# CUSTOMER RELATIONSHIP MANAGEMENT IN AN ELECTRONIC ECONOMY

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Abstract: In the last few years Customer Relationship Management (CRM) has been the subject of considerable

interest in the business world. This has sometimes resulted in exaggerated claims about the benefits on offer to organisations. This paper provides an insight to the underlying concepts of CRM, the technological changes, and the impact to the organisational structure, its processes and the three main business divisions relied upon to deliver customer intimacy – specifically, Customer Service, Marketing and Sales. The paper highlights examples where CRM initiatives have been implemented for cost savings, profitability growth and a competitive advantage. The paper also outlines how many organisations are seeking to realign and empower the lower ranks of the business to nurture and harvest one-to-one customer relationships. The paper indicates that organisations need to review business operations in order to meet the challenges of

delivering customer focus and outlines a framework as a planning tool to utilise CRM technology.

## 1 INTRODUCTION

Undoubtedly, Information Technology (IT) is revolutionising the many areas of business. Relationship Management attempts to make appropriate use of technological capability to meet ever-increasing demands placed on organisations through fierce competition, escalating costs and growing consumer expectations. It is therefore no wonder that CRM has rapidly become a popular 'buzzword' in many organisations around the world in an effort to counteract these concerns. Contrary to popular belief, CRM does not exist as a separate entity or division. It is a sell-side collection of strategies, processes and tasks that allow an organisation to form mutually beneficial one-to-one relationships with each of its customers. The CRM culture and attitude to business means that organisations can expect improved levels of efficiency and effectiveness as a result of automating business processes and tasks for customer-focus. This in turn can lead to significant operational cost reductions and allow for an improved understanding of customers for interpretation. This accumulates new marketing and selling opportunities that can produce significant improvements in financial profitability. Figure 1 outlines the two facets of an organisation and clarifies CRM's environment.

Over the past few decades, organisations have concentrated on product innovation to win over customers. The rapid globalisation of the Internet and its associated technologies has meant it is far easier for organisations to establish their position in increasingly marketplace. populated Consequently, this has provided the consumer with an escalating ease at which they are able to buy their products or services. Alexander and Turner [2001] point out that the Internet discourages brand loyalty and encourages "serial switching" since product information such as pricing discounts and specifications can be communicated far more easily. Serial switchers are customers who are not loyal to an organisation or its products; moreover, they are more concerned with the price and aesthetics of each product they buy rather than brand virtues or where they buy it. Effectively, these customers return very little profit to the business bearing in mind the costs associated with their acquisition and support. Another difficulty to overcome is that of shorter product lifecycles [Findlay 2000]. Organisations now have to invest heavily in customer-focused research and development to remain competitive.

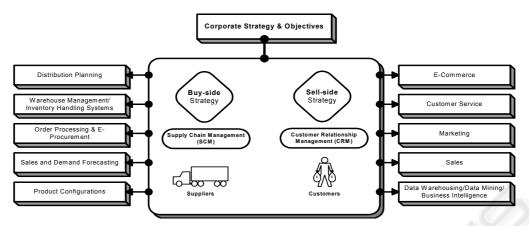


Figure 1: The two facets of an organisation

In the motor industry, model lifetimes have been reduced significantly. This has resulted in models having more 'facelifts' to freshen their market appeal. More often than not, these have been the outcome of both customer feedback and 'Kaizen' continuous improvement programmes.

The underlying component of the CRM philosophy is customer centricity. Customer centricity is about ensuring all aspects of the organisation are geared towards creating, fulfilling and sustaining positive, intimate relationships with customers. [2003] decomposes customer centricity into five areas indicated in Figure 2. Organisations that are customer centric are able to utilise the two main mechanisms of CRM - customer retention and Research outlined by customer personalisation. Payne [2000] has shown that an organisation can increase profits between 20 and 125 per cent by retaining just five per cent of its most profitable customers. Furthermore, it can also cost an organisation as much as four to seven times to obtain a new customer than it does to retain one [Findlay 2000]. Clearly, customer retention makes economic sense. A classic example of modern times is the mobile telecommunications industry. At the end of a 12-month contract an operator will call to offer the customer a new contract at a discounted price as an incentive. This is because the organisation will not have the costs associated with a 'new customer' like setting up new administrative accounts or the cost of promotions and discounts for new customer acquisition. Nevertheless, not all customers are as profitable as each other therefore it is essential that the organisation is able to evaluate each customer for their current and future intrinsic worth in order to personalise the way in which it interacts with them. Analysing past purchase history is an example of

how to categorise the level of preferential treatment a customer may justify; although in reality it will be a number of more complex and simultaneous factors that will determine a customer's real value over time. Organisations are then able to offer a mix of the right products along with an appropriate level of service to its customer base more accurately, and most importantly, more profitably. Even so, the success of this will depend on the quality of its customer data, the capability of its data analytics and the abilities of its people.

