

CHAPTER 1

INTRODUCTION TO CRM

[Click Here to Buy This Book Now!](#)

CHAPTER OBJECTIVES

By the end of the chapter, you will be aware of:

1. Three major types of CRM: strategic, operational and analytical.
2. Where social CRM fits in the CRM landscape.
3. The changing character of CRM.
4. Several common misunderstandings about CRM.
5. A definition of CRM.
6. Constituencies having an interest in CRM.
7. How CRM is deployed in a number of industries and the not-for-profit context.
8. Four models of CRM.

INTRODUCTION

The expression “Customer Relationship Management (CRM)” has been in use from the early 1990s. Since then, there have been many competing attempts to define the domain of CRM, a number of which appear in Table 1.1.

There are two main clusters of CRM definitions – those of the information technology (IT) industry and those taking a broader strategic or managerial perspective.

IT perspective on CRM

IT companies have tended to use the term CRM to describe the software tools that are used to support the marketing, selling and service functions of businesses. This equates CRM with technology. Although the market for CRM software is now populated with many players, its commercialization was greatly boosted in 1993 when Tom Siebel founded Siebel Systems Inc.

Table 1.1 Definitions of CRM

CRM is an information industry term for methodologies, software and usually Internet capabilities that help an enterprise manage customer relationships in an organized way.¹

CRM is the process of managing all aspects of interaction a company has with its customers, including prospecting, sales, and service. CRM applications attempt to provide insight into and improve the company/customer relationship by combining all these views of customer interaction into one picture.²

CRM is an integrated approach to identifying, acquiring and retaining customers. By enabling organizations to manage and coordinate customer interactions across multiple channels, departments, lines of business, and geographies, CRM helps organizations maximize the value of every customer interaction and drive superior corporate performance.³

CRM is an integrated information system that is used to plan, schedule and control the pre-sales and post-sales activities in an organization. CRM embraces all aspects of dealing with prospects and customers, including the call center, sales force, marketing, technical support and field service. The primary goal of CRM is to improve long-term growth and profitability through a better understanding of customer behavior. CRM aims to provide more effective feedback and improved integration to better gauge the return on investment (ROI) in these areas.⁴

CRM is a business strategy that maximizes profitability, revenue and customer satisfaction by organizing around customer segments, fostering behavior that satisfies customers, and implementing customer-centric processes.⁵

(now part of Oracle). Use of the term CRM can be traced back to that period. Gartner, Inc., the information technology research and advisory firm, reported that annual spending on CRM software reached US\$26.3 billion in 2015, up 12.3% from US\$23.4 billion in 2014, and forecast growth to US\$80 billion by 2025.⁶ CRM spending includes both software licenses and subscriptions, and fees for cloud services including data storage. Large businesses, for example banks, telecommunications firms and retailers, were early adopters of CRM, but the current growth in CRM spending is fueled by adoptions in other sectors of developed economies, such as small and medium-sized businesses and not-for-profit organizations. Spending is also boosted by corporate investment in new IT capabilities that enable them to exploit new forms of customer data (particularly that collected in social media) and allow them to interact with customers in technology-enabled ways such as the use of chatbots.⁷ Additional growth comes from adoptions in developing economies.

Strategic or managerial perspective on CRM

Others take a more strategic or managerial approach to CRM. Rather than emphasizing IT applications, they take the view that CRM is a disciplined approach to managing the customer journey from the initial acquisition of a customer, to that customer becoming a high-spending, profitable advocate, and that technology may or may not have a role in journey management. This equates CRM with customer management strategy, where questions such as the following are answered: which customers should we serve, what sorts of value

propositions should we present to them, and which channels should we use to serve them? Even though technology is not front-and-center in this perspective on CRM, no large organization with millions of customers interacting across multiple channels can implement a customer management strategy cost-effectively without the use of IT support, customer intelligence and carefully designed business processes.

CRM and customer experience management

This managerial perspective on CRM is closely associated with the customer experience (CX) movement.⁸ This movement is an approach to customer management that aims to understand and improve the experience of customers as they interact with business. When a company introduces new technology, new processes or new people into customer-facing roles, customer experience is often affected. CRM technologies can fundamentally change CX for the better because it reinvents what happens at customer touchpoints.

Imagine a sales rep who has always carried hard-copy brochures. He is sitting in front of a qualified prospect with a product query, but who otherwise is ready to buy. The rep goes to his briefcase. The brochure he needs is missing, and he cannot answer the query. “I’ll get back to you,” he says. But he doesn’t. He forgets, and the opportunity is lost. Supported by CRM technology, the interaction is very different. The rep carries a tablet with a current, searchable, product database and the customer’s record. He answers the query successfully. The prospect asks for a firm quote. The rep activates the quotation engine. A quote is prepared interactively with the customer. The rep requests the order. He wins the order. The rep converts the quote to an order by checking a box on a quotation engine screen. The rep shares the screen information with the customer. An electronic signature is obtained. The order is submitted immediately, confirmation is sent to the buyer’s email address and fulfilment process begins.

However, it needs to be said that CX, following a CRM technology implementation, is not always received favorably. Customers who are used to face-to-face calls from sales reps might find they are expected to place orders and pay through a sales portal. Self-service through portals deliver a completely different customer experience. Resistance, resentment and customer churn may result. Weary workers arriving home after a hard day’s labor are confronted with cold calls selling products that aren’t of the slightest interest. Customers of a multi-channel retailing firm find they receive conflicting or duplicated offers from different channels – a clear indication that customer data are held in silos. The avoidance of negative customer experience from ineptly implemented CRM is an important reason for ensuring the voice-of-the-customer is heard during CRM project planning and implementation. It also signals the importance of monitoring customer response after a CRM implementation.

THREE FORMS OF CRM

We can resolve the debate between managerial and technological schools by conceiving of CRM as taking three main forms: strategic, operational, and analytical, as summarized in Table 1.2 and described below.

Table 1.2 Types of CRM

| <i>Type of CRM</i> | <i>Dominant characteristic</i> |
|--------------------|---|
| Strategic | Strategic CRM is the customer-centric business strategy that aims at winning, developing and keeping profitable customers. |
| Operational | Operational CRM focuses on the integration and automation of customer-facing processes such as selling, marketing and customer service. |
| Analytical | Analytical CRM is the process through which organizations transform customer-related data into actionable insight for use in either strategic or operational CRM. |

STRATEGIC CRM

Strategic CRM is focused upon the development of a customer-centric business culture dedicated to winning, developing and keeping profitable customers by creating and delivering better value propositions and customer experiences than competitors. The culture is reflected in leadership behaviors, the design of formal systems of the company and the myths and stories that are created within the firm. In a customer-centric culture you would expect resources to be allocated where they would best enhance customer value, reward systems to promote employee behaviors that enhance customer engagement, satisfaction and retention, and customer information to be collected, shared and applied across the business. The heroes of customer-centric businesses deliver outstanding value or service to customers. Many businesses claim to be customer-centric, customer-led, customer-focused, or customer-oriented but few are. Indeed, there can be very few companies of any size that do not claim that they are on a mission to satisfy customer requirements profitably. Customer-centricity competes with other business logics. Philip Kotler identifies three other major business logics or orientations: product, production, and selling.⁹

