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Successful customer value management: key lessons and emerging trends

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Successful Customer Value Management: Key Lessons and Emerging Trends

Abstract

In the past decade, firms have paid increasing attention to customer value management (CVM). Through customer-centric management systems, firms aim to maximize customer value. In this article, we put forth six important lessons that firms can employ for successful CVM, integrating available research knowledge and best practices: (1) Use CVM to improve business performance; (2) ensure that CVM is more customer driven than IT driven; (3) adopt customer lifetime value as a core metric; (4) invest in strong analytical capabilities; (5) understand the key drivers of customer acquisition, customer retention, and customer expansion; and (6) manage channels to create customer value.

One of the key developments in marketing and management practice in the past decade has been the growth of customer value management (CVM). Many firms have invested in large customer databases to understand, monitor, and influence customer behavior (Winer, 2001). Recent figures from Forrester show that more than 73% of large enterprises in the United States have implemented or are planning to implement customer management programs. A critical aspect of CVM is the role of customer value, or the economic value of the customer relationship to the firm. Firms aim to increase the value of their customer base by attracting new customers, retaining existing customers, reducing the costs of current customers, and selling more products or service to their customers. According to Forrester, more than 72% of B2C firms regard retaining customers as one of their top priorities (Band, 2010). As a consequence, firms continue to invest in software systems and strategies that enable them to actively manage their customers. For example, in Europe 46% of CIOs and end-users among 500 EU organizations want to invest in customer relationship management applications, according to a survey by telecommunications firm Vodafone. In addition, 45% plan to enhance their data-collection applications and 44% will upgrade their database-management solutions (Diana 2010). Conceptually, CVM has its roots in relationship marketing.[1] It entails maximizing the value of a company's customer base and analyzing individual data on prospects and customers. Firms then use the resulting information to acquire and retain customers and to drive customer behavior with developed marketing strategies in such a way that the value of all current and future customers is maximized. In CVM, determining and maximizing the value of a firm's customer base is one of its core goals. Companies can increase the value of their customer base by (1) attracting new customers, (2) increasing customer retention, (3) creating customer expansion, (4) winning back old customers,

(5) supporting (active) relationship termination, and (6) effectively allocating resources among customers (Verhoef, van Doorn, & Dorotic, 2007; Bolton, Lemon,& Verhoef, 2004)[2].

Important developments in information and communication technology, which have enabled firms to build large customer databases with real-time access at customer touch points, and the development of strong software packages for analyzing these data have accelerated interest in and application of CVM. Companies such as Capital One, Harrah's Entertainment, IBM, U.K.-based retailer Tesco, and the Dutch mobile phone operator KPN have, as a consequence, invested heavily in customer management. However, multiple companies still struggle with implementing CVM. Many firms report complete failure of their CVM projects, indicating weaker customer relationships and decreased revenues from customer spending (Kim & Mukhopadhyay, 2011; Bohling et al., 2006; Rigby & Ledingham, 2004; Rigby, Reichheld, & Schefter, 2002). In addition, new developments, such as the increasing presence of new (social) media and the rise of customer communities, pose new challenges and opportunities for managing customers.

In the same vein, as firms have adopted CVM principles and begun practicing CVM, academics have embraced CVM as a fruitful research domain. An increasing number of articles in top marketing journals have been published on the topic in the past. Originating from several research streams, such as marketing models, marketing strategy, relationship marketing, database marketing, and sales management, researchers have embraced CVM as a specific research topic (Verhoef, Reinartz, & Krafft, 2010).

This ongoing research within marketing science has provided a strong knowledge base. To provide an actionable, in-depth exploration of CVM, we focus on six key lessons (see Table 1),

each of which is discussed through the lens of existing research in CVM. We then describe specific insights from practice on this lesson.

Although multiple literature overviews on CVM and specifically customer lifetime value have appeared in the past (e.g., Verhoef, van Doorn & Dorotic, 2007; Blattberg, Neslin & Malthouse 2008; Kumar et al. 2006) this article differs from prior reviews by having a stronger managerial focus. We do so by providing six key-lessons, which we first theoretically discuss and offer insights from marketing science. Importantly, we then use examples from practice to illustrate these lessons. Furthermore, our overview has a broader scope by not only focusing on CLV, but also considering other relevant topics in CVM, such as multi-channel-customer management and customer experience management.

-- Insert Table 1 about here --

SIX LESSONS ON CUSTOMER VALUE MANAGEMENT

Lesson 1: Use CVM to Improve Business Performance

Insights from Marketing Science

As firms continuously seek new ways to gain competitive advantage and to improve performance, recent research suggests that CVM is a sound approach. CVM can improve business performance in three ways: (1) CVM is a market-based resource for competitive advantage, (2) CVM increases a firm's customer-centric orientation, and (3) CVM leads to more accountable marketing (see Figure 1). CVM provides firms with sustainable competitive advantage. A firm's customer database and existing customer relationships are important market-based resources because they are difficult to develop and copy. Research shows that a database

containing customer acquisition and retention data improves business performance. In addition, research suggests that formal systems for identifying and managing high potential customers lead to higher economic performance (Becker, Greve & Albers 2009; Jayachandran, Sharma, Kaufman, & Raman, 2005; Reinartz, Krafft, & Hoyer, 2004;)

CVM creates a stronger focus on the customer because it requires a customer-centric approach. Moreover, CVM provides firms with extensive customer knowledge. Extensive research shows that firms with a customer-oriented or customer-centric focus tend to have stronger performance than firms without such a focus. CVM leads to more analytical and fact-based decision making within firms and a stronger focus on return on investment (ROI) of marketing decisions, which also improves a firms' bottom-line results. As a consequence, marketing becomes more accountable, which causes less waste of marketing spending and more effective allocation of the marketing budget over customers and marketing instruments.

