and synchronize customer interaction points and communication channels (e.g. the telephone, email, and the web).

Implementing CRM is a long-term process and 50-70% of all CRM initiatives do not achieve their goals, with the reasons for this failure often being an unsuccessful strategic as well as organizational implementation (Murphy/Russell 2002, p. 2). Performance measurement in CRM could solve this problem since it supports strategy implementation by defining concrete objectives and measures. Furthermore, the clear statement and communication of strategic objectives promotes swifter implementation of activities (Neely et al. 2000, p. 1121). In this paper, we first provide a short introduction to performance measurement of CRM. Thereafter, using case study research, we examine performance measurement practices in CRM initiatives in financial services companies and identify related challenges and determine their causes.

1.2   Performance Measurement of CRM

Performance measurement can be defined as the process of quantifying the efficiency and effectiveness of past actions (Neely 1998, p. 5). Measuring CRM performance is a challenge: it is difficult to define the causal connections between CRM activities and the company's economic results. These difficulties result from the manifold relationships between functional areas such as marketing, sales and service, and CRM processes and systems. In addition, many CRM benefits are of a qualitative nature and it is therefore difficult to prove their influence on financial results. Performance measurement in CRM can either focus on calculating the monetary benefit of CRM investments, or on measuring and managing the success of CRM activities and processes. We will present examples of both.

Traditional investment appraisal offers methods with which to calculate the monetary results of CRM investments. These methods represent results, such as "return" or "ROI", as a function of several determinants, such as "turnover" or "costs", whose connection is explicated by mathematical operators (Neely et al. 2000, p. 1124). Selchert developed a method, the so-called CRM Value Metric, with which to calculate the cash flow ROI (CFROI) of 35 projects in which the CRM software, mySAP CRM, was implemented (Selchert 2004). This method defines functional chains that link financial indicators to operative measures that reflect the changes initiated by CRM. Consequently, the difficulty mentioned above of assigning the cause and effects of CRM is surmounted.

In order to facilitate strategy implementation in organizations and to measure and manage performance, companies can use other types of measurement frameworks. These include financial and non-financial measures to present a comprehensive picture of the situation. One well-known example of such a framework is the Balanced Scorecard (BSC) (Kaplan/Norton 1992). It comprises measures from four different perspectives that have proven to be relevant for management decision making. They are: the financial perspective that measures financial objectives, the process perspective that focuses on the internal efficiency, the customer perspective that shows developments related to the customer base and, finally, the innovation perspective that reflects the company's innovativeness and learning. The BSC is a generic framework that can be customized to fit different requirements. Kim et al. propose a CRM-specific BSC that captures the various benefits of CRM (Kim et al. 2003). The four perspectives of their CRM-specific BSC are: the *Customer Value* perspective that measures the financial benefits gained from customers, the *Customer Satisfaction* perspective that measures the level of satisfaction achieved by products and services, the *Customer Interaction* perspective that measures the operational excellence of internal processes and multi-channel management and the *Customer Knowledge* perspective that measures the quality of customer knowledge and data analysis. This BSC covers the financial, operative and qualitative objectives of CRM and is thus a useful framework with which to measure CRM results. Figure 1 shows some causal connections between value creation through the use of customer knowledge and IT and covers the four perspectives of the CRM-specific BSC.
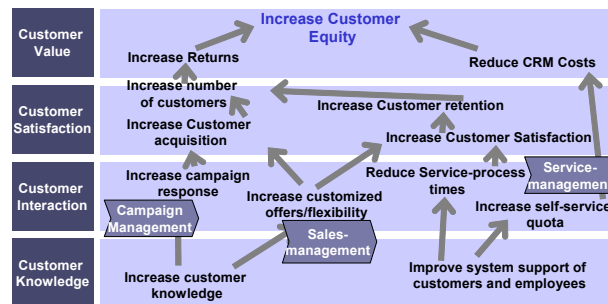

Figure 1: Causal connections of CRM value creation.

2   Research Methodology

The objective of our research was to identify the practices and challenges of CRM performance measurement in the financial services industry. We therefore adopted the case study method proposed by Senger and Österle (Senger/Österle 2002), which is an adaptation of Yin's methodology (Yin 2002) for the field of information management.