Product-oriented businesses believe that customers choose products with the best quality, performance, design or features. We use the term product in a very broad sense to include anything that is offered to a customer for purchase. Products, in this sense, extend beyond tangible goods (like a cabbage or an automobile) to also include intangible-dominant services (like massage or accountancy services), experiences (like a kayak tour or a team-building weekend) and bundles of tangibles and intangibles (like a packaged vacation). In short, a product is any offer (or offering) that delivers value to customers.¹⁰ Many new business start-ups are also product-oriented. In product-oriented firms, it is common for the customer's voice to be missing when important marketing, selling or service decisions are made. Little or no customer research is conducted, sometimes because the offering is so innovative it is very tricky for customers to evaluate the offer. Management therefore makes assumptions about what customers want and/or provides visionary leadership for the market. Perhaps the most iconic example of product-orientation is Apple. Apple has created huge demand for products that customers did not know they needed. Leading fashion houses also tend to be product-oriented and try to establish new fashion trends or a distinctive look rather than respond to consumer research. Also known for product-orientation is the design-led consumer electronics firm Bang & Olufsen, and engineering firms GE and Rolls-Royce. However, these

are exceptional. Product-oriented companies risk over-specifying, or over-engineering for the requirements of the market, and therefore risk being too costly for many customer segments. The subset of relatively price-insensitive customers who marketers dub “innovators,” are more likely to respond positively to company claims about product excellence, but they are a relatively small segment, perhaps 2.5% of the potential market.¹¹

Production-oriented businesses focus on operational excellence.¹² They seek to offer the customers the best value for money, time and or effort. Consequently, they strive to keep operating costs low, and develop standardized offers and routes to market. Complexity, customization and innovation are very costly and unappealing to production-oriented businesses. Production-oriented firms rarely are first to market with truly innovative products. They focus their innovation on supply chain optimization and simplification. They tend to serve customers who want “good-enough,” low-priced products and services. Production-oriented businesses choose not to believe that customers have unique needs or wants. It is possible to be highly profitable by being the lowest cost market participant, for example Wal*mart. There is a price and convenience segment in most markets, but the majority of customers have other requirements. Moreover, an excessive focus on operational efficiency might make a business blind to disruptive changes just over the horizon; making cheap products that no one wants to buy is not a sustainable strategy.

Sales-oriented businesses make the assumption that if they invest enough in advertising, selling, public relations (PR) and sales promotion, customers will be persuaded to buy. Very often, a sales orientation follows a production-orientation. The company produces low-cost products and then has to promote them heavily to shift inventory – a “make and sell” approach. The deal-maker and persuader is king in such firms. In markets that are growing rapidly, such an approach can promote strong market share growth and attendant economies of scale. Here the risk is that the firm finds its offer is overtaken by more innovative competitors and it spends increasing amounts pushing products that fewer and fewer customers find desirable.

The business orientation that is most compatible with strategic CRM is **customer or market-orientation**. Such companies share a set of beliefs about putting the customer first. They collect, disseminate and use customer and competitive information to develop better value propositions for customers. A customer-centric firm is a learning firm that constantly adapts to customer requirements and competitive conditions. There is evidence that customer-centricity correlates strongly with business performance.¹³

Many managers would argue that customer orientation must be right for all companies. However, at different stages of market or economic development, other orientations may have stronger appeal.

OPERATIONAL CRM

Operational CRM uses technologies to automate customer-facing business processes. CRM software applications that automate marketing, selling and service processes result not only in efficiency and effectiveness gains, but may also improve customer experience and engagement. Some of the major forms of operational CRM appear in Table 1.3.

Although we cover the technological aspects of operational CRM in Chapters 8, 9 and 10, it is worth making a few observations at this point.

CASE ILLUSTRATION 1.1

STRATEGIC CRM AT HONDA AUSTRALIA¹⁴

Honda manufactures and markets a range of motorcycle, power equipment and marine products. The Honda brand has a reputation for quality, technology and performance. Honda Australia recognized that while it was diligently nurturing individual relationships with partners, dealers and customers, each segment was closed off from the others. Inevitably, this meant valuable customer data being trapped in pockets within the organization and not available to potential users. Honda realized that consolidating and freeing up the flow of data could have a huge positive impact on the effectiveness and efficiency of the business. Honda developed a strategy themed *Customers For Life*, based on data integration and a whole-of-customer view. Honda found customer-related data in numerous spreadsheets and databases across the business. These were integrated into a single CRM platform, supplied by Salesforce.com, and hosted in the cloud. This was enriched with customer information from Honda Australia Rider Training (HART), Automobile Association memberships, and several other sources to create a single comprehensive data source and reporting system. Honda then removed responsibility for managing customer relationships from individual departments, and moved it to a newly formed CRM unit. An integrated view of the customer has allowed Honda to stop different operating units from bombarding customers with multiple communications. Instead, Honda now consolidates outbound customer contact into meaningful and relevant communications, and accurately measures communications effectiveness. Honda has built workflows into customer touch-points, for example customer satisfaction surveys, guaranteeing follow-up of any negative comments. The immediate effect was a reduction in complaint resolution time from months to minutes. Honda has shifted closer to becoming a unified brand that really knows and understands its customers.

Marketing automation

Marketing automation (MA) applies technology to marketing processes.

Campaign management (CM) modules allow marketers to use customer-related data in order to develop, execute and evaluate targeted communications and offers. CM applications generally aim to lift customer engagement with the brand – be that a product brand or an organizational brand. These campaigns are predominantly digital and range from simple SMS or email campaign messaging to more sophisticated multi- or omni-channel programs that encourage engagement at various stages of the customer journey. We have more to say about customer engagement in Chapter 4.

Customer segmentation for campaigning purposes is, in some cases, possible at the level of the individual customer, enabling unique communications to be designed.

In multi-channel environments, campaign management is particularly challenging. Some fashion retailers, for example, have multiple transactional channels including free-standing stores, department store concessions, one or more branded websites, home shopping catalogs, catalog stores and perhaps even a TV shopping channel. Some customers may be unique to a single channel, but many will be multi-channel prospects, if not already customers of several channels. Integration of communication and offer strategies, and evaluation of performance, requires a substantial amount of technology-aided coordination across these channels. We

Table 1.3 Operational CRM – some applications*Marketing automation*

Campaign management

Event-based (trigger) marketing

Marketing optimization

Sales force automation

Account management

Lead management

Opportunity management

Pipeline management

Contact management

Product configuration

Quotation and proposal generation

Service automation

Case (incident or issue) management

Customer communications management

Queuing and routing

Service level management

discuss how modern marketing clouds provide such coordination across online channels in the introduction to Section C that precedes Chapter 8.

Event-based, or trigger, marketing is the term used to describe messaging and offer development to customers at particular points-in-time. An event triggers the communication and offer. Event-based campaigns can be initiated by customer behaviors, or contextual conditions. A call to a contact center is an example of a customer-initiated event. When a credit-card customer calls a contact center to enquire about the current rate of interest, this can be taken as indication that the customer is comparing alternatives and may switch to a different provider. This event may trigger an offer designed to retain the customer. Examples of contextual events are the birth of a child or a public holiday. Both of these indicate potential changes in buyer behavior, initiating a marketing response. Event-based marketing also occurs in the business-to-business context. The event may be a change of personnel on the customer-side, the approaching expiry of a contract, or a request for information (RFI).