-- Insert Figure 1 about here --

Insights from Practice

CVM implementation can affect performance in several ways. For example, Telenor, the seventh-largest mobile operator in the world, has developed such an approach. Using various metrics to assign each customer a value, Telenor focused its retention efforts on a subset of customers, which led to a 1.8% overall reduction in annual churn. In addition, Telenor used customer life-cycle management to provide more targeted marketing messages, which increased average revenue per user by 5%–10%. However, perhaps the most convincing and insightful evidence is provided in published implementations of CVM by V. Kumar and his colleagues

(Kumar & Shah, 2009; Kumar, Venkatesan, Bohling, & Beckmann, 2008; Kumar, 2008). Kumar has reported extensively on CVM implementations at a B2B firm that provides high-tech services and a B2C apparel retailer. He convincingly shows that both firms could improve their bottom-line results by using principles of CVM. In their implementation of CVM, the firms estimated the customer lifetime value (CLV) for each individual customer, taking into account the customer's next purchase probability, contribution margin, and predicted individual customer-level marketing costs. Using advanced econometric modeling techniques, the firms derived individual predictions for customer value. Armed with insights from these analyses both firms implemented strategies accordingly, including the reallocation of resources among customer value segments, selective customer acquisition, channel propositions for specific customer value segments, and selective cross-selling. Selective customer acquisition, cross-selling, and the reallocation of resources among customer value segments resulted in greater effectiveness of each marketing dollar spent.

As such, both firms developed more accountable marketing strategies. They also exploited the knowledge in their databases to develop these more effective customer-centric strategies, which resulted in strong increases in the customer value or customer equity of 19.4% for the B2B firm and 23.3% for the B2C firm. Importantly, after the CVM implementation, stock prices increased substantially for both firms (one year changes of 32.8% for the B2B firm and 57.6% for the B2C firm). Both firms outperformed the S&P index by as much as 2 times (B2B) and 3.6 times (B2C). The described CVM implementation also clearly shows that customer value metrics can be linked to financial performance metrics, such as shareholder value. The marketing department may benefit from this by gaining a greater portion of resources within the firm, while also aligning its objectives with the CFO's agenda.

Lesson 2: Ensure that CVM Is More Customer Driven than IT Driven

Insights from Marketing Science

Despite the attractiveness of CVM for firms, many implementations still fail. A common hazard is that firms assume that applying more technology is the answer. This usually results in too strong a focus on the IT side of CVM rather than the customer side (Rigby, Reichheld & Shefter, 2002).

One important issue is the role of technology in the overall implementation of CVM. Some firms focus too much on the technological aspects of CVM and the requisite financial investments in such technology. When firms focus extensively on such specifications, resources frequently move to technology solutions, software, and consulting agencies implementing the technology. In such cases, the focus usually becomes more internal than external, damaging the performance potential of CVM. Alternatively, a firm can approach CVM technologies as information processes and touch points that facilitate the management of customer relationships. With this approach, CVM technologies focus on the underlying value associated with or enhanced by the technology. For example, the acquisition, storage, accessibility, and evaluation of customer data within the organization should be organized to enhance the customer experience. Research has shown positive effects of such customer-oriented information processes on CVM performance (Jayachandran, Sharma, Kaufman, & Raman, 2005).

Thus, technology investments in CVM should be done in such a way that benefits customer-centric processes within the organization. That is, the focus should not be on the specifications of the technologies themselves but rather on how the technologies can best facilitate customer management.

Beyond the IT issues, similar problems related to CVM implementation also occur. One critical problem is the lack of a customer strategy before implementation; CVM should be embedded in any pursued strategy. A second problem occurs if the organization is not organized in a way that matches its CVM efforts. For example, customer intelligence often lacks a formal role within the organization, even though firms expect managers to use customer information in their decision making.

Barriers that make it more difficult for firms to shift from a more product-centric (or even IT-centric) to a more customer-centric focus may also exist. Frequently identified barriers are culture, structure, processes, and finance. Culture involves aspects such as the employee level of involvement with customers and resistance to change. To overcome resistance, employees should participate in the change process. Structure refers to the internal organization of the firm and involves issues such as coordination. Each department's responsibilities should be well defined, and the firm's processes should be defined from a customer-centric point of view (Shah, Rust, Parasuraman, Staelin, & Day, 2006).

Finally, customer centricity requires the use and acceptance of customer-centric metrics, such as customer profitability, CLV, and customer satisfaction. In general, measurement leads to execution—"What is measured is what gets done." The technology company Akamai has a robust customer experience program to ensure that employees maintain a customer-oriented focus. The firm prominently posts quarterly Net Promoter Score results throughout the organization and ties the compensation of service managers to this metric. Customer-centric metrics can also be embedded in performance evaluations and incentive structures, such as the Net Promoter Score or Customer Satisfaction scores.

Overall, research suggests that firms that focus on the customer first are successful in implementing CVM. They begin with small projects, identify an executive champion, understand data limitations, and actively manage expectations (Rigby & Ledingham, 2004; Capon & Senn, 2010). Finally, they identify ways to measure the effectiveness of their CVM initiatives.

Insights from Practice[3]

An example of a company that has successfully used technology to enhance its CVM is Parametric Technology Corporation (PTC). PTC offers product development management software solutions for customers in industrial design, high-technology, aerospace and defense, automotive, and consumer and medical device industries. Its solutions include three-dimensional product design tools, engineer calculation software, and product life-cycle management software to enable companies to streamline product development processes.[4]

A few years ago, PTC recognized that its customers often faced difficulties in optimally using its products. Rather than merely develop training courses and online training tools, PTC took a much more customer-centric approach—using technology to grow and strengthen its customer relationships. First, PTC identified where its customers were challenged and then analyzed the bottlenecks that existed in the learning and usage of its products. Second, after identifying the specific customer issues, PTC created comprehensive training solutions to address its customers' "pain points" through its training division—PTC University.

For example, PTC learned that one of the major deterrents of successful product development software solutions was that users (e.g., product development engineers) within the customer organization often did not understand many of the processes involved in successfully using the technologies. The problem? Product design took longer than it should, and errors and

miscommunication occurred along the way with increased costs and time delays. PTC addressed these issues with what it called the PTC LearningConnector, which provides e-learning content in the software help center and directly connects to technical support. Thus, users could improve their ability to use the technology while working on a project—seamlessly accessing "learning" without ever leaving their work space.

Another customer-centric technology PTC implemented through its PTC University is the LearningExchange. PTC heard from customers that they could not find short, digestible information on how to do one particular task within the product without endlessly searching and having to pay out of pocket. In response, PTC created a free site for customers with short three- to seven-minute tutorials on how to do "just one thing" within the product. This allowed PTC to better engage with its users, find out where they were having the most difficulty, and offer solutions to address customer needs immediately without requiring the customer to take an entire training course.