#### 2 CRM TECHNOLOGIES

Despite the advances of technology, CRM will always remain a business philosophy. Many of its underlying concepts have actually been around for many years; it is only due to the evolution in computer processing speed, storage capacity and database technology that some of the ideas proposed years ago have been made more accessible to all today. Furthermore, the reduced cost of technology has enabled smaller organisations to compete more fairly with their larger counterparts; resulting in more competitive markets. Nowadays, many organisations have invested in large warehouses. One of the drivers of which has been the trend to replace legacy computer systems that are often characterised as being a poor source of supportive information to base tactical and strategic business decisions. However, they are critical for CRM since large quantities of customer data will be restructured, 'mined' and analysed for the extraction of customer retention tactics, personalisation techniques and recognising new marketing and selling opportunities. Even though data

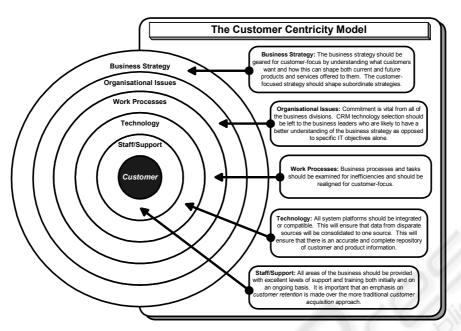


Figure 2: A 'Customer Centricity' Model

warehouses are notorious for being expensive and time-consuming to maintain, Manning [2000] suggests that they are a "long-term delivery mechanism for ongoing management needs" and as such, represent good value for money in the strategic sense.

Inherently, the accuracy, consistency completeness of the organisation's customer data will form a central role in CRM. In a typical CRM system, data and information is constantly exchanged across the organisation therefore a compatible or integrated systems platform is essential - for example, customer interaction can take place over many channels (e.g. post, telephone or email) therefore it is easy to see how problems with data integrity is undesirably achieved. Findlay [2000] likens CRM data flows as "fluid" since the transfer and update of data across the business is continuous all of the time. Unsurprisingly, integration is one of the major challenges CRM projects have to overcome and as a result; data and systems integration proves one of the most costly aspects in CRM budgets. Poorly integrated systems can lead to duplicate data, mismatched information and inaccurate reporting. Data maintenance attempts to prevent this but is both time-consuming and expensive. Khanna [2000] identified that one of the main reasons for poorly integrated systems is that organisations traditionally adopted 'best of breed' applications, i.e. separate applications to support specialist areas of the business (e.g. finance

and logistics). Nevertheless, integration is becoming easier thanks to the introduction of a number of technologies such as XML (eXtended Mark-up Language - a universal standard for electronic data interchange) and legacy extension toolkits that are designed to integrate old data with new IT systems. Since CRM is data intensive, Delahoz [2000] suggests the benefits of legacy integration tools should not be underestimated as organisations can benefit from rapid implementations at a substantially reduced cost. Elsewhere, there are a number of large organisations using their Enterprise Resource Planning (ERP) systems (e.g. SAP and Peoplesoft) for their CRM needs. Since ERP modules share and interchange a common set of data transparently, ERP organisations are said to have the upper hand of CRM. Unfortunately, recent research has shown that ERP software can cost between €3,000 and €87,000 per seat depending on how it is implemented [Saran 2003]. On an equal scale, organisations also face radical process re-design.

CRM is generally conceived to be one of the main drivers of mobile technology. This is supported by Kaakani (2001) who identified that business transactions were becoming increasingly automated yet customer-facing processes were still mainly manual based. Up until the arrival of CRM, Fickel (2001) observed that the main obstacle for the acceptance of mobile databases had been a shortage of business-driven application demand. The rise of mobile technology is now accepted as a normal part of life mainly due to smaller powerful devices, decreasing bandwidth costs and platform standardisation. The relevance to CRM is that the

speed and precision of data recorded is improved and employees are able to be more flexible by gaining access to role specific information on the move and in a more accurate and timely manner. This improves customer service levels, shortens decision-making processes and can potentially become a new source of revenue. The application of a centralised e-business for a large UK travel company supported by Virtual Private Networking (VPN) has allowed a CRM trial to show increased sales of £150k, which if applied throughout the business would increase sales by £1.2m per annum However, [Shaw and Atkins 2004]. decentralisation of computer devices increases the risk to data security and integrity therefore the implementation of a strict IT policy, adequate user training and good working etiquette is essential.