Real-time marketing combines predictive modeling and work flow automation enabling companies to make relevant offers to customers as they interact with different touchpoints such as website and retail outlet. As consumers share more data with companies, and as the company's ability to analyze that data improves, online and mobile marketing increasingly occurs in real-time. Customer behavior online is married to their profiles, and the profiles of similar people, to enable firms to predict which communication and offers are most likely to

lead to a desired outcome: this is often called the NBO or Next Best Offer and is refreshed in real-time. E-retailers such as Amazon continually refresh recommendations as a result of customer searches, and Google changes the advertising it pushes to searchers as a function of their location and search behaviors.

More information about marketing automation appears in chapter 8.

Sales force automation

Sales force automation (SFA) was the original form of operational CRM. SFA systems are now widely adopted in B2B environments and are seen as an “imperative”¹⁵ that offers “competitive parity.”¹⁶

SFA applies technology to the management of a company’s selling activities. The selling process can be decomposed into a number of stages such as lead generation, lead qualification, lead nurturing, needs discovery, proposition development, proposal presentation, negotiation and closing the sale. SFA software can be configured so that it is modeled on the selling process of any industry or organization.

Automation of selling activities is often linked to efforts to improve and standardize the selling process. This involves the implementation of a sales methodology. Sales methodologies allow sales team members and management to adopt a standardized view of the sales cycle, and a common language for discussion of sales issues.

SFA software enables companies to assign leads automatically and track opportunities as they progress through the sales pipeline towards closure. Opportunity management lets users identify and progress opportunities-to-sell from lead status through to closure and beyond, into after-sales support. Opportunity management software usually contains lead management and sales forecasting applications. Lead management applications enable users to qualify leads and assign them to the appropriate salesperson. Sales forecasting applications may use transactional histories and salesperson estimates to produce estimates of future sales.

Contact management lets users manage their communications program with customers. Customer records contain customer contact histories. Contact management applications often have features such as automatic customer dialing, the salesperson’s personal calendar and email functionality.

Product configuration applications enable salespeople, or customers themselves, automatically to design and price customized products, services or solutions. Configurators are useful when the product is particularly complex, such as IT solutions. Configurators are typically based on an “if ... then” rules structure. The general case of this rule is “If X is chosen, then Y is required or prohibited or legitimated or unaffected.” For example, if the customer chooses a particular feature (say, a particular hard drive for a computer), then this rules out certain other choices or related features that are technologically incompatible or too costly or complex to manufacture.

Quotation and proposal generation allow the salesperson to automate the production of prices and proposals for customers. The salesperson enters details such as product codes, volumes, customer name and delivery requirements, and the software automatically generates a priced quotation. This functionality is often bundled together with product configuration in what is known as CPQ – Configure, Price, Quote.

CASE ILLUSTRATION 1.2

SALES FORCE AUTOMATION AT ROCHE

Roche is one of the world's leading research-based healthcare organizations, active in the discovery, development and manufacture of pharmaceuticals and diagnostic systems. The organization has traditionally been product-centric and quite poor in the area of customer management. Roche's customers are medical practitioners prescribing products to patients. Customer information was previously collected through several mutually exclusive sources, ranging from personal visits to handwritten correspondence, and not integrated into a database, giving incomplete views of the customer. Roche identified the need to adopt a more customer-centric approach to better understand their customers, improve services offered to them and to increase sales effectiveness. Roche implemented a sales force automation system where all data and interactions with customers are stored in a central database, which can be accessed throughout the organization. This has resulted in Roche being able to create customer profiles, segment customers and communicate with existing and potential customers. Since implementation Roche has been more successful in identifying, winning and retaining customers.

More information about sales force automation appears in Chapter 9.

Service automation

Service automation involves the application of technology to customer service operations. Service automation helps companies to manage their service operations, whether delivered through call center, contact center, field-service, web, chatbot or face-to-face with high levels of efficiency, reliability and effectiveness.¹⁷ Service automation software enables companies to handle in-bound and out-bound communications across all channels. Software vendors claim that this enables users to become more efficient and effective by reducing service costs, improving service quality, lifting productivity, enhancing customer experience and lifting customer satisfaction.

Service automation differs significantly across contexts. The first point of contact for service of consumer products is usually a retail outlet or call center. People working at these touchpoints often use online diagnostic tools that help identify and resolve customers' problems. A number of technologies are common to service automation. Call routing software can be used to direct inbound calls to the most appropriate handler. Technologies such as interactive voice response (IVR) enable customers to interact with company computers. Customers can input to an IVR system after listening to menu instructions either by telephone keypad (key 1 for option A, key 2 for option B), or by voice. If first contact problem resolution is not possible, the service process may then involve authorizing a return of goods, or a repair cycle involving a third-party service provider. Increasingly, firms are integrating artificial intelligence to this process and ever-improving chatbots – robots capable of conversation with customers – are being deployed to reduce costs and ensure consistent service quality standards.

Most large organizations now respond to customer complaints in social media such as Facebook and Twitter in close to real-time. Social media have greatly increased the risks of consumer complaints remaining unanswered. Real-time engagement in the social conversation enables companies to intervene immediately and resolve an issue before a social media storm erupts. Some companies employ people and/or technologies to monitor and respond to tweets and other social media content. Other participants in the conversation, for example other users of Twitter, might also be able to contribute to the resolution of a consumer's problem, through what is known as crowd-sourced customer service.

CASE ILLUSTRATION 1.3

CUSTOMER SERVICE AT JETBLUE

JetBlue is a US low-cost airline known not only for its prices, but for friendly and helpful customer service, winning multiple JD Power customer service awards. It created its first Twitter account in 2007.¹⁸ Initially, like so many new technology users, the company felt that Twitter would be a sales promotion channel. Indeed, JetBlue has been imaginative in building its following and promoting ticket sales over the new channel. As its competence grew, JetBlue was able to use Twitter for real-time customer service. One story is about a customer who'd tweeted that he had left sunglasses at one of the stages before boarding. The head office team monitoring the Twitterfeed arranged for them to be found and returned to the passenger prior to boarding the aircraft. JetBlue's active engagement with customers over Twitter has improved its ability to feel the experience as a customer does and make necessary improvements quickly.

Service automation for large capital equipment is quite different. This normally involves diagnostic and corrective action taken in the field, at the location of the equipment. Examples of this type of service include industrial air conditioning and refrigeration. In these cases, service automation may involve providing the service technician with diagnostics, repair manuals, inventory management and job information on a tablet or other mobile device. This information is then synchronized at regular intervals to update the central CRM system. An alternative is for diagnostics to be built into the equipment, and back-to-base issue reporting to be automated. Rolls-Royce aero-engines, for example, are offered with a service contract that involves Rolls-Royce engineers monitoring engines in flight to help airlines maximize efficiencies, reduce service cost and most importantly, reduce downtime of the aircraft through preventative service interventions. Rolls-Royce calls this "Power-by-Hour." GE, its chief competitor in aircraft engines, offers a similar service. The Internet of Things (IoT) is accelerating this trend by providing remote diagnostics into items such as locomotives and industrial tires. In addition to diagnostics for after sales service, IoT provides real-time location data. Firms can therefore use smart systems, powered by IoT data, to enhance their offers. We have more to say about the IoT in Chapters 12 and 15.

