Towards a general definition of customer relationship management

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Abstract Previously published papers often describe what customer relationship management (CRM) is *not*, ie CRM is not just technique, CRM is not enhanced through abstract conceptual discussions, etc. Despite general agreement on what CRM is not, the authors have not found a generally accepted definition or description of what CRM actually is. In fact, the number of definitions for the term CRM probably equals the number of individuals claiming to be employed in this sector of business. This paper is intended to forward ideas triggering discussion towards a more generally accepted definition of the term customer relationship management.

INTRODUCTION

Customer relationship management (CRM) is a buzzword in contemporary marketing. The implications of the term are often misinterpreted however. Some players in the emerging field of CRM are strongly inclined to reduce this challenging new concept to the utility of a single tool or a previously developed technical solution. Others stick to conceptual discussions so abstract that they do not touch upon a single practical issue or situation. Such approaches and views about CRM have led to sub-optimal utilisation of this lucid new paradigm and the market is now demanding more substantial approaches.

This paper picks up on this challenge.

The emphasis of the discussion is not on the introduction or technical implementation of previously developed tools or abstract theoretical conceptualisations, but on issues relating to matters such as:

- problem definition of real-life business questions and defining relevant solutions
- applying and supporting the implementation of data warehousing, data research and data mining approaches, focusing on fully utilising client data for commercial processes
- conducting and analysing market research and building test environments aimed at disclosure of client needs, client experiences and

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- other relevant issues for enhancing commercial processes
- problem-driven implementations of CRM-applications, concentrating on the business perspective (technology is regarded as a means, not as a goal).

The authors first discuss some previously introduced definitions of CRM and conceptualise their own view on meeting the CRM challenge, concentrating on relevant business challenges.

Consecutively, they discuss a stepwise approach for successfully conducting CRM projects from this business-driven perspective. Then each of these steps is discussed in more detail, after which the paper concludes with a more general discussion. It is not the aim of this paper to propose yet another definition of CRM. Rather, new views on this paradigm are discussed in the hope of contributing to the formulation of a (more) generally accepted definition of CRM.

THE ABC OF CRM

There is a proliferation of CRM-terms such as A-CRM, E-CRM or, indeed, the abbreviation CRM accompanied by another letter of the alphabet. Taking CRM from alpha to omega first leads to so-called A-CRM which represents Analytical-CRM. Does this imply that CRM is all about applying sophisticated analytical tools to transactional data stored in giga or even terra-massive data warehouses? It is true that both data and analyses are possible means for improving CRM. Nevertheless, in the past CRM has also been optimised by enhancing business processes, without using data. Thus, CRM is more than just A-CRM.

Another relevant letter is 'C', ie C-CRM represents Collaborative-CRM. This term places the collaboration between client and company central. But

how can this collaboration be made possible? Interaction between client and company on a mass production scale cannot be reduced to a conversation between two individuals. A massive organisation is needed to support the so-called collaboration. Thus, C-CRM only focuses on one particularly important aspect of CRM, more or less neglecting the means supporting the collaboration.

Proceeding through the alphabet, there is E-CRM, representing E-Commerce driven CRM. In its pure form this term suggests that modern Web-based technology solves almost any business problem related to interaction with clients. But how do marketers deal with, for example, profitable clients who do not have a connection to the Internet or who are old-fashioned to the extent that they seek personal contact with a salesperson? Such questions basically reduce the Internet to a new and interesting channel supporting effective CRM for some client segments, a far cry from the ambitious proposition of E-CRM.

Further into the alphabet CRM experts who dislike technology will be happy to find the term O-CRM, Operational-CRM. The promise of O-CRM is that optimal business processes in the front office will optimise management of relationships with clients. Does this mean that CRM has nothing to do with data, research or other forms of technology? This cannot be the case, although it is possible to enhance CRM without addressing predominately technological issues, data and research often do play an important part in improving CRM, as do other forms of technology. Thus, O-CRM concentrates too much on one of many possible means for improving CRM.

A combination of all the terms discussed above still leads to a partial

view of CRM. Adding more letters in combination with the abbreviation CRM will probably not lead to a complete view either. Some means and some goals concerning CRM are described, but the overall purpose of CRM, which is discussed below, is not disclosed through such terminology.