#### 3 CUSTOMER SERVICE CRM

Customer service departments are often perceived as a peripheral activity and are usually seen as a cost to organisations. In contrast, with growing customer expectations for reduced response times and increasing demands for information availability the role of customer service is crucial for successful CRM. Research shows that 74 per cent of online customers would shop elsewhere if their query was not answered within an hour or so [Dyche 2002]. Customer Service CRM allows an organisation to have tight control over the services offered by interpreting each customer's real value to the business and providing an appropriate level of service accordingly. This allows an organisation to stipulate personalised and profitable customer retention tactics on a unique, one-to-one basis.

Making appropriate and effective use of the electronic communication channels can usually result in a substantial reduction in escalating customer support costs. In many cases data administration costs can be transferred to the customer by allowing them to update their details over the web. This saves an expensive telephone operator making the changes on their behalf and reduces call queue times for customers that do require operator assistance. Some companies offer discounts for customers who solely use their online channels and sometimes direct low-value customers to self-help sites – UK mobile telephone operator O2 [www.o2.co.uk] offer its web customers more free SMS text messages as an incentive to deal with them solely over the web. An organisation's website is becoming a crucial portal for its customers - for many, it is their first port of call for a query or problem therefore it is essential it contains a host of services and information customers expect. This may include Frequently Asked Questions (FAQs), downloads or detailed product specifications. The companies who have the best levels of customer services are those who offer a mix of self-help and call-centre expertise so that customers are able to make the choice themselves and not feel isolated. Tanoury [2003] suggests that customers who contact call centres symbolise that the organisation has failed in someway (e.g. product/service failure or poor self-help content) therefore the contact centre is an opportunity to salvage a customer relationship. There are strategic benefits too, Friedlein [2001] points out that electronic support is also a quick and easy method of acquiring feedback that can be used to enhance existing and future products and services.

For those who require operator support, the skills of call centre staff are vital in meeting customer's service expectations. Ultimately, it will determine whether or not they or their friends and family will remain loyal. Customer service of the past had been to provide an efficient but standardised level of service. Typically, customer service departments dealt with a wide range of problems using a range of scripted questions, procedures and rules. The CRM approach drives flexibility and personalisation - it encourages and empowers all service staff to make decisions based on the situation and information delivered to them on their screens. As such, CRM is not for those organisations that may want tight control over every decision made. The challenge of customer-facing CRM systems is ensuring that service staff have as much information about the customer as possible when contact is initiated, as well as prompting the employee with 'intelligent' service recommendations. This will allow them to personalise conversational details and determine the flexibility of decisions or procedures with each customer in person. Figure 3 identifies the many roles of Customer Service CRM.

The increasing specialisation and importance of customer service has meant employees need to grasp relevant expertise for their role. Garland [2002] suggests that as much as 80 per cent of Customer Service CRM is about developing people. The implications of this are the costs and issues associated with training and maintaining high service standards. Usually, call centres have a high staff turnover therefore job variation, enhanced staff development and good remuneration form decisive elements to the success of Customer Service CRM.

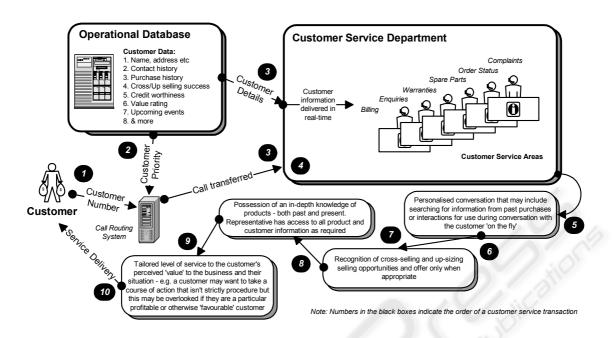


Figure 3: Customer Service CRM

#### 4 MARKETING CRM

McKenna [2002] suggests that marketing of the past had been about "message making" and was far too concerned with the psychology of brand identity. Nowadays, marketing becomes much more than a messaging tool as it attempts to recognise customers in a growing number of smaller, more specialised markets. CRM recognises customers' 'uniqueness' - for instance, a group of people who share the same age range does not mean that they have similar interests or hobbies. A comprehensive source of customer information is essential for CRM given that a large proportion of marketing is analytical. As well as information available in data warehouses, the Internet is ideal for this type of unique segmentation since customer's 'click-streams' (page viewing history) and purchasing habits can be analysed to assess product interests and prospective value on an Appropriately, Friedlein [2001] individual basis. states that personalisation can differentiate an organisation at times of growing market similarity. Some companies use this information to form personalised home pages containing only products and services that may be of interest to each customer. individual Large e-commerce organisations like Amazon [www.amazon.com] collect gigabytes of customer viewing habits everyday - this cost-effective practice enables them to identify new marketing and selling opportunities and extend their range of customer retention tactics.