Turning products into services, or developing combined “product-service systems,”¹⁹ is known as “servitization.” This is not a new strategy; indeed, IBM famously made a transition from selling computers to providing solutions and systems. In all such cases, the nature of the customer relationship changes. Modern operational CRM systems permit the delivery of such solutions in a cost-effective manner.

Service automation is equally prominent in the services sector and is often built on the principle of “zero touch” or no human interaction. Indeed, the core service offer may be delivered by automation. The Google search engine, and the in-cloud data storage service Dropbox are examples. Service automation is also used to enhance core offers. The mobile apps for retail banks were initially created to reduce the cost of servicing customers; however, many customers now use apps as their prime interface with the bank. When app use becomes a highly valued part of the customer’s relationship with a bank, it becomes less of an enhancement for the customer and more part of the core offer.

Many companies use a combination of direct and indirect channels especially for sales and service functions. When indirect channels are employed, operational CRM supports this function through partner relationship management (PRM). This technology allows partners to communicate with the supplier through a portal, to manage leads, sales orders, product information and incentives.

More information about service automation appears in Chapter 10.

ANALYTICAL (OR ANALYTIC) CRM

Analytical CRM, also called analytic CRM, is concerned with capturing, storing, extracting, integrating, processing, interpreting, distributing, using and reporting customer-related data to enhance both customer and company value.

Analytical CRM depends on customer-related information. Customer-related data may be found in several enterprise-wide repositories: sales data (purchase history), financial data (payment history, credit score), marketing data (campaign response, loyalty scheme data) and service data. To these internal data can be added data from external sources including business partners with whom companies have data sharing agreements (subject to customer acceptance) and third party organizations such as research firms that provide geo-demographic and life-style data. These are typically structured datasets held in relational databases. A relational database is like an Excel spreadsheet where all the data in any row is about a particular customer, and the columns report a particular variable such as name, postcode and so on. See Chapter 11 for more detail. With the application of data mining tools, a company can interrogate the data and advance their customer relationship objectives.

Although most companies depend on these conventional forms of customer-related data to support strategic and operational CRM, there has been a recent revolution in customer insight spawned by companies’ use of “big data”. The expression “big data” has been around since 2000, but it’s only since 2010 that businesses have been able to manage the large volumes of ever-changing big data. According to IBM, big “data comes from everywhere: from sensors used to gather climate information, posts to social media sites, digital pictures and videos posted online, transaction records of online purchases, and from cell phone GPS signals to

name a few.”²⁰ Big data thus extends beyond structured data, including unstructured data of all varieties: text, audio, video, click streams, log files and more. The tools for searching, making sense of, and acting on unstructured data differ from those available for data-mining structured datasets. Some technology firms offer what are called “social CRM” solutions that are designed to help users understand and exploit big data. We discuss this further below.

Analytical CRM delivers insights that support intelligent strategic and operational CRM decisions, including answers to questions such as “which customers should we serve?” and “what offer should we make?” From the customer’s point of view, analytical CRM can deliver timely, customized, and appropriate solutions to the customer’s problems, thereby enhancing customer satisfaction and loyalty. From the company’s point of view, analytical CRM offers the prospect of more powerful cross-selling and up-selling programs, and more effective customer retention and customer acquisition programs.

CASE ILLUSTRATION 1.4

ANALYTICAL CRM AT AXA SEGUROS E INVERSIONES (AXA)²¹

Spanish insurer AXA Seguros e Inversiones (AXA) has revenues of over €1.8 billion (US\$2.3 billion), 2 million customers and is a member of global giant The AXA Group.

AXA runs marketing campaigns in Spain for its many products and services. The company wanted a better understanding of its customers, in order to be able to make more personalized offers and promote customer loyalty.

AXA used CRM vendor, SAS’s, data-mining solution to build a predictive policy cancellation model. The solution creates profiles and predictive models from customer data that enable more finely targeted campaign management, call center management, sales force automation and other activities involved in customer relationship management.

The model was applied to current and cancelled policies in various offices, so as to validate it before deploying it across Spain. Moreover, the model was used to create two control groups (subdivided into high and low probability) that were not targeted in any way, while other groups, similarly divided into high and low probability, were targeted by various marketing actions. The outcome was that the auto insurance policy cancellation rate was cut by up to nine percentage points in specific targeted segments.

With the customer insight obtained from the model, AXA is now able to design and execute personalized actions and customer loyalty campaigns tailored to the needs and expectations of high-value customers.

WHERE DOES SOCIAL CRM FIT?

We have identified three different types of CRM – strategic, operational and analytical. Another expression that has recently found widespread traction is “social CRM.” This term was first used by technology firms to describe tools they had developed to identify, capture, interpret and exploit data found in social media platforms such as Facebook and Twitter. More recently, these social CRM tools have become integrated into more comprehensive cloud-based solutions.

CRM as a management practice was popularized by advances in database technology that allowed companies to create a single view of the customer by integrating data from various organizational silos. The data that originally fueled CRM was largely generated and held within organizations' operational systems: sales, call centers, customer service, etc. Now, data about customers is as likely to be found in customers' Facebook or Twitter activities and user-generated content posted to YouTube. There is, therefore, a desire to integrate organization-owned data with that generated socially to create a more comprehensive view of the customer.

The customer-related data residing in social media can be used by companies to help them manage customer relationships. It is a relatively simple matter to establish a corporate Facebook page and use it to acquire new customers (for example, by viral distribution of content), sell product, and service customer queries. It is an altogether different matter to select and use social CRM tools that enable a business to detect sentiment in unstructured data such as Twitter feeds and YouTube video content, and take appropriate strategic actions.

We do not regard social CRM as a fundamental type of CRM, equivalent to strategic, operational and analytical. Social CRM focusses on different forms of customer-related data, but that data are used for the same strategic and operational customer management purposes as conventional siloed organizational data.

We discuss social CRM in more detail in Chapter 8.

THE CHANGING FACE OF CRM

CRM today has evolved dramatically from the early systems discussed above. We can think of this earlier form of CRM as CRM 1.0. In the early years, the customer data that provided the foundation for strategic CRM decisions, and the insights for campaigns and events delivered by operational CRM, were mostly sourced from corporate silos – sales, marketing, service and finance. There was some enrichment of data from third parties such as market research firms and government sources. The data, which were typically structured, were stored in corporate databases behind firewalls, and CRM functionality was delivered through software applications that were licensed from vendors and loaded onto company servers. This type of CRM implementation is called on-premise CRM. Analytics included established statistical procedures such as cluster analysis (for market segmentation), and logistic regression (to predict buy/not buy).