These simple, "as needed" training options are customer-focused and address immediate customer bottlenecks and pain points. However, by listening to its customers, PTC also recognized that the complexity of the design process necessitated a deeper understanding of product design. According to one customer, a development engineer, "When designing such a complex product, we need to be proficient in many design tasks—from part modeling and assembling to sheet metal design and analysis."(PTC, 2010) Customers also noted that, often, errors in design were exposed only very late in the design process, resulting in expensive rework. Recognition of these complexities led to a new training offering: Best Practice Academy. PTC University's Best Practice Academy breaks down the most critical processes within the customer's organization and turns each process into a customized, practical learning module that

members of the product team can apply in their everyday roles. With its strong expertise in product development, PTC first identifies industry best practices on key topics identified by customers. It then customizes workshops specifically to the customers' processes and objectives based on their current skill levels and needs. Best practices within each customer's organization are also gleaned through the training needs analysis. As a result, best practices are implemented and adopted across the entire organization, thus improving product quality and reducing product development time (see Figure 2). As Matt Cohen, divisional vice president of PT University, noted, "While addressing the features and functions through training is important, even more important is addressing how users are using the software to ensure the company's business objectives are met—and this comes down to having your entire product development team follow best practices—not just pockets of experts."(Hedges, 2011)

Taken together, these learning technologies facilitate engagement with PTC's customers, while enabling its customers to learn and improve their product development processes. As PTC's Cohen stated, "Our programs focus on the customer's business priorities." By beginning with its customers' needs and pain points, PTC was able to design a set of training initiatives that truly enhanced the customers' ability to use its software solutions. PTC is an example of an organization that has been able to utilize technology to manage its customer relationships and enhance customer value, by putting customers at the center of its CVM strategy.

-- Insert Figure 2 about here --

Lesson 3: Adopt CLV as a Core Metric

Insights from Marketing Science

CLV is one of the core customer-centric metrics within CVM. It commonly refers to the net present value of all future profits derived from a customer over his or her lifetime with the firm. Traditionally, firms use more product-centric metrics, such as market share, which are usually defined at the product-market level. For example, when a firm sells insurance and bank accounts, it uses market share for insurance and bank accounts as the key metric. The primary objective of a market share metric is to gain a large piece of the total market "pie." The logic is that if firms have larger market shares, they can gain economies of scale, have more market power, and earn higher profits (Szymanski, Bharadwaj & Varadarajan, 1993).

One important disadvantage of such product-centric metrics, however, is that they might be optimized incorrectly. Frequently, managers are steered to achieve sales targets in a particular product or service category. One short-term way to achieve this is to use sales promotions, which cause only temporary shifts in sales. Even worse is that sales promotions increase consumer price sensitivity and destroy customer loyalty. For example, to keep sales up, multiple U.S. car manufacturers have used deep sales promotions, which destroy firm value (Gupta & Lehmann, 2005; Pauwels, Silva-Risso, Srinivasan & Hanssens, 2004; Rust, Zeithaml, & Lemon, 2000).

Another important disadvantage is that product-centric metrics only consider one product category, while customers may buy from multiple categories. Since the purchase behaviors within product categories may depend on each other, if this interdependence is not acknowledged, it may depress the overall value of a customer to a firm. For example, having strong price offers in the health insurance category might cause a stronger focus on price in other insurance categories as well. Furthermore, having too specific a focus on one product-centric metric may

cause customer value to be destroyed. For example, firms may focus on sales growth of one specific product using attractive deals, which may lead to a migration of customers from other high-priced products to the new lower-priced product.

Firms may use the CLV metric in different ways. We distinguish five distinct applications of CLV in firms: (1) as a metric to steer to a more customer-centric firm culture, (2) as a metric to evaluate marketing campaigns and investments, (3) as a valuation tool of the customer base, (4) as a metric for customer segmentation and resource allocation, and (5) as an additional marketing metric in the customer database.

The first application of CLV functions as a metric that aims to stimulate a customer-centric culture. As such, employees and departments need to acknowledge that the ultimate objective of the organization is to maximize CLV and focus strategies on achieving this objective. In so doing, a long-term perspective on customers is guaranteed.

In contrast with this more pervasive use of CLV throughout the organization, the second application of CLV focuses merely on increasing the accountability of marketing investments. Using the CLV metric, firms can then calculate the ROI of marketing investments (Rust, Lemon, & Zeithaml, 2004).

Third, CLV can also be used mainly to assess the value of the customer base, which is frequently referred to as customer equity. This can be of major importance for overall firm valuation purposes. This application reflects the notion that customers are important assets and, as such, should be financially valued. Researchers have proposed methods on how to value customer bases and have shown links with shareholder value. For example, recent research by Skiera has proposed also taking into account the long-term value creation objectives of a firm and extending the customer equity metric with a customer equity sustainability ratio (Gupta,

Lehmann, & Stuart, 2004; Skiera, Berns, & Horn, 2011). With this extension, for example, firms can gain better insights into whether they are exploiting the customer base to achieve short-term profits at the expense of long-term customer value.

The fourth application of CLV is a more typical database marketing application. For current customers, CLV is calculated, and then customers are segmented according to that calculation. Marketing resources can then be allocated across the resulting segments. For example, firms can decide to reallocate marketing resources in such a way that less of the marketing budget is allocated to low-CLV segments while more of the budget is allocated to high-CLV segments (Venkatesan & Kumar, 2004). Understanding the role of CLV in managing a firm's customer portfolio over time is critical. Linking CLV to important other metrics, such as churn, can also provide valuable insights. For example, a telecommunications company discovered that churn was highest for its high-CLV segments. These insights provided clear directives to customer management by showing that large improvements in bottom-line results could be achieved by reducing churn in high-CLV segments.

Finally, CLV can be used as just another marketing metric present in the customer database. This application of CLV does not create value for the firm per se. Many firms, unfortunately, still use CLV in this way, without fully availing themselves of the rich opportunities this metric can provide. Such use also highlights one of the crucial pitfalls with the implementation of CVM. Although firms can calculate all kinds of customer-centric metrics, managers are not often evaluated on these metrics. For example, in many financial service firms product sales is still the leading metric and the one on which bonuses and incentives are based, instead of CLV. As such, in the end managers will maximize product sales instead of customer value. We could even argue

that only when firms choose the right (1) customer-centric metrics, (2) measure of these metrics, and (3) use of these metrics for evaluation will this lead to a successful implementation of CVM.