As a result, companies that have a web presence are able to cross-sell less obvious products - for example, comparing customers who have similar viewing and purchasing habits and attempting to cross-sell products the other customer had bought (such as cross-selling across a genre films). Similarly, Dyche [2002] suggests that the results of analysing buying trends can be used to selectively configure products for customers. products (e.g. PCs) can be configured quite flexibly over a website to meet each customer's specific needs. Product configuration analysis could provide an organisation with useful information as to what aspects of customisation customers like to change, and more importantly, what they change it too (e.g. customers may upgrade their PC to a specific brand of graphics card). Over time, the company could then market a product that contains all the qualities preferred by its customers; consequently creating a product that has customer-focused market appeal.

Large data warehouses have enabled organisations analyse customer attributes and buying behaviour to make educated predictions as to what they are likely to buy next. With this knowledge, an organisation can entice a customer to remain loyal by recommending products they predict will be sought after at the right time. In the same way, customer lifetime modelling enables an organisation to consider customer value in the long term. Even though a customer may not be profitable at present, he or she may be profitable at a later point in life. In

high street banking, students may not represent high value accounts initially, however, profitability may soar in the future when many find themselves in well-paid employment. It is for this reason that many high street banks offer undergraduates incentives to join student bank accounts. Although this is a more generalised example; large quantities of accurate customer data, a range of sophisticated data collection techniques and powerful database analytics can allow CRM organisations model customer behaviour and value lifetimes. This can enable the organisation market its products and services on a more profitable, one-to-one basis. Subsequently, the communication links Kurtyka [2001] customers are important too. suggests that the growth of the rapid and costeffective electronic channels has enabled marketing evolve to a two-way communication mechanism and allows organisations gain an insight to customers' unique communication preferences – for instance, the type of communication, the delivery frequency and the channel it arrives through. Recently, a US bowling company's CRM system allowed it to stop irritating its customers by sending them irrelevant offers as well as minimise the risk of alienating those who had already purchased the product [Dragoon 2002]. In an age where customers are driven to anguish through electronic 'spam' and other junk mail, it is imperative that customers are able to determine the basis of communication; otherwise the organisation risks becoming a major irritation – proving detrimental to both the brand and its customer retention programme.

#### 5 SALES CRM

Nowadays, the reality of sales teams is that a range of time-consuming support tasks constantly hinder the revenue-generating ability of representatives. This is supported by Kahle [2000] who states that typical 30-minute tasks can often take two hours or more. Add to this, each sales representative has their own repository of contacts, leads and customer communication history. This has an adverse effect on revenues since pockets of knowledge exist across many different inaccessible sources. As a result, new leads and opportunities are missed, decisionmaking processes are drawn out, support resources are difficult to locate and neither management, representatives or customers are able to track information or indeed, each other. A Sales CRM system centralises and formalises sales activity and offers an extensive mix of functionality to maximise the efficiency of sales teams. A typical CRM system may:

- Contain an accurate and up-to-date range of commonly used resources such as pricing details, document templates, presentations, product specifications and customer contact information.
- Store a 'live' register of leads and opportunities, as well as relevant market and competition information to enhance business awareness.
- Contain personal details such as contact information, weekly diary/schedule and a sales performance summary.
- Act as an intermediary to accelerate and shorten bureaucratic decision-making processes e.g. product quotations that can be submitted electronically for approval.
- Be integrated with email, video conferencing and instant messaging facilities; allowing customers, suppliers and colleagues to communicate more easily.
- Provide ad-hoc reporting facilities that are simple to use, flexible and highly informative.
- Contain other miscellaneous resources such as hotel information, maps and travel guides.

For data consistency reasons, Sales CRM needs to be closely integrated with the other operational and management systems. Chase [2001] suggests that Sales CRM is allowing organisations collaborate with internal and external parties so that they are able to take control of their demand chain. For example, sales forecasting could be integrated with manufacturing or supplier inventory systems to ensure optimal levels of stock. This would enhance customer satisfaction levels, reduce stock holding minimise support administration. and Similarly, both suppliers and customers would benefit from a web-based extranet portal that could provide them with up-to-date stock information, deal progress tracking and a communications log. This would lead to a reduction in common customer queries that take so much time of a representative's typical day.