Today, the quantity and character of customer data has changed significantly. Although businesses still rely on a solid foundation of internal data to underpin their customer management strategies, there is also a massive amount of potentially valuable additional data in big data sources. A significant portion of that data is unstructured, and contemporary users of CRM are beginning to find ways to exploit that data for customer management purposes. Analytics for unstructured data such as natural language processing and video analytics are available, and machine learning applications such as neural networks and artificial intelligence are available to find meaning in large and apparently amorphous datasets. Nowadays, customer data is typically stored in the cloud – in global or regional data centers – and accessed through CRM software that is delivered as a service though the Internet. We can think of this form of CRM as CRM 2.0. This software as a service (SaaS), or cloud, model is the dominant form of CRM now, particularly in small-and medium-sized businesses and not-for-profits. SaaS adopters generally pay a monthly fee per user instead of buying an outright software license.

Table 1.4 How CRM has changed over time

| | CRM 1.0 | CRM 2.0 |
|------------------------------|----------------------------------|---|
| <i>Period</i> | 1990 > | 2010 > |
| <i>Customer data sources</i> | Mostly internal corporate silos | Internal silos plus external big data sources |
| <i>Data character</i> | Structured | Structured and unstructured |
| <i>Data storage</i> | Corporate servers | Cloud |
| <i>Analytics</i> | Standard multivariate statistics | Standard multivariate statistics plus artificial intelligence |
| <i>Mobile CRM access</i> | Rare | Common |
| <i>Customer interactions</i> | Pre-planned | Real-time |
| <i>Dominant CRM model</i> | On-premise | Software as a service |

Some of the differences between CRM 1.0 and CRM 2.0 are summarized in Table 1.4. These will be explored further in future chapters.

MISUNDERSTANDINGS ABOUT CRM

As with all major management initiatives, there are a number of common misunderstandings about the nature of CRM. Four of these are outlined below.

- 1 **CRM is about making sales teams more effective and efficient.** This is certainly a goal of many sales force automation implementations, particularly in B2B contexts, but operational CRM is much wider in scope and includes automation of marketing and sales functions. During the early years of CRM, sales force automation modules were often the first to be adopted.
- 2 **CRM is a new term for database marketing.** Database marketing is concerned with building and exploiting high-quality customer databases for marketing purposes. Companies collect data from a number of sources. These data are verified, cleaned, integrated and stored on computers, often in data warehouses or data marts. They are then used for marketing purposes such as customer segmentation, running campaigns and events, and conducting market research. CRM is much wider in scope than database marketing.
- 3 **CRM is about loyalty schemes.** Loyalty schemes are but one part of a wide range of customer management initiatives. They are common in many industries: car hire, airlines, food retail and hotels, for example. Customers accumulate credits such as points from purchases. These are then redeemed at some future time. Many loyalty schemes require new members to complete an application form when they join the program. This demographic information is typically used together with purchasing data to help companies become more effective at customer communication and offer development. Whereas some CRM implementations are linked to loyalty schemes, not all are. Loyalty schemes may play two roles in CRM. First, they generate data that can be used to guide customer acquisition, retention and development. Second, loyalty schemes may serve as

an exit barrier. Customers who have accumulated credits in a scheme may be reluctant to exit the relationship. The credits accumulated reflect the value of the investment that the customer has made in the scheme, and therefore in the relationship.

- 4 **CRM is an IT issue.** In the authors' experience, this is the most serious of the misunderstandings. There is no doubt that IT is a necessary enabler of CRM in most organizations given the need to store, analyze and distribute huge amounts of data quickly throughout the organization and its business partners. CRM technology keeps advancing and can be costly. It is therefore too easy for senior management to look to the IT function for CRM leadership. Too many CRM implementations are framed at the outset as IT initiatives, rather than broader strategic initiatives. It is critical for businesses to be clear about what they are trying to achieve with CRM – those business goals will determine which parts of the business are involved in CRM's acquisition and deployment. CRM technology provides tools that can be used to generate better value for customers and company alike. However, two other important parts of most CRM projects are people and process. People develop and implement the processes that are enabled by the IT. IT cannot compensate for bad processes and inept people. However, not all CRM initiatives involve IT investments. An overarching goal of many CRM projects is the development of relationships with, and retention of, highly valued customers. This may involve behavioral changes in customer contact employees, education of call center staff, and a focus on empathy and reliability from salespeople. IT may play no role at all.

DEFINING CRM

Against this background of three types of CRM, and the misunderstandings about CRM, it is no easy matter to settle on a single definition of CRM. However, we can identify a number of core CRM attributes, and integrate them into a definition that underpins the rest of this book.

CRM is the core business strategy that aims to create and maintain profitable relationships with customers, by designing and delivering superior value propositions. It is grounded on high-quality customer-related data and enabled by information technology.

CRM is a “core business strategy.” This clearly denotes that CRM is not just about IT. CRM is a basic business discipline focused on managing the firm's relationships with customers.

CRM “aims to create and maintain profitable relationships with customers.” This implies that customers go through a series of stages in their relationship with a supplier; CRM practitioners call this a customer life cycle or customer journey. The “create” phase means that CRM is used to acquire or on-board a new customer. The “maintain” phase means that CRM is used to retain the customer. The qualification that the relationship should be “profitable” indicates that not all potential customers may be worth acquiring or retaining. Some customers may be so costly to acquire that they have no prospect of turning a profit; equally, the costs of maintaining a relationship may prove to be too heavy, meaning that customer managers may implement strategies for delisting or sacking customers. The definition suggests that the basic strategy for building and maintaining relationships is “designing and delivering superior value

propositions.” Businesses develop value propositions (offers or offerings) and present and promote them to customers through communication and distribution channels. When customers own or use these offers they experience value. Businesses that succeed ensure that the value customers experience from use and ownership is superior to what they experience from competitive offerings.

CRM is “grounded on high quality customer-related data and enabled by information technology.” “High quality customer-related data” underpins strategic CRM decisions (for example, which customers should we serve?) and operational CRM decisions (for example, what offer should we make in what channel to which customer?) We emphasize the words “high quality.” Quality is always relative to purpose. For example, when a customer contacts a call-center with a specific query, the agent must have access to that particular customer’s record. However, if operational CRM is being used to run a campaign into a cohort of customers, it is desirable but not essential that the message be customized for each particular customer. Access to “customer-related data” allows selling, marketing and service functions to be aware of each other’s interactions with customers. Furthermore, back office functions such as operations and finance can learn from and contribute to customer-related data. “Customer-related data” allows suppliers and other members of a business’s network of partners, for example distributors, value-added resellers, and agents to align their efforts with those of the focal company.

Historically, most companies were located close to the markets they served and knew their customers intimately. Very often there would be face-to-face, even day-to-day, interaction with customers in which knowledge of customer requirements and preferences grew. However, as companies have grown larger, they have become more remote from the customers they serve. The remoteness is not only geographic; it may be cultural also. Even some of the most widely admired American companies have not always understood the markets they served. Disney’s development of a theme park near to the French capital, Paris, was not an initial success because they failed to deliver to the value expectations of European customers. For example, Disney failed to offer visitors alcohol on-site. Many Europeans, however, are accustomed to enjoying a glass or two of wine with their food.