Insights from Practice

Maximizing the use of CLV will change behavior, which in turn may change the company culture and subsequent processes as well. The credit card and financial services firm Capital One has adopted CLV as a core metric. Capital One carefully segments and values its customers to understand their lifetime value and to identify the best utilization of its resources. The firm also uses CLV to evaluate marketing campaigns and marketing investments.

Capital One's use of CLV runs deep throughout the organization. The firm's goal, "to deliver the right product, at the right price, to the right customer, at the right time," (Day, 2003; Rierson & Lattin, 2007) necessitated an information-based marketing strategy approach that enabled it to micro-segment customers on the basis of their CLV. In the United States, Capital One's credit card business is segmented into groups such as prime, high response, medium response, partnership, affinity, and small business. Segment managers have the autonomy and resources to, in essence, run their segment as a business, with profit and loss responsibility.

In addition to using CLV as a customer segmentation tool, Capital One uses it to evaluate the potential and success (or failure) of new product ideas and marketing campaigns. Capital One runs tens of thousands of experiments each year to improve its ability to acquire customers, maximize CLV, and even perhaps determine which unprofitable customers to terminate (Anderson & Simester, 2011). One such test, designed to optimize customer retention, compared customer responses to three different actions across three randomized groups of people who called in to cancel their Capital One credit card because they had received a better offer from a

competing card. For the first group, the firm “called their bluff” and closed the account. For the second group, Capital One matched the customer’s alleged offer from a competitor. For the third group, Capital One met the customer halfway with an offer. Follow-up data were collected on customers and responses to the offers, and statistical models were built to link the results to the existing customer data and CLV. With these analyses, when a customer calls in to cancel an account, the service representative instantly sees a recommendation for the customer (e.g., lower the interest rate to 12.9%) based on these tests and the customer’s lifetime value and can make an offer during that interaction. The result? Capital One has one of the industry’s highest retention rates among its most profitable customers and has been able to increase the lifetime value of its average customer (Blake, n.d.).

A recent quarterly report of Capital One reflects its ongoing commitment to nurturing customer relationships: “Our strategies and actions are designed to deliver profitable long-term growth through the acquisition and retention of franchise-enhancing customer relationships across our businesses.”(Capital One Financial Corp, 2011) This commitment to customers through a deep understanding of customer value enables Capital One to almost “individually service” its customers according to their potential. When a customer calls, the firm can immediately access his or her history and potential and generate potential offers—all based on the customer’s CLV. This customized service also resulted in increases in customer satisfaction: Capital One’s High Value Servicing Team was awarded the International Customer Management Institute’s Global Call Center of the Year Award and was certified by the prestigious J.D. Power and Associates’ Call Center Certification Program.[5] This example clearly shows how Capital One has been able to successfully adopt CLV as a core metric, especially for customer segmentation, evaluation of marketing campaigns and investments, and resource allocation.

Lesson 4: Invest in Strong Analytical Capabilities

Insights from Marketing Science

Having more data on many business processes will induce more intelligence-based decision making. In such decision making, firms rely heavily on the analytical function. Davenport and Harris explicitly argue that firms can gain a competitive advantage if they build up strong and effective analytical capabilities. They view analytics as the process of extensively employing data, quantitative analyses, statistical models (for both explanation and prediction), and fact-based management techniques to drive firm decisions and actions. These analytical capabilities can be used in different kinds of functions, such as human resources management, logistics, finance, and marketing. The use of these capabilities may lead to less waste in all kinds of processes and may optimize certain decisions (Davenport & Harris, 2005). For example, firms may create a category assortment in such a way that category profitability is optimized. Several firms, such as Anheuser-Busch, Google, Tesco, Wall-Mart, FedEx, and Harrah's Entertainment, have adopted strategies that rely heavily on the analytical function. Customer analytics is one of the important areas in which firms can compete. As noted previously, Capital One has achieved growth through a more effective analytical-based targeting of new and current customers. In a recent survey, Forrester reports that 27 of 28 companies responded that their use of customer analytics improved loyalty (Temkin, & Belanger, 2004).

This discussion highlights the importance of customer intelligence (CI) capabilities. The core task of the CI function in organizations is to collect and store customer data and then to analyze the data to acquire customer insights. Customer insights need to be as accurate and up to date as possible, and they should be based on every relevant piece of customer information. The CI function compiles an *as complete as possible and necessary* view of the customer. Prior

research has shown that the success or failure of CVM depends on the quality of the CI function. That is, firms with strong CI capabilities have greater firm performance (Hoekstra & Verhoef, 2010).

An important aspect of CI capability is the analytical capability. Analyses may encompass disparate fields such as identifying potential customers, predicting response behavior of existing customers, calculating the costs of maintaining a relationship, and cross-selling predictions. Both traditional techniques, such as cross-tabulation and tree-based methods, and more sophisticated techniques, such as logistic regression and boosting, can be used (Blattberg, Kim & Neslin, 2008; Neslin, Gupta, Kamakura, Lu & Mason, =2006). Beyond these analytical skills, we also emphasize the importance of the CI–marketing interface. It is critical that CI understands marketing's requests for analyses, checks whether it is asking the right questions, and rephrases them if necessary. CI should also be willing and able to advise marketing according to the outcomes of the analyses. The quality of these cross-functional capabilities of CI will improve the quality of marketing decision making, which will become more fact based. However, with this CI–marketing interface, marketing should also adopt some CI-based principles. Marketing should be able to guide the process of abstracting customer needs from the available customer data by initiating relevant data queries. Such cross-functional CI capabilities will increase CI's effectiveness by clearly explaining the information needed. In addition, to increase the quality of decision making marketing needs to understand the outcomes of customer database analyses and be able and willing to use these outcomes in its decision making.