The research data were collected in a study of four Swiss and German financial services companies from June to October 2003. The site selection was based on a willingness to cooperate (Yin 2002) and on the CRM approach used. We furthermore chose case sites that exhibited different business models and competitive environments and would thus differ widely in CRM strategy, processes and systems (Eisenhardt 1989). To ensure comparability, we focused on CRM in the retail banking segment of the respective companies. Table 1 provides a brief overview of the case sites.

In all four cases, we collected the data through semi-structured interviews with key informants as well as through document analysis. We used a two-stage strategy for data analysis (Yin 2002). During the first stage, the within-case analysis of the data from each case

site was undertaken. The objective was to build an explanation of the case, using a cycle of deduction and induction. The second stage involved the cross-case analysis of the data, thus locating and examining similarities and differences from across the four cases.

Characteristic	Investment Bank[1]	Swiss Regional Bank[1]	Universal Bank[1]	German Regional Bank[1]
Description	One of the largest investment fund management companies in Germany offering public and special funds	Small universal bank[2] that is active only in one specific region of Switzerland. It is the largest bank in the region	Globally-active Swiss financial services company offering a comprehensive range of banking and insurance products	Large universal bank that is active only in one specific region of Germany. It is the largest bank in the region and one of the ten largest banks in Germany.
Business segments	Investment funds, asset management	Corporate/ retail/ private banking	Corporate/ retail/ private banking, insurance	Corporate/ retail/ private banking, insurance
Total assets	€ 100 billion	€ 9 billion	€ 644 billion	€ 322 billion
Employees	ca. 2,000	ca. 750	ca. 75,000	ca. 13,238
Customers	ca. 4 million	ca. 230,000	ca. 3 million	ca. 2 million

Table 1.: Overview of case sites.

3 Practices and challenges of CRM Performance Measurement in financial services

In order to identify CRM performance measurement practices and related challenges, we examined five aspects of the performance measurement of the companies studied: we first examined the evaluation of the monetary benefits in the form of investment appraisals. Then we focused on the performance measurement of the ongoing operative CRM activities by dividing this aspect into four sections: customer knowledge, customer interaction, customer satisfaction and customer value. These sections correspond to the four perspectives of the CRM-specific balanced scorecard developed by Kim et al. (Kim et al. 2003). The four perspectives capture the different aspects of CRM performance comprehensively and helped us to structure the problem domain.

3.1 Findings

Do the companies have a CRM business case?

We described a method for calculating the monetary benefit of a CRM investment in the form of the CFROI achieved (see 1.2). The calculation is quite complex due to almost unverifiable casual effect chains.

None of the banks studied did a detailed calculation to measure the monetary returns on CRM investment since it is very difficult to determine the cause and effects of CRM activities and the disproportionate cost-value ratio of this calculation. Companies regard the identification of qualitative benefits as sufficient and estimate quantitative results accordingly. However, in two of the case studies, the persons in charge of CRM would want a detailed calculation to justify the high investment and to ensure further top management support. Consequently, the value of knowing the monetary result of CRM investment does not seem to justify the high costs of calculating it.

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[1] The names of these companies have been changed in keeping with non-disclosure agreements.
[2] A universal bank is a bank that offers a full range of banking products.

Do the companies measure the "Customer Knowledge" perspective?

CRM is based on the assumption that better customer knowledge makes for higher profits. This is achieved through the gathering, analysis and use of customer data such as master data, transaction data and soft facts, e.g., interests and hobbies. The data allow companies to customize customer contacts and product offers, and thus achieve a higher service quality. Creating additional value for customers also improves customer retention and loyalty. In turn, improved customer retention leads to higher customer profitability, since long-lasting relationships have higher customer lifetime values (CLV). Additionally, retention costs are far lower than the costs of customer acquisition (Reichheld/Sasser 1990). In this way the hoped for positive effects of improved customer knowledge on company profits should be achieved, an assumption that plays an important role in the CRM philosophy.