Geographic and cultural remoteness, together with business owner and management separation from customer contact, means that many companies, even small companies, do not have the intuitive knowledge and understanding of their customers so often found in micro-businesses such as neighborhood stores and hairdressing salons. This has given rise to demand for better customer-related data, a cornerstone of effective CRM.

Underpinning this “core business strategy” in the majority of cases is IT – software applications and hardware. Software provides analytical capability and operational support for marketing, sales and service functions. Hardware is also important to CRM. Sales people and field service technicians are heavy users of mobile devices; contact center agents interact with customers using telephony and desktop hardware. Customers may also be using desktop and portable devices to contact companies.

In summary, we take the view that CRM is a technology-enabled approach to management of the customer journey. Most CRM initiatives expect to have impact on the costs-to-serve and revenue streams from customers. The use of technology also changes the customer’s experience of transacting and communicating with a supplier. For that reason, the customer’s perspective on CRM is an important consideration in this book. CRM influences customer experience, and that is of fundamental strategic significance.

CRM CONSTITUENCIES

There are several important constituencies having an interest in CRM:

- 1 **Companies** implementing CRM. Early adopters were larger companies in financial services, telecommunications and manufacturing, in the US and Europe. Medium-sized businesses have followed. The CRM message is reaching smaller companies, other worldwide markets, not-for-profits and new business start-ups.
- 2 **Customers and partners** of those companies. The customers and partners of companies that implement CRM are a particularly important constituency. Because CRM influences customer experience, it can impact on customer satisfaction, customer engagement and customer loyalty.
- 3 **CRM software houses.** Major CRM brands at the time of writing include Oracle, Salesforce.com, Microsoft Dynamics and Adobe. However, there are hundreds of other players, some of which specialize in particular sub-disciplines of CRM such as analytics, social CRM, marketing automation and lead management. There has been considerable consolidation of CRM software developers over the years. IBM has acquired analytics specialists as it built a comprehensive analytical CRM capability. IBM now offers Watson Campaign Automation. Oracle acquired and integrated many solutions providers into its customer experience cloud.
- 4 **Social media players.** Facebook, Twitter and other social media platforms are building enormous communities that generate huge amounts of potentially valuable data about people's preferences, activities, friends and wants. Technology firms developing social CRM applications are competing to offer clients functionality that enables them to learn from and use social media data for customer management purposes.
- 5 **Vendors of CRM hardware and infrastructure.** Hardware and infrastructure vendors provide the technological foundations for CRM implementations. They supply technologies such as servers, computers, hand held and mobile devices, call center hardware, and telephony systems.
- 6 **Management consultants.** Consultancies offer clients a diverse range of CRM-related capabilities such as strategy, business, application and technical consulting. Consultants can help companies implementing CRM in several ways: choosing between different vendors, or developing implementation plans and project management as the implementation is rolled out. Most CRM implementations are composed of a large number of smaller projects, for example: systems integration, data quality improvement, process engineering and culture change. Major consultancies such as McKinsey, Bearing Point, and CGEY (Cap Gemini Ernst and Young) all offer CRM consultancy. Accenture has bought some advertising companies and is building a comprehensive one-stop shop for customer management, mixing agency, CRM systems and analytics capabilities. Smaller companies sometimes offer specialized expertise. Peppers and Rogers provide strategy consulting. Dunnhumby is known for its expertise in data science in fast-moving consumer goods.

COMMERCIAL CONTEXTS OF CRM

CRM is practiced in a wide variety of commercial contexts, which present a range of different customer relationship management problems. We'll consider four contexts: banks, automobile manufacturers, technology solution vendors and consumer goods manufacturers.

- **Banks** deal with a large number of individual retail customers. They want CRM for its analytical capability to help them manage customer defection (churn) rates and to enhance cross-sell performance. Data-mining techniques can be used to identify which customers are likely to defect, what can be done to win them back, which customers are hot prospects for cross-sell offers, and how best to communicate those offers. Data mining can also improve predictions of payment default. Banks often want to win a greater share of customer spend (share of wallet) on financial services. In terms of operational CRM, most banks initially transferred service out of branches into contact centers and online; a second wave of CRM innovation have involved banks in delivering service by mobile applications (apps). This is proving popular with some customer segments but banks are finding they now compete against new players from outside the traditional banking industry including Apple Pay, Google Wallet, PayPal, Simple, Moven, T-Mobile and WeChat. Banks have been slow to introduce innovative technologies that digitize the mobile customer experience, allowing these nonbanking competitors to gain significant share of the fee stream associated with retail payments.
- **Auto manufacturers** sell through distributor/dealer networks. They have little contact with the end-user owner or driver. They use CRM for its ability to help them develop better and more profitable relationships with their distribution networks and to help their dealers improve their customer management. Being physically disconnected from drivers, they have built websites that enable them to interact with these end-users and generate qualified sales leads for the dealer network. This has improved their knowledge of customer requirements and builds capability throughout their distribution network. Ultimately, they hope CRM will enable them to win a greater share of end-user spend across the car purchase, maintenance and replacement cycle.
- **Technology solution vendors** manufacture or assemble complex bundles of hardware, software and implementation that are generally sold by partner organizations. Historically, small innovative software developers have traditionally partnered with established companies to obtain distribution and sales. Dell's direct-to-customer (DTC) channel strategy for PCs and Apple's for smartphones have bypassed this practice. This process of avoiding established channels and going DTC is called disintermediation. CRM helps these DTC companies to collect customer information, segment their customer base, automate their sales processes with product configurator software and deliver their customer service online. Modern solutions are often entirely web /software based so the DTC model is increasingly popular.
- **Consumer goods manufacturers** deal with the retail trade. They use CRM to help them develop profitable relationships with retailers. CRM helps them understand costs-to-serve and customer profitability. Key account management practices are applied to strategically significant customers. IT-enabled purchasing processes deliver higher levels of accuracy in stock replenishment. Manufacturers can run CRM-enabled marketing campaigns that are highly cost-effective.

THE NOT-FOR-PROFIT CONTEXT – THE “THIRD SECTOR”

Most of this chapter has been concerned with CRM in the for-profit context. However, CRM is also found in the not-for-profit context. The “third sector,” the not-for-profit community (charity, non-government organization (NGO), education and government), is very active in implementing CRM. Universities wish to maintain relationships with alumni, charities campaign to raise income and government increasingly is interested in changing citizens’ behavior gently, through “nudges” (behavioral economics). It is sometimes difficult to translate concepts developed for commercial, profit-centric organizations to the third sector. One key element of strategic CRM is the customer selection and targeting process: there are some customers for whom a business does more, and some customers for whom it does less. Governments interact with citizens, not customers. Governments provide services to all citizens, but typically provide more services to the most vulnerable. Operational CRM solutions are often used to improve government service delivery. For example, the UK’s annual licensing

CASE ILLUSTRATION 1.5

THE UK DVLA

The UK’s Department of Vehicle Licensing Agency (DVLA) organizes the annual licensing of road vehicles. It has radically overhauled this process twice in the past 15 years or so. Traditionally, car owners had to buy a physical “tax disc” to display on the windscreen. Before the disc was issued, owners had to prove that they were insured and that their vehicle was roadworthy by passing a test at an authorized service point. The process for most citizens then consisted of waiting for hard-copy papers to be mailed from the DVLA as the tax disc reached its expiry, and taking a certificate of insurance, and roadworthiness certificate to a post office, where other forms would be completed, evidence presented and payment made. The physical disc would then be supplied. A call center in Wales managed a large volume of calls to support car owners as they engaged this process. The center was frequently overwhelmed by call volumes and customer experience suffered.