Insights from Practice[6]

Building a strong CI function is difficult for most firms. Some firms, such as Capital One, hire academics with doctoral degrees in statistics to strengthen their analytical skills. However, hiring talented employees with analytical skills is not sufficient. Rather, firms must build up a strong CI function to create value for the firm. The Dutch incumbent Telco KPN understood the necessity of building up such a function six years ago. Confronted with suboptimal marketing campaigns and increasing competition with high increasing churn, the firm began implementing CVM with a strong focus on fact-based marketing. The management of KPN also understood that a strong CI function was essential. However, the firm lacked strong analytical skills. Therefore, it set up the Marketing Intelligence (MI) Academy jointly with the marketing intelligence consulting agency MIcompany. Baptiest Coopmans, member of KPN's board of directors, stated the following: "Our own education programs were not focused on customer intelligence, but focused on educating marketing managers and organizational leaders. With the MIacademy we aim to develop top talented specialists, which are able to fully understand customer needs." A three-year training program was developed for new young master graduates. In this program, they were trained in analytical techniques but were also trained in improving the interface between the CI function and marketing. Important skills included the effective presentation of marketing facts and interpersonal communication. Furthermore, CI trainees were trained in deriving growth opportunities from their analytical findings/insights to develop strong recommendations for marketing.

Recently, the whole program has been evaluated (see Figure 3). The management of KPN is fully convinced of the success of building a strong CI with MIacademy. Marteyn Roose, director of customer management at KPN, stated "Statistical tooling, methods and central data

warehousing are all beneficial, but it's our people that make the real difference. The benefits of attracting top talented graduates and training them to become top performing CI professionals has proven to be tremendous in all kinds of areas." KPN identified several of the benefits of the program shown in Figure 2. Since then, the program has resulted in additional revenues and costs reductions. Direct revenues have occurred through improved marketing campaigns (overall improving net present value of orders by 132%) and the development of successful growth initiative opportunities (>€140 million in 2010). Indirect and more long-term revenues have also been realized, for example, through the strong development of the customer management function within KPN. There is an increasingly high demand throughout all departments and disciplines in KPN. This ensures that few CI professionals choose to leave KPN because they find challenging careers elsewhere. The traditional focus of CI was mainly the optimization of marketing campaigns. At KPN, that scope was broadened to all disciplines (e.g., marketing, sales, service, network) and on all levels (i.e., up to the board of directors). A strong CI function is a necessity. The program's strong focus on the interface between marketing and CI also resulted in greater acceptance of more accountable or fact-based marketing. Cost reductions mainly occurred from lower recruitment costs and short vacancy periods (>95% of new talent acquired without any recruitment aid). Moreover, the firm could pay lower salaries because it did not need to hire experienced CI specialists (20% saving, including educational costs). The firm also required less input from external dedicated marketing intelligence firms, as sufficient skills were now present internally. This example of a focus on building a strong CI function clearly shows that dedicated and top-management-supported training initiatives aimed to improve analytical and interface skills really benefit CVM and the firm.

-- Insert Figure 3 about here --

Lesson 5: Understand the Key Drivers of Customer Acquisition, Retention, and Expansion

Insights from Marketing Science

Firms often assume that they have adopted a customer-centric view merely by actively measuring and monitoring customer metrics. However, this alone is not sufficient. To truly succeed in managing customers for maximum value, firms must clearly understand what drives customer acquisition, customer retention, and customer growth over time. Across many industries, countries, and contexts, several key insights have emerged.

First, it is important to consider both marketing and broader operational factors in understanding key drivers of customer decisions. Three key areas the firm can influence may drive customer acquisition and retention decisions: value equity, brand equity, and relationship equity. Value equity is the customer's objective assessment of the firm's offering based on his or her perceptions of what is given up for what is received. Key drivers of value equity include features and benefits of the product or service, overall quality, factors that influence customer convenience (e.g., ease of purchase, ease of use), and all elements of pricing. Brand equity is the customer's subjective perception of the firm's offering, beyond its objectively perceived value. Key drivers of brand equity include all marketing strategies that influence brand awareness and brand perceptions (e.g., promotion, advertising, sales, social media) and corporate citizenship efforts. Relationship equity is the customer's perception of the customer–firm touch points. Key drivers of relationship equity include customer loyalty programs, all the ways the customer and the firm directly interact (e.g., customer support, website interactions), customer communities, and the knowledge developed by the firm and the customer over time about each other. Firms need to understand the extent to which customer behavior is most influenced by value

perceptions (often the key driver for continuously provided services), brand perceptions (most often the case for frequently purchased consumer goods), or relationship perceptions (typically most critical in B2B contexts) (Rust et al., 2000).

Second, the drivers of customer acquisition may be distinct from what drives customer retention or customer growth (Bolton, Lemon & Verhoef 2004). It is important to analyze the key drivers of customer behavior for at least three stages in the customer–firm relationship: acquisition, customer growth, and customer retention. When acquiring the customer, brand and value elements tend to dominate. In the growth phase, value is important, but the relationship also begins to become important. Finally, when trying to retain customers and prevent highly profitable customers from defecting to competitors, relationship and value are both critical. For consumer products, refreshing the brand image in later stages of the relationship is also important.

Third, understanding what drives customers to the competition is also critical. One key mistake that firms often make is only surveying and interviewing their current customers to determine key drivers of acquisition, growth, and retention. However, understanding why customers do *not* buy from the company can be even more informative. The research methodology employed to evaluate key drivers of customer behavior should include both current customers and noncustomers, so that the firm can gain insights into what is important to all potential customers in the market. One such approach that examines the focal company and its competition is customer equity analysis. This approach enables a firm to examine the key drivers of customer acquisition and retention for all competitors in the marketplace, not just the focal firm, and to analyze the performance of all competitors on each of the key drivers identified. As

a result, a firm can determine where it is doing well, where it is doing poorly, and where it should invest its resources for maximum impact.

Fourth, customer segmentation is a key factor when trying to understand what motivates customers. Not all customers care about the same attributes of a product or service experience (e.g., Wieringa and Verhoef 2007). Solid customer segmentation takes the approach that incorporating customer valuation is necessary to trust the insights from analyses of the drivers of customer behavior. Occasional leisure travelers on an airline have very different drivers of acquisition, growth, and retention than frequent business travelers. When appropriately segmented (by value, behavior, demographics, and/or psychographics), key driver analysis can be a helpful tool to determine where to invest to grow the value of each segment and, when paired with CLV analysis, on which segments to focus.

Fifth, firms must recognize the importance of managing their customer portfolio. It is critical to examine the mix of customer segments and the mix of customers at different stages in their life cycle with the firm. Recent research suggests that firms should maximize their CLV portfolio to understand how customers early in their relationship with the firm (strangers or acquaintances) may provide value to the firm differently than customers who have a long-term relationship with the firm (friends or partners). Firms can optimize the risk and return of their customer portfolios by structuring the mix of customers to reduce vulnerability and volatility of cash flows. Key insights from this body of research are that firms should seek a diverse portfolio of customers that will maximize value and minimize risk and that these diverse customers also have different needs and distinct drivers of purchase behavior (Dhar & Glazer, 2003; Johnson & Selnes, 2004; Tasari, Bolton, Hutt, & Walker, 2011).