However, in practice the role of customer knowledge reveals a different picture. The companies interviewed scarcely measure the BSC perspective "Customer Knowledge". Their systematic gathering and storage of customer data in information systems do, in fact, improve the availability of customer knowledge for employees in branches and call centers. However, when it comes to the systematic analysis of customer data, quality problems, especially with soft customer information, prevail. Soft facts about customers are often incomplete or obsolete and thus scarcely useful for automatic data analysis, as the quality of the results cannot be guaranteed. This led three of the four companies to cut back on the collection of soft customer information. Only *German Regional Bank* tries to link its data quality to its employees' annual objectives and takes the longer processing times due to data administration into account in its performance measures. Although customer knowledge plays an important part in CRM, and data quality is a challenge for all CRM initiatives, there is hardly any performance measurement in this field.

Do the companies measure the "Customer Interaction" perspective?

The deployment of IT leads to operative and financial benefits. The automation of processes and integration of information systems accelerate processing times and reduce interaction costs, e.g., through the use of cheap media-based communication channels like the internet or call centers (Swift 2000). Improved allocation of information will furthermore reduce the time required to search for information.

The companies are quite committed to and resemble one another in their measuring of process results. With their *campaign management* and *sales management* processes, the companies measure the response and conversion rates. Additionally, the top management regularly receives reports on the overall branch and employee performance. Only *Universal Bank* defines campaigns as investments in customer relationships. It calculates the Net Present Value (NPV) of each campaign and then decides on the execution of the marketing activities. With the *service management* process, Service Level Agreements (SLA) are used, especially at call centers, to measure and manage performance. Examples of such measures are, e.g., "the proportion of calls accepted within defined timeframes" or "the proportion of requests answered within the first contact". Media-based communication channels provide an important benefit in that call center agents can conduct outbound campaigns - formerly a task of the highly trained customer counselors at the branches - and enter appointments for counseling interviews directly into the calendar of the appropriate counselor. This allows for cost reductions and offers more time for counseling. The integration of the CRM systems deployed at the call center and at the branches is the foundation on which to realize these

benefits. The efficiency and effectiveness of internal processes are part of the traditional performance measurement at the banks. The measurement is, however, less aimed at assessing the performance of CRM than at measuring employees and business units' performance.

Do the companies measure the "Customer Satisfaction" perspective?

High customer satisfaction is thought to foster long-lasting customer relationships and to lead to references being supplied by happy customers.

All the banks studied measure customer satisfaction. The *Swiss Regional Bank* improved its customer satisfaction through CRM as well as the willingness of the customers to recommend the bank. *Investment Bank* specifically evaluates customers' satisfaction after having call center contact in order to measure the overall quality and effect of employee training and the new services offered. The bank benchmarks its results against similar companies in order to compare its performance achievements. Measuring customer satisfaction is no challenge in itself, but quantifying its influence on performance is almost impossible.

Do the companies measure the "Customer Value" perspective?

According to our definition, profitable customer relationships are the objective of CRM. Customer relationships are only profitable if returns on customers' purchases exceed expenditures on customer relationships, which originate from customer acquisition, e.g., campaign costs, or from customer retention activities, e.g., discounts. Additionally, customer behavior generates costs, e.g., requests or transactions. Only companies that are able to calculate the returns and costs of customer relationships know the value of customers and are able to manage their customer base accordingly (Blattberg et al. 2001).

The measurement of customer profitability differs widely at the four companies studied. *Investment Bank* distributes its products via distribution banks, thus it has little direct customer contact. It cannot calculate the customers' contributions to the profit since it lacks data on transactions and customer contacts. *Universal Bank* and *German Regional Bank* both possess sophisticated systems for data analysis. Nevertheless, the value of customers is seldom measured. *Universal Bank* only considers the returns on customer relationships and ignores costs, which is justified by the cost-value-ratio. Customers are classified according to their profitability and loyalty and are systematically migrated to more profitable segments through up- and cross-selling activities. At *German Regional Bank* the calculation of the future-oriented "customer lifetime value" (CLV) failed due to poor data availability and quality. As an alternative, the past-oriented "profit contribution" of customers is calculated, using rough cost rates. The results are not used for strategic customer management, but in product portfolio management to identify unprofitable products. The situation at *Swiss Regional Bank* is rather similar. The challenge of measuring customer value is, in general, determining the costs of customer relationships. Strategic differentiation, e. g., of product offers or communication channels offered, between customers according to their monetary value for the company is scarce, with the exception of the traditional overall classification into retail and private banking.