THE HISTORICAL CONTEXT OF CRM

CRM gives a new view on marketing incorporating and extending older marketing concepts. This part of the paper discusses the predecessors of the CRM paradigm. This discussion will lead to a thorough description of the central concepts of CRM in the remainder of the paper.

The oldest relevant marketing concept is the product centred marketing perspective. Until the 1990s interactive brainstorm sessions would be organised and marketers would consider themselves pretty neat if they defined the characteristics of a new product which would fill an assumed hole in the market. Seventy-five per cent of these revolutionary innovations did not, however, earn back the investment made in them. Fortunately, the profits made on the remaining products were substantial enough to keep most companies in business.

Slowly decision makers in companies realised that products were not their core interest, their clients were. Thus, the modern marketing approach triggered companies to conduct research revealing unique insights into customer needs. This insight enabled companies to develop products, services and communication channels and approaches possessing utilities facilitating satisfaction of salient customer needs.

Although companies are now concentrating on their major asset, their clients, one may still hear critical sounds.

A sensible category of criticism focuses on the ultimate goal of the modern marketing approach, ie optimally satisfying every need of each customer, by offering the right product, via the right channel (phone, Internet, etc.), at the right moment and in phrasing to catch the client's interest. Implementation of these ideas implies that it is highly profitable for a client to maintain the relationship with the company. It is also obvious, however, that these theoretical ideals require tremendous investment by the company. CRM should meet this challenge by offering a solution that intelligently avoids striving for these over-ambitious ideals.

To this end a distinction has to be made between clients worth investing in and unprofitable clients that are unlikely to develop into better clients, ie in order to apply the CRM-paradigm a company must be willing to fire customers.¹ This simple but challenging conceptualisation basically summarises the utility of important marketing tools such as customer segmentation, share of wallet, customer value, (potential) lifetime value and loyalty. That is to say, few resources should be invested in customers scoring poorly on these client performance indicators. The relationship between company and client should also be profitable for the company.

Taking this idea a step further: companies do not have to satisfy all needs of customers scoring high on the client performance indicators, ie their core customers. Although the usual 20 per cent of clients defined as core customers contribute to 80 per cent of the profits, it may still be unprofitable to strive for satisfaction of every need that a core customer may have. Some needs of core customers are less salient, implying that marketing spend is invested in issues of marginal importance. Thus, any specific investment made within each

Figure 1 The aim of CRM from the company's perspective

profitable relationship, should also yield more than it costs. Note that an expectation of positive difference between yield and cost has always been a necessary condition for conducting any marketing activity.^{2,3} Another fundamental point is that the current offer a company makes to its core customers has at least been reasonably successful. Therefore, when interacting with these customers companies should, at least to some extent, keep on doing what they are doing.

CRM: COSTS AND INCOME

The CRM paradigm constitutes a proposition that basically summarises and extends all issues discussed above. More precisely, CRM should facilitate processes for planning and executing the conception, pricing, promotion and distribution of ideas, goods and services to create exchanges that satisfy individual and organisational objectives in a long-term win-win relationship (these latter remarks are highly similar to ideas on marketing proposed by the American

Marketing Association).⁴ In such a relationship between company and client both parties invest in each other. The profits made by the client and the company should be of a greater value than the necessary investments made by each party.⁵ This is the basis for creating long-term mutual loyalty. The investments made and yields gained by the company in maintaining such relationships with their clients are presented in Figure 1.

Figure 1 shows that the ultimate aim of CRM, from the company's perspective, is similar to that of any other business activity: making profit. As always, profit is simply the difference between income and costs incurred. Another conventional concept presented in Figure 1 is that profit is the product of the volume of sales and the price of the products sold. Costs are allocated to various activities necessary for making profits (taking risks, keeping up an organisation, operations/processes, distribution/channel).

The goal of the investments made (or costs), aimed at realising profits, is

Figure 2 The aim of CRM from the client's perspective

enhancement of mass customisation. The latter consists of developing and keeping available products and services and ensuring that communication about products and services to clients is of a high standard and up-to-date. The rules (or business intelligence) in the decision engine of Figure 1 are used to ensure the right product is offered with the right service, via the right channel, using the right communication, to the right client at the right moment. Moreover, decision rules should also aim to support making such offers in a cost efficient manner, from the company's perspective. This is business-driven CRM.