Finally, the goal should be to develop a customer dashboard to enable the firm to link key drivers to key metrics. The real power of customer value management lies in the ability to link marketing inputs (specific strategies and tactics) to customer responses and, ultimately, to firm performance. When armed with an understanding of the key drivers of CLV, the next logical step is the development of a customer dashboard to link the inputs and outputs (Pauwels et al., 2009).

Insights from Practice

One industry that has been very successful in developing a keen understanding of the drivers of customer behavior is the hotel industry. Hilton Worldwide, a global leader in this industry, has made CVM a cornerstone of its strategy. Hilton has invested heavily in information technology, people, and processes to obtain a deeper understanding of its customers and customer segments.

Hilton understands that a customer's hotel stay decision depends on many factors, including the aspects that are, according to Hilton, just the cost of entry: "a clean room, secure room, good bed, functional alarm clock, working shower, hot water, etc. So it's the physical property that's a requirement."(Thompson, 2006) In addition, a strong loyalty program is now viewed as a baseline necessity for major hotel chains. Where Hilton stands out is in its mastery of the customer experience—providing new and innovative ways for customers to have more choice and control. For example, Hilton's chain-specific smart phone apps not only make it simple for travelers to search for hotels nearby, make (change, or cancel) a hotel reservation, check in online, and check loyalty program status and redeem points but also enable consumers to order food or other services on arrival through the "Requests Upon Arrival" feature. As Paul Brown, president of Global Brands and Commercial Services for Hilton Worldwide, noted

(2009), “We are constantly working to anticipate our guests’ needs and this is a great way to make the entire hotel experience more convenient.” Hilton has experienced great success from these mobile apps; mobile online bookings are growing fast, and its iPhone app was downloaded more than 125,000 times in its first three months. Another recent enhancement to the customer experience is “Suite Selection” at Hilton’s Homewood Suites, which allows guests to view the hotel’s floor plan online, see the rooms available, and choose a specific room when checking in online.

Hilton also does a great job segmenting its customers. As a clear global leader among business travelers, Hilton has implemented strategies to attract and grow the business segment. Hilton has tried to address each customer touch point for its business travelers, especially recognizing key pain points. For example, guests at Hilton hotels can print wirelessly from their smart phones, and the hotel’s eFolio application allows customers to print their final hotel bill from the website, without waiting in line at the front desk. Hilton’s custom, comprehensive, integrated information services approach, called OnQ, enables the firm to implement and manage its customer-centric approach. Hilton HHonors loyalty program is a core element of this strategy and is known and recognized as an excellent option for business travelers, with a broad range of hotels and locations as well as extensive options for earning and redeeming points. As a result of this unrelenting focus on the business customer segment, Hilton consistently is ranked the number-one hotel brand for business travelers. In addition, Hilton has been able to grow its share of wallet from frequent guests, from 40%–60% to 65%–84%, with revenue per room across Hilton brands more than 7% above the industry average.

Hilton’s portfolio of brands, which spans the spectrum from super luxury (its Waldorf Astoria Collection) to moderate (Hampton Inn) to extended stay (Homewood Suites and Home2),

enables the hotel chain to obtain a broad portfolio of customers. As such, Hilton can engage in successful cross-selling—that is, finding an alternative Hilton lodging option when a customer's first Hilton choice is not available. This strategy generates more than $600 million per year for Hilton—revenue that would have been lost to competitors otherwise. Hilton also recognizes the value of understanding its customer portfolio in terms of frequency and recency of customer stays. By analyzing its customers' stay histories, Hilton was able to develop customized strategies to grow the value of each segment of its loyalty program customer portfolio: a "retention program" for highly loyal, frequent customers; a "welcome back" strategy for high-value customers who lapsed but have returned to Hilton; a "win-back" strategy for previously high-value customers who have not stayed at a Hilton in the past year; and even an "escort-out" strategy for consistently low-value customers who stay so infrequently at a Hilton that they are probably not receiving much value from the loyalty program (see Figure 4).

Hilton truly understands the value of understanding the drivers of customer acquisition, retention, and customer expansion. Through an integrated CVM approach, Hilton has been able to grow its customer base and its brand. With aggressive global expansion plans, Hilton has more than 600,000 rooms in 3600 hotels in 81 countries, with an expansion pipeline of more than 130,000 additional rooms, 65% of which are outside the United States (Watkins, 2010; Hoover, 2008; Applegate, Piccoli, & Def, 2008; de Lollis, 2010; de Lollis, 2010).

-- Insert Figure 4 about here --

Lesson 6: Manage Channels to Create Customer Value

Insights from Marketing Science

Firms are now confronting a conundrum with the multiple channels they can use to get in touch with their customers. In turn, customers can employ multiple channels to search, purchase, and receive after-sales services for those offerings (Neslin et al. 2006; Neslin and Shankar 2009). Before the widespread emergence of the Internet in the 1990s, firms typically used only a limited number of channels. Today, sales channels include the store, the Web, catalogs, sales forces, third-party agencies, call centers, and so on. And the number of channels just keeps increasing. New channels, such as mobile or smart phones, and new social media, such as social networking sites (e.g., Facebook, LinkedIn, Foursquare) have created new challenges and opportunities. Forrester predicts that by 2014, as much as 8% of retail sales will likely occur online and 53% will be enabled by a website. Firms are facing the new challenge of how to manage their customers across all channels in such a way that customer value is created and maintained (Schonfeld, 2010).

Firms frequently assume that providing more channels is the main solution; the thought is that providing more channels can create a stronger customer experience. However, more channels may also create more complexity. Although empirical research consistently shows that such multichannel customers are more profitable, an important but still unresolved issue is whether this link is causal. Do heavy users and more brand loyal customers tend to use multiple channels, or does the use of multiple channels increase customer experiences and result in higher volume and profitability? Does this effect remain when multichannel use is the market standard? Moreover, although multichannel customers may be more profitable, they may also be less loyal (Ansari, Mela & Neslin 2008; Konus, Verhoef & Neslin 2008).