In the first wave of change, the DVLA re-engineered the process by building an online database comprising roadworthiness certificates generated at the testing centers and data supplied by all car insurers to verify that a vehicle is insured. The about-to-lapse notification was still sent to the car owner, who went online and entered the reference number on the notification; computer systems verified that the vehicle was insured and roadworthy, the owner was asked to pay online and the tax disc came via the post in a few days. For government, compliance was improved, and costs reduced. For car owners, time, effort and errors are taken out of the process.

The second wave of change omits the issuing of a physical disc altogether. The citizen still completes the annual licensing process as described in wave one above, but police and other authorities can enter a vehicle registration number into a database to ensure compliance. This type of online self-service is an example of how operational CRM (citizen relationship management, rather than customer relationship management) systems can improve outcomes for both parties in a not-for-profit context.

of private road vehicles is online, and charities segment donors by regularity and size of gift, trying to migrate small donors up the value ladder to major bequests.

MODELS OF CRM

A number of comprehensive CRM models have been developed. We introduce four of them here.

The IDIC model

The IDIC model was developed by Don Peppers and Martha Rogers, of the Peppers & Rogers Group and has featured in a number of their books.²² The IDIC model suggests that companies should take four actions in order to build closer one-to-one relationships with customers:

- **Identify** who the customers are and build a deep understanding of them.
- **Differentiate** customers to identify which customers have most value now and which offer most for the future.
- **Interact** with customers to ensure that a deep understanding of customer expectations and customers' relationships with other suppliers or brands.
- **Customize** the offer and communications to ensure that the expectations of customers are met.

The CRM value chain

Francis Buttle's model of CRM, shown in Figure 1.1, consists of five primary stages and four supporting conditions leading towards the end goal of enhanced customer profitability.²³ The primary stages of customer portfolio analysis, customer intimacy, network development,

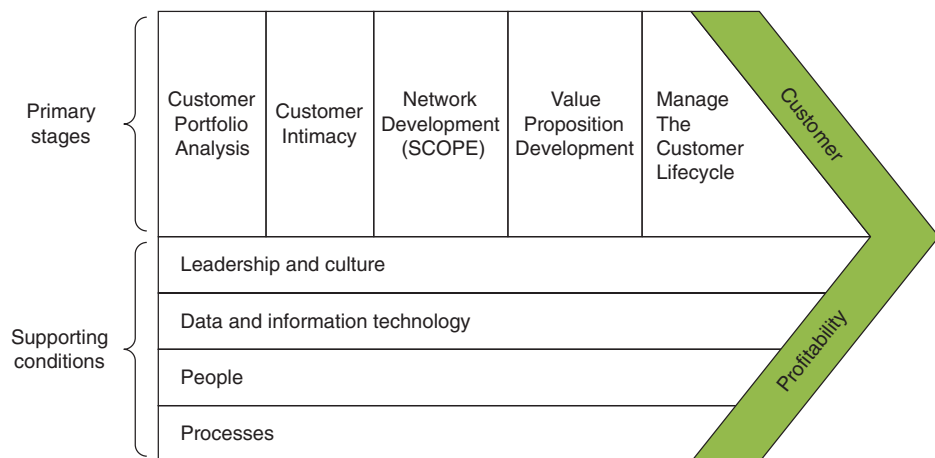


Figure 1.1 The CRM value chain

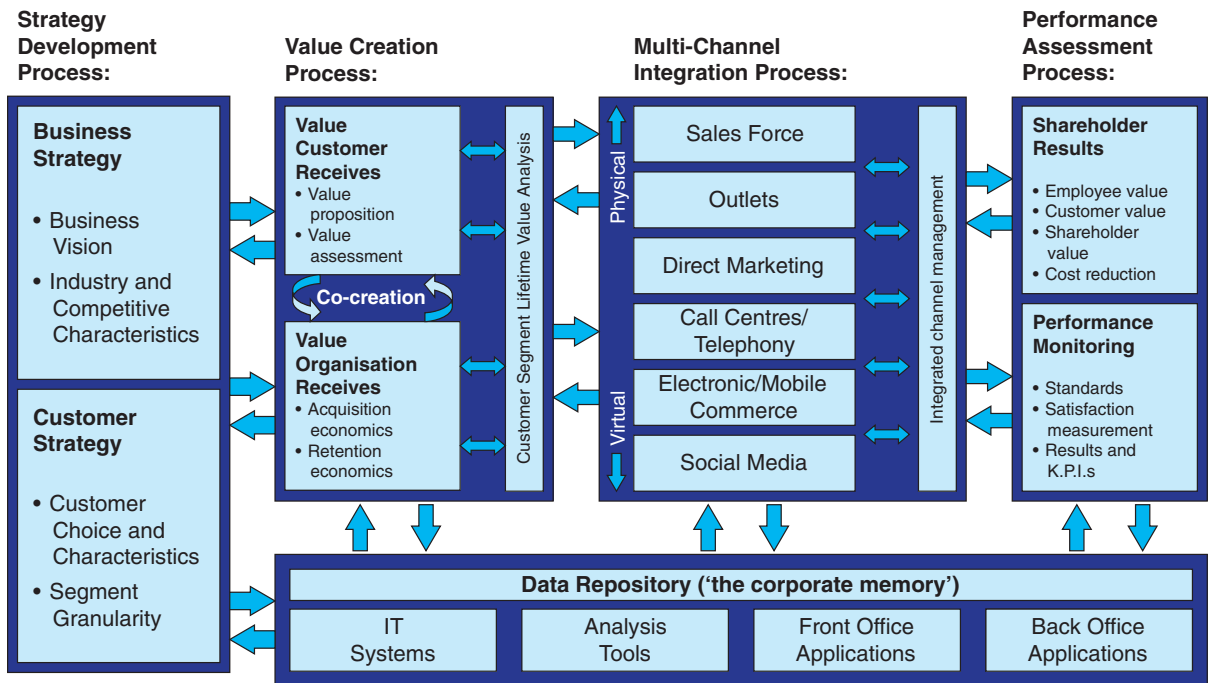


Figure 1.2 Payne and Frow's model of CRM

value proposition development and managing the customer lifecycle, are sequenced to ensure that a company, with the support of its network of suppliers, partners and employees (SCOPE in Figure 1.1), creates and delivers value propositions that acquire and retain profitable customers. The supporting conditions of leadership and culture, data and IT, people, and processes enable the CRM strategy to function effectively and efficiently.

The five-process model

Adrian Payne and Pennie Frow developed the five-process model of CRM.²⁴ This model (Figure 1.2) clearly identifies five core processes in CRM: the strategy development process, the value creation process, the multi-channel integration process, the performance assessment process and the information management process. The first two represent strategic CRM; the multi-channel integration process represents operational CRM; the information management process is analytical CRM.