3.2 Summary of the findings

The cross-case analysis reveals several shortcomings and existing challenges in the CRM performance measurement. The monetary value of CRM is hardly measured, since the costs

of the calculation are assessed higher than the value of knowing the exact figure. Only one bank did an ROI analysis for one section of the CRM project. All the companies interviewed have no CRM-specific performance measurement framework, or measure all possible benefits of CRM. While the results of CRM processes and customer satisfaction are monitored, the perspectives "customer knowledge" or "customer value" are barely measured. The latter is due to the fact that measuring customer value, especially incorporating the costs of customer relationships, is still a challenge for the companies studied. Measuring customer knowledge does not fall within the focus of the firms, even though it plays an important role in CRM, and problems with data quality hinder all CRM initiatives. Table 2 provides an overview of the results and the characteristic features of each bank.

Criteria		Investment Bank	Swiss Regional Bank	Universal Bank	German Regional Bank
Business Case		None, due to cost-value ratio	None, due to cost-value ratio	• ROI on DWH project after 2 years	None, due to cost-value ratio
Performance Measurement	Financial perspective: **Customer value**	No measurement, due to a lack of customer data	• Profit contribution per customer • Measurement of customer retention	• Customer profitability (without cost component) • Strategic Customer migration	• Profit contribution per customer • Measurement of CLV failed
	Customer perspective: **Customer Satisfaction**	Customer satisfaction surveys, focusing on call center quality	Customer satisfaction surveys	Customer satisfaction surveys	Customer satisfaction surveys
	Process perspective: **Customer Interaction**	• Response rate • Conversion rate • SLAs, focus on call center	• Response rate • Conversion Rate • SLAs	• Campaign NPV, response rate • Conversion rate • SLAs	• Response rate • Conversion rate • SLAs
	Innovation perspective: **Customer knowledge**	No measurement (little customer knowledge due to missing direct contact to customers)	No measurement, but hard and soft facts about customers stored in CRM system	No measurement, but the use of customer knowledge is a key component of CRM	No measurement, but the use of customer knowledge is a key component of CRM
Challenges		Lacking customer data	• Data quality • Data integration	Organizational CRM implementation	• Organizational CRM implementation • Data quality

Table 2.: CRM and Performance Measurement in Financial Services.

4   Conclusions and outlook for further research

CRM performance can be measured as the monetary return on CRM investment and as the result of the ongoing CRM activities. The results of the cross-case analysis reveal some CRM performance measurement practices as well as identify existing challenges. It is remarkable that no CRM-specific performance measurement is done and that several important objectives of CRM are barely measured. This reflects the fact that, especially in the large companies interviewed, CRM is regarded as the duty of one department, not as an overall management philosophy. This complicates the dissemination of the CRM philosophy to all employees in the CRM-related processes. Nevertheless, the small sample size does not allow a broad generalization. Further research could focus on the unused potential of CRM due to the lack of a comprehensive performance measurement.

Building upon these results, our future research will focus on the development of a system for performance measurement in CRM that combines the monetary performance measurement with operational performance management. It will incorporate the four CRM-specific perspectives of the BSC proposed by Kim et al. (Kim et al. 2003) to ensure its comprehensiveness. The framework, like the framework presented by Selchert (Selchert 2004), connects financial indicators with operative measures that reflect the changes initiated by CRM. Figure 1 (see 1.2) shows a simplified functional chain from our performance measurement system. As our framework focuses on the situation in one specific company, it could therefore be used for a strategic, value-based customer management that allows for the

simulation of strategic decisions and the optimization of the value of customer relationships. Persons in charge of CRM could thus demonstrate the benefits achieved and identify weak spots in their CRM initiatives. The framework supports the making of correct decisions to drive CRM implementation. Currently we are at the concept stage of an action research project with corporate research partners to develop such a performance measurement system and map it into a software tool.

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