Two general insights into multichannel CVM have emerged. First, migrating customers to other channels can be beneficial but can also have detrimental effects. Prior research has found that customers who migrated to the online banking channel became more profitable, controlling for selection effects. However, in a catalog context, customers who migrated to online channels tended to become less loyal than those who continued to use the catalog channel. Other research endeavors have warned that forcing customers into a specific channel (e.g., for cost reasons) creates customer reactance, dissatisfaction, and potentially disloyalty. Thus, it is important for firms to understand not only how multichannel efforts influence firm profitability but also how they influence customer perceptions and responses over time (DoubleClick, 2004; Ansari, Mela, & Neslin, 2008; Gensler, Leeflang, & Skiera, 2012; Konus, Trampe, & Verhoef, 2009; Wilson, Street,& Bruce, 2008).

Second, firms should consider how they can optimally allocate resources over customer segments and channels. Currently, most channel combinations arise from a careful examination of current channel usage patterns, which do not necessarily reflect the ultimate objective of maximizing CLV and/or the customer experience. A simple example of appropriate resource allocation is consistency of information across all channels. The insurer Esurance tries to release any changes or new information to all channels at the same time to ensure a consistent customer experience. Because customers often start quotes online but purchase over the telephone, the company recognizes that it is critical for its sales agents to have the same functionality and information as its customers, so that there are no lapses in service or support.

Insights from Practice

This discussion clearly signals that a multichannel strategy requires a strong analysis of the consequences of adding channels, migrating customers to alternative channels, and eliminating channels. A European retailer that sells electronics, apparel, and household goods was confronted with such decisions. Originally, this retailer was a cataloger that sent large catalogs to its customers twice a year. At the end of the 1990s, it adopted the online channel and achieved strong growth, as more customers began buying online. Still, the retailer continued sending catalogs twice a year to its expanding customer base. In 2006, approximately 70% of its revenue came from online purchases, which continued to grow substantially. The remaining 30% of revenue came from orders through the telephone channel, which was closely related to the catalog (i.e., customers called the telephone number in the catalog to order). As such, the retailer began relying more on e-mail communication as a device to stimulate sales.

For the future, it was unclear whether the retailer would still require the catalog channel, which was costlier than the online channel. Could the firm easily eliminate the catalog without upsetting customers? Moreover, would eliminating the catalog reduce sales among customers, especially if it still functioned as an impetus for customers to buy? To fully understand this, the firm's customer intelligence group executed a large-scale experiment, in which it stopped sending catalogs to a randomly selected group of customers for a period of two years. In doing so, it could also assess long-term value consequences. The retailer learned several important lessons: (1) the catalog still functioned as an important channel to stimulate sales, causing a lower purchase frequency among customers not receiving the catalog and lower sales levels; (2) especially loyal telephone buyers reduced their purchase frequency; (3) the average order size of existing customers increased; and (4) the elimination of the catalog channel reduced costs

substantially. Overall, the lower sales were not offset by the lower costs, leading to a decrease in customer profitability. However, taking advantage of this long-term study, the retailer also learned that sales began to recover over time (Konus, Neslin, & Verhoef, 2011).

These insights were used to develop a new strategy. The analysis clearly showed that the catalog should not be eliminated; it was still an important stimulus for customers to buy. Continuing with the current strategy, however, was not a viable option, as the "stimulus" aspect of the catalog was not fully realized from its semiannual mailing. Moreover, given the increasing (almost daily) change in assortments and prices in the online channel, the catalog was soon out of date and not consistent with the offering on the website. Finally, the existing catalog did not fit with the firm's new brand positioning. So, the retailer decided to relaunch the catalog by sending smaller catalogs with up-to-date offerings more frequently, thereby changing the catalog into a kind of extended folder, which could also play a more dominant role in a renewed positioning, Moreover, it could be used as an acquisition instrument for new customers in door-to-door campaigns. The implemented adapted multichannel strategy led to multiple improvements. The retailer was able to acquire more new and potentially more valuable customers. In addition, existing customers were more satisfied because the online assortment was more in line with the new "catalogs." As a result, existing customers also spent more. In summary, this well-deliberated, multichannel strategy helped this retailer enhance performance.

THREE EMERGING PERSPECTIVES ON MANAGING CUSTOMER VALUE

Having an understanding of the key lessons of customer value management may not be sufficient. New technologies and changes in customer expectations, experiences, and behavior require that firms also look to the future. We foresee three emerging perspectives on CVM: (1) managing

customer engagement, (2) managing customer networks, and (3) managing the customer experience.

Managing Customer Engagement

In an increasingly networked society in which customers can interact easily with other customers and firms through social networks and other new media, nontransactional customer behavior is likely to become more important (Verhoef, Reinartz & Krafft, 2010; Hennig-Thurau et al., 2010). Moreover, we observe that firms are increasingly pursuing strategies that encourage nontransactional behavior. For example, leisure firms proactively ask recent customers to provide ratings on independent comparison websites. Firms also understand the potential strong negative consequences of nontransactional behavior if not managed properly. The term "customer engagement" has been mentioned as an important new trend within CVM reflecting these important changes. In our view, customer engagement behaviors (CEBs) go *beyond transactions* and specifically reflect customers' behavioral manifestations that have a brand or firm focus, beyond purchase, resulting from motivational drivers. CEBs consist of multiple behaviors, such as word of mouth, blogging, customer ratings, and so forth (van Doorn et al., 2010).

For firms, the key challenge is to identify the different actors, places, and content of CEBs and understand their potential effects. For some types of CEBs, such as word of mouth, online reviews, and recommendations, research suggests how to assess their extent and impact. When evaluating CEBs, firms should consider the likely consequences in terms of both short- and long-term objectives. Yet, while some CEB manifestations are visible to the firm, others are not.

Translating CEBs into financial metrics can also improve decision making about the customer base, especially the engaged customer base. Customer engagement value can be

quantified into different components, including customer influence value, customer referral value, and customer knowledge value (van Doorn et al., 2010; Kumar et al., 2010).