The SCHEMA model

The SCHEMA model is a commercial property developed as a benchmarking tool by TCF (The Customer Framework, www.thecustomerframework.com). The model, as shown in Figure 1.3, aims to help companies strike an optimal balance between customer engagement and profitability.²⁵ The model proposes a key financial goal for customer management – the



Figure 1.3 The SCHEMA model of customer management

achievement of sustainable incremental profitability. This goal is achieved when the identified foundations enable the successful execution of strategies designed to win, keep and develop customers cost-effectively. The model identifies four key foundations that underpin successful customer engagement: direction and leadership (e.g. clarity of strategy, cross-functional ownership, budgets, measurement); IT and data management capabilities; organizational culture (ways of working); and competencies of people. The model identifies five enablers of good customer management, including the deep customer insight that is necessary for well-targeted marketing, selling and service; the alignment of brand positioning with customer experience, and the integration of channels and media and the way content is created and used. The agility and workflow required to support real-time engagement (including compliance and decision making) is a critical enabler as are the activities that get measured, as they will drive action by management and front-line staff.

CONCLUSION

In this chapter, you have learned that the expression CRM has a variety of meanings. Three major types of CRM have been identified: strategic, operational and analytical. There are many misunderstandings about CRM. For example, some people wrongly equate CRM with

loyalty programs whereas others think of CRM as an IT issue. Although CRM is generally associated with for-profit organizations, it is also applied in the not-for-profit context. Different industries such as automobile manufacturing, consumer goods firms, banks and technology firms use CRM for different purposes. A number of different constituencies have an interest in CRM, including CRM consultancies, CRM software houses, CRM hardware and infrastructure vendors, companies that are implementing CRM, and their customers.

We have produced a definition that underpins the rest of this book. CRM is the core business strategy that aims to create and maintain profitable relationships with customers, by designing and delivering superior value propositions. It is grounded on high-quality customer-related data and enabled by information technology.

Finally, we have introduced four models of CRM that try to scope the field.

NOTES AND REFERENCES

- 1 http://whatis.techtarget.com/definition/0,289893,sid9_gci213567,00.html. Accessed November 29, 2005.
- 2 <http://onlinebusiness.about.com/cs/marketing/g/CRM.htm>. Accessed November 29, 2005.
- 3 www.siebel.com/what-is-crm/software-solutions.shtm. Accessed November 29, 2005.
- 4 <http://computing-dictionary.thefreedictionary.com/CRM>. Accessed November 29, 2005
- 5 www.destinationcrm.com/articles/default.asp?ArticleID=5460. Accessed November 29, 2005. This definition is attributed to Gartner, Inc. (www.gartner.com).
- 6 Gartner, Inc. (2016). Gartner says customer relationship management software market grew 12.3 percent. www.gartner.com/newsroom/id/3329317. Accessed October 24, 2017. Schaeffer, C. (2017). CRM software market share report. www.crmsearch.com/crm-software-market-share.php. Accessed October 24, 2017. Grand View Research (2017) CRM Market Analysis by Deployment. <https://www.grandviewresearch.com/industry-analysis/customer-relationship-management-crm-market> Accessed 14 February, 2019.
- 7 Columbus, Louis (2017). www.forbes.com. Accessed October 23, 2017.
- 8 Maklan, S., Antonetti, P. and Whitty, S. (2017). A better way to manage customer experience. *California Management Review*, 59 (2), 92–115.
- 9 Kotler, P. (2000). *Marketing management: the millennium edition*. Englewood Cliffs, NJ: Prentice-Hall International.
- 10 Baines, T. S., Lightfoot, H. W. and Evans, S. (2007). State-of-the-art in product-service systems. *Proceedings of the Institution of Mechanical Engineers – Part B – Engineering Manufacture (Professional Engineering Publishing)*, 221(10), 1543–1552.
- 11 Rogers, E. M. (1962). *Diffusion of innovations*. New York: Free Press.
- 12 Treacy, M. and Wiersema, F. (1995). *The discipline of market leaders*. London: Harper-Collins.
- 13 Deshpandé, R. (1999). *Developing a market orientation*. London: Sage.
- 14 www.salesforce.com/au/customers/stories/honda-australia.jsp. Accessed February 21, 2014.
- 15 Morgan, A. and Inks, S. A. (2001). Technology and the sales force. *Industrial Marketing Management*, 30(5), 463–472.
- 16 Engle, R. L. and Barnes, M. L. (2000). Sales force automation usage, effectiveness, and cost-benefit in Germany, England and the United States. *Journal of Business and Industrial Marketing*, 15(4), 216–242.
- 17 Contact-centres differ from call-centres in that they handle not only phone calls, but communications in other media such as mail, fax, email and SMS.

- 18 Amplifying perceptions: how JetBlue uses Twitter to drive engagement and satisfaction. Case Clearing House: M-336 (2010), Stanford Graduate School of Business.
- 19 Baines, T. S. et al. (2007). State-of-the-art in product-service systems. *Proceedings of the Institution of Mechanical Engineers – Part B – Engineering Manufacture* (Professional Engineering Publishing), 221(10), 1543–1552.
- 20 www-01.ibm.com/software/au/data/bigdata/. Accessed January 24, 2014.
- 21 www.sas.com/success/axaseguros.html. Accessed January 20, 2007.
- 22 Peppers, Don and Rogers, Martha (1996). *The 1-to-1 future: building business relationships one customer at a time*. London: Piatkus; Peppers, Don and Rogers, Martha (1998). *Enterprise 1-to-1*. London: Piatkus; Peppers, Don and Rogers, Martha (1999). *The 1-to-1 fieldbook*. London: Piatkus; Peppers, Don and Rogers, Martha (2000). *The 1-to-1 manager*. London: Piatkus; Peppers, Don and Rogers, Martha (2001). *One-to-one B2B: CRM strategies for the real economy*. London: Piatkus; Peppers, Don and Rogers, Martha (2011). *Managing customer relationships: a strategic framework*. Hoboken, NJ: John Wiley and Sons; Peppers, Don and Rogers, Martha (2005). *Return on customer: creating maximum value from your scarcest resource*. New York: Doubleday; Peppers, Don and Rogers, Martha (2017). *Managing customer experience and relationships: a strategic framework*. Hoboken, NJ: John Wiley and Sons.
- 23 Buttle, Francis (2004). *Customer relationship management: concepts and tools*. Oxford: Elsevier Butterworth-Heinemann.
- 24 Payne, A. and Frow, P. (2013). *Strategic customer management: integrating CRM and relationship marketing*. Cambridge: Cambridge University Press, p. 211. See also Payne, Adrian (2005). *Handbook of CRM: achieving excellence through customer management*. Oxford: Elsevier Butterworth-Heinemann; Payne, Adrian and Frow, Pennie (2005). A strategic framework for customer relationship management. *Journal of Marketing*, 69, October, 167–176.
- 25 TCF (The Customer Framework), (2017). The SCHEMA Model, www.thecustomerframework.com/schema-toolset/the-schema-model/. Accessed December 29, 2017.

Click Here to Buy This Book Now!