Besides sales inefficiency, Gardner [2001] suggests that organisations are not managing each stage of the sales process in the most effective way. In particular CRM can optimise one of the pivotal components of sales activity – personnel. Analysing the performance of each representative may report the success rates at the various stages of deals. A CRM system is then able maximise revenues by matching individual skills with the outstanding stages of leads and deals appropriately. For example, good communicators and negotiators would be more useful towards the end of the sales process (e.g. securing a deal). In the same way, each stage of the lifecycle can be analysed for best practice for others to copy. In a Sales CRM environment, several people end up managing one entire sales cycle and as a result, sales representatives work together with shared goals. Unfortunately, as sales divisions are the most aggressive area of the organisation, gaining support and cooperation for CRM can be difficult since fundamental changes may prove detrimental to levels of personal remuneration (i.e. bonuses and fringe benefits). This is echoed by McMahon [2003] who says that most sales representatives are only concerned about the current situation. because if they didn't make their existing sales targets, they wouldn't be around for the long-term For this reason, Diver [2002] plans anyway. suggests that incentives should be adjusted to reward those who contribute 'value' to the CRM system.

#### 6 CRM READINESS

A catalogue of recent CRM failures (65% of CRM projects during 2001 [Everett 2002]) stresses the importance of evaluating the feasibility implementing CRM. Khera [2000] identified that well qualified people, well designed processes and technology are the three vital components for successful CRM; and whilst some CRM vendors may claim to offer full CRM solutions, none will be able to offer all of the above. As a result, organisations must evaluate whether or not they are ready for CRM. The CRM Readiness Framework shown Figure 4 is an approach to categorise aspects for assessment. The shaded area highlights external whilst the non-shaded considerations. highlights internal considerations:

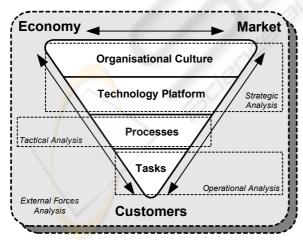


Figure 4: The CRM Readiness Framework

Below are a series of aspects that could be identified by exploring the areas suggested by the framework: External assessment may include:

**Economy:** current economic conditions, growth

and future trends.

Market: current market position, market

changes and future product line up and range of competitor products

and services offered.

**Customers:** future expectations and trends.

*Internal* assessment may include:

Tasks:

Org. Culture: level of boardroom and employee

support, constraints or availability of resources for ongoing commitment.

**Technology:** level of systems integration and/or

compatibility, number of data sources and quality of existing data.

**Processes:** communication channels used, levels of efficiency and computerisation.

level of automation, quality of people and existing alignment for

customer-focus.

This is not an exhaustive list of considerations that could be identified using the framework – all the same, the outcome could be one of two things. Not only could it determine whether an organisation is ready for CRM, it could also outline areas of concern that need to be addressed in order to prepare itself to a state where it is able to implement CRM with confidence.

#### 7 CONCLUSIONS

Twenty-five years ago, Nolan [1979] proposed a sixstage growth model containing the various stages an organisation adopted IT. It is still relevant for modern day CRM. The final stage of his model – 'maturity' – indicates that IT and IS development is closely tied to strategic business planning and as a result, is where organisations need to be at before considering CRM. Organisations need to understand technological capability with the business strategy in mind; this minimises the risk of setting unrealistic objectives that would inevitably result in a poorly performing implementation. After the early CRM 'bandwagon' hype, projects need to be more closely controlled. Return On Investment (ROI) and other similar performance indicators are becoming an essential part of on-going CRM. They enable organisations to dissect and reflect on its short-term results so it is able to sustain conformity to the longterm goals.

Although this paper has discussed some of the more costly aspects of CRM, many organisations that face

limited resources can adopt an incremental approach to CRM or CRM readiness. Basic changes to existing systems, work processes and tasks can yield outstanding results for minimal expenditure – for example; information that answers common customer queries could be added to the company website. Not only will this cut call queue times and enhance service levels, it will also form a pioneering part of the organisation's electronic support strategy for its Customer Service CRM programme. CRM's roots remain in common business sense therefore it is both economical and practical to examine areas of the existing business for basic improvements before venturing onto the more complex and costly aspects of process redesign and technology investment.

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