The contents of the rules engine should not only be business driven, from the company's perspective, but should also take account of cost and income

gains considered relevant by the client. That is to say, the business intelligence, implemented in the decision engine, coordinates mass customisation, aiming to enhance progression of client-carriers, from acquisition to cross and up sell, to consolidation, with retention strategies reducing default probabilities in each of these phases. Clients also make investments when acquiring products, aiming to gain income or another form of gain, obtaining a particular service or facility. This topic has been discussed at length in the literature in the field of economic psychology.⁶⁻⁹ If the balance between cost and income is negative for a specific client, a message should not be communicated to this particular individual. The cost and income considerations of individual clients are displayed in Figure 2. The contents of

Figure 3 Steps for implementing business driven CRM

the decision engine in Figure 1 should be according to the concepts introduced in Figure 2. That is to say, any offers made to clients should also be profitable for the client.

Figures 1 and 2 give compact representations of the main goals of the two parties involved in an interaction, company and client. These representations do not, however, reveal the necessary steps for successfully conducting CRM projects. A thoroughly conducted CRM project, aimed at enhancing profits as displayed in Figures 1 and 2, consists of the phases displayed in Figure 3. Note that data warehousing and setting up the research environment are optional steps because CRM is not always enhanced through these instruments (as mentioned earlier in this

paper). Relevant tasks for each step are elaborated on below.

PROBLEM DEFINITION AND CONCEPTUAL MODEL FOR THE SOLUTION

The model in Figure 3 places the business problem at the centre. Thus, Figure 3 is consistent with the commonly accepted proposition stating that CRM is more than just implementing technical solutions.¹⁰ Practical experience shows that solving business problems is profitable, while implementing complex technology for the sake of being sophisticated leads to expensive projects, which often fail to solve real-life business problems.

Given the above, it is apparent that in

the initial phases of a project the primary focus should be on the business problem. For example, a company may consider a specific technical problem to be particularly important, but after scrutinising the relevant business problem it often happens that the initial technical issue becomes obsolete. This implies that a business solution or an alternative technical solution may have greater impact on the effectiveness of CRM.

Various tools and techniques can be used to disclose the actual business problem, such as:

- management courses on CRM
- brainstorming sessions
- quick scans of business processes.

Once it is clear where a company is failing to utilise marketing opportunities or is causing clients to default, a solution for these problems can be formulated at a conceptual level. Such conceptualisations should be in terms of the propositions visualised in Figures 1 and 2. As mentioned above CRM is only effective when both parties in the relationship, company and client, make a profit from the interaction. Moreover, the conceptual solution functions as a guide for all consecutive phases of the project, ensuring any technical or other activities are desirable from the perspective of the defined problem and are profitable for company and client.

DATA WAREHOUSING

Once the business problem has been defined and the solution is formulated in conceptual terms, the existing database systems may have to be enhanced to support implementation of the desired solution. To make this possible one should start with a quick scan, which rapidly reveals how the current database system can play a role in the key areas of

the business problem. A systems analyst should also aim to define possible problem areas such as: (1) describing technical solutions for potential problems and (2) pointing out which crucial information is missing.

DATA MINING AND MODELLING

The model proposed in Figure 1 requires the decision engine to be filled with business intelligence for coordinating mass customisation. It is at this point that investment made in the data warehouse starts to pay off. Business intelligence is obtained by performing OLAP analyses or data mining on the multitude of data stored in the data warehouse. Data mining is particularly crucial for transforming stored transactional data into insights about customer needs. The latter type of knowledge is a crucial aspect of business intelligence. Data mining tools enable analysts to retrieve automatically relevant information from data warehouses containing giga or even terra data.¹¹

The latter is also an activity that should be performed from a business-centred perspective, data mining techniques should never be applied blind. This type of data mining is often referred to as fishing or dredging by critics and demonstrates the GIGO principle (garbage-in-garbage-out).¹² A researcher should always interpret data mining results from a substantive business perspective in close collaboration with domain experts: one should not mine data, but discover knowledge for enhancing commercial processes in each stage of the client carrier displayed in Figure 4.¹³

The following types of models can be used to make mass customisation meet salient needs in each step of the carrier of different client segments:

- prospect selection models for recognising prospects with high

Figure 4 Client carrier

- probabilities of becoming profitable core customers
- models for developing and consolidating the relationship with the client through cross- and up-selling
- retention models supporting campaigns to prevent good customers defaulting.

These models are applied to improve interaction with clients in a manner that maximises profits. To this end profitability of clients has to be interpreted from multiple perspectives. Also relevant for the decision engine are individualised client performance indicators for measuring client profitability, such as:

- share of wallet
- life time value (actual and potential)
- client satisfaction
- cross and up-sell quantifications (actual and potential)
- client loyalty.

These performance indicators are used in the decision engine for determining which actions and strategies should be conducted. If a client is selected for a multitude of marketing communications, then the decision engine should contain

rules guaranteeing that only interactions having the highest expected return are carried out.

MARKET RESEARCH AND CLIENT LABORATORIES FOR KNOWLEDGE ENHANCEMENT ON CUSTOMER NEEDS

In some cases the crucial data for disclosing client needs cannot be retrieved from the current business processes. Data on customer needs are necessary for gaining insight into the clients' profit-drive, displayed in Figure 2. In such situations two possible means are offered for retrieving the necessary information for increasing knowledge about clients:

- market research: members of consumer panels are interviewed about their needs and their consumption behaviour. The data obtained are then linked to the company's internal data, which are stored in the marketing database or in a data warehouse
- client laboratories: implementing test environments facilitating conduction of experiments aimed at answering what-if questions such as 'What

happens if customers in segment X are excluded from all direct mail and are instead approached through online call centres?'. Experiments conducted in client laboratories can, thus, show how different client segments react to various marketing campaigns and strategies. In the laboratory such trials are applied to small selections of individuals representing the entire client base. Only campaigns and strategies yielding desirable results are then applied to larger groups of clients.

IMPLEMENTATION OF SOLUTIONS

When implementing solutions for previously defined problems, one should concentrate on improvement of business processes. Often, typical CRM-solutions are used to realise this, such as:

- multi-channelling
- campaign management
- front-office applications.

Figure 1 showed that multi-channelling is considered to be an important success factor for CRM. The idea being that a company's clients use various channels for different purposes. It is not, however, enough to offer clients the possibility of communicating via different channels. This communication also has to be coordinated through time and between channels. CRM-minded companies should seek implementation of campaign management systems supporting this type of multi-channelling and fill the rule engines necessary for effective multi-channelling. Moreover, such technological solutions should be effectively implemented in business processes avoiding technology if the problem could be solved through other means, such as enhancement of business

processes or by triggering cultural changes in the organisation.

DISCUSSION

The ideas visualised in Figures 1 and 2 enable a project manager to grasp the relevant issues for CRM projects. Moreover, Figure 1 can function as a safeguard against incurring high costs that lead to low return on investment, a common problem in CRM. The stepwise guidelines for conducting successful CRM projects (Figure 3), have been used in various practical situations in The Netherlands. The guidelines help in the formulation of an overview of the activities encompassed by the project and enhance the focus on CRM issues of core interest for company and client.

This overview is not necessary for performing the individual tasks in a project, but without the overview the coordination between such tasks is lost and the results are not relevant to the salient business problem. Nevertheless, the realisation of individual tasks relies on more than just a general overview. Other techniques and guidelines focusing on the specific activities to be conducted can offer support in the implementation of the specific tasks in the project. Moreover, as always the right people should be responsible for the tasks in which they have expertise.

In summary, this paper has introduced some issues relating to CRM that have also been useful in practical situations. It is expected that the cost and income interpretation of CRM, from the perspective of company and client, will be useful in future implementations and also for enhancement of CRM theory. Subsequent theoretical discussions on CRM should aim to formalise these ideas on cost and income and incorporate new ideas derived from practical situations in the ever-changing marketplace. The

results of such activities could lead to a more generally accepted definition of customer relationship management.

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