To react to CEBs, firms should develop a set of capabilities and resources to manage customer engagement. Such management efforts should leverage the potential benefit or threat of a CEB internally and externally. Internally, the content of relevant CEBs (e.g., suggestions) must be made available to the right people inside the firm so that they can use it appropriately—for example, to generate new product ideas. Firms should also nurture and harness the positive potential of customer engagement by fostering processes and venues to stimulate it. Externally, a central opportunity to stimulate engagement is to give customers a site or forum to express their ideas and thoughts. For example, Microsoft uses the expertise of its users to advise other software owners on the Microsoft Answers website. Ford now encourages customers to provide ideas and suggestions on its "Your Ideas" website (see www.thefordstory.com).

Managing Customer Networks

In the past decade, Internet usage has increased tremendously, and consumers use it to search for information, buy products, and communicate. This trend of digital communication and the increased availability of data that comes with it have encouraged marketing scholars to analyze the role of networks in consumers' decision-making processes.

Customer management researchers aim to quantify the effects of networks on customer adoption decisions. Such research may have important implications for customer management practices. Certain customers may be more valuable than assumed, especially those who are critical in influencing other customers to adopt new services or buy new product offerings. Using network analyses, firms may be able to detect customers with high social influence. Specific referral programs and seeding strategies can then be developed to maximize the value of these

customers. This, potentially, may also dramatically reduce marketing costs. If firms are able to target the influencers within the database, the new offering will probably spread automatically within the rest of the customer base without the need for extensive marketing campaigns. Notably, customers acquired by other customers (i.e., through referral programs) also tend to be more loyal and valuable than customers acquired through firm-initiated communications (Schmitt, Skiera, & Van den Bulte, 2011; Hinz, Skiera, Barrot, & Jan Becker, 2012).

Not only is social influence important in adoption decisions, but it also plays a role in retention decisions. Recent research shows that the defection of a network neighbor (an individual closely connected with a customer in a network) increases a customer's risk of defecting. A single exposure to a defecting neighbor is associated with an increase in the focal customer's risk of defecting of as much as 150%, or by 80%, after controlling for tie strength and similarity (Nitzan & Libai, 2011). Understanding these customer networks will become increasingly important to managing customer value. As a consequence, we observe an increasing interest in this topic among marketing scholars, as reflected by ongoing research on this topic aiming at establishing the effects of networks on customer behavior, quantification of the network value of customers, and the use of new social media to influence customers (e.g., Risselada 2012; Haenlein 2011; Nitzan & Libai 2011).

Managing the Customer Experience

Creating superior customer experiences seems to be one of the central objectives for many firms. Firms around the globe have embraced the concept of customer experience management, with many incorporating the notion into their mission statements. For example, Valero Energy Corporation is committed to ensuring a positive customer experience by focusing on convenience, value, and quality. Similarly, the success of Starbucks has been attributed to

creating a distinctive customer experience (Kleinberger, Badgett, & Boyce, 2007; Michelli, 2007).

We suggest that the customer experience construct is holistic in nature and involves the customer's cognitive, affective, emotional, social, and physical responses to a firm. This experience is created not only by the elements that firms can control (e.g., service interface, price) but also by the elements that are outside their control (e.g., influence of others). In addition, the customer experience encompasses the *total* experience, including the search, purchase, consumption, and after-sale phases of the experience; it may also involve multiple channels (Verhoef, Lemon, Roggeveen, Tsiros, & Schlesinger, 2009).

Especially in today's multichannel environment, creating strong positive customer experiences that are consistent across all channels is important. A strong customer experience can foster customer loyalty. Thus, firms need insights into how they can improve their customers' experiences, which can be shaped by sensory, affective, intellectual, and behavioral experiences. Researchers in CVM have mainly considered more cognitive aspects of the customer experience, such as satisfaction, price, and value perceptions. Despite this, firms also aim to influence other, more emotional and affective attitudes to create customer loyalty. This has gained some attention in existing literature. Many firms have aimed to delight their customers. Other studies have provided evidence for the existence of positive and negative (service) consumption emotions. Positive emotions include aspects such as hope, happiness, joy, and surprise, while negative emotions include aspects such as anger, depression, and guilt. Insights from psychological research on love have been used to show that intimacy and passion are also important for creating loyal customers in some industries. In summary, existing research suggests that emotional and affective components of the customer–firm relationship are

important drivers of customer loyalty and, thus, CLV (Yim, Tse, & Chan, 2008; Bügel, Verhoef, & Buunk, 2011).

CONCLUDING THOUGHTS

It is an exciting time for customer value management. New models and the extensive availability of data make it possible to implement the six key lessons described herein relatively easily. The overarching theme across the six lessons is, however, that firms can only outperform competition when they implement *customer-centric strategies*. Strong analytical departments can provide the required input (i.e., drivers of loyalty) for developing these strategies, and firms can evaluate these strategies using customer-focused metrics, such as CLV. Firms can also use these metrics to instigate changes in culture. New technologies and channels can further facilitate customer–firm interactions and successfully create value for both the customer and the firm. In summary, we believe that when firms adopt a customer-centric approach to CVM and are willing to invest in customer intelligence, they can achieve a strong competitive advantage resulting in stronger market performance.

How can firms achieve this? First, CVM really can and does improve business performance. Second, all CVM initiatives should be customer driven rather than IT driven. Third, to succeed in implementing CVM, firms should adopt CLV as a core metric. Fourth, firms should invest in strong analytical capabilities; these will be critical over the next few decades. Fifth, firms must understand the drivers of customer acquisition, customer retention, and customer expansion. Sixth, multichannel management is a key factor to creating customer value.

However, going forward, all this will not be sufficient. New technological and societal developments urge firms to move even further. Understanding how to motivate customer engagement and monitor and manage customer engagement behaviors will become essential,

while analyzing, managing, and influencing customer networks will be necessary skills in the future. Finally, broadening and deepening understanding and appreciation of the customer experience—and learning to manage all aspects of the customer experience over time—will be a continuing challenge so that *the value of all current and future customers is maximized.* Still, even in these new environments, customer-centric strategies—in which firms fully understand the drivers of customer value—will be the main prerequisite to remain successful.

Table 1. Six Lessons for Customer Value Management

Lesson	
1.	Use CVM to improve business performance.
2.	Ensure that CVM is more customer driven than IT driven.
3.	Adopt CLV as a core metric.
4.	Invest in strong analytical capabilities.
5.	Understand the key drivers of customer acquisition, customer retention, and customer expansion.
6.	Manage channels to create customer value.

Figure 1. Mechanisms Through Which CVM Improves Business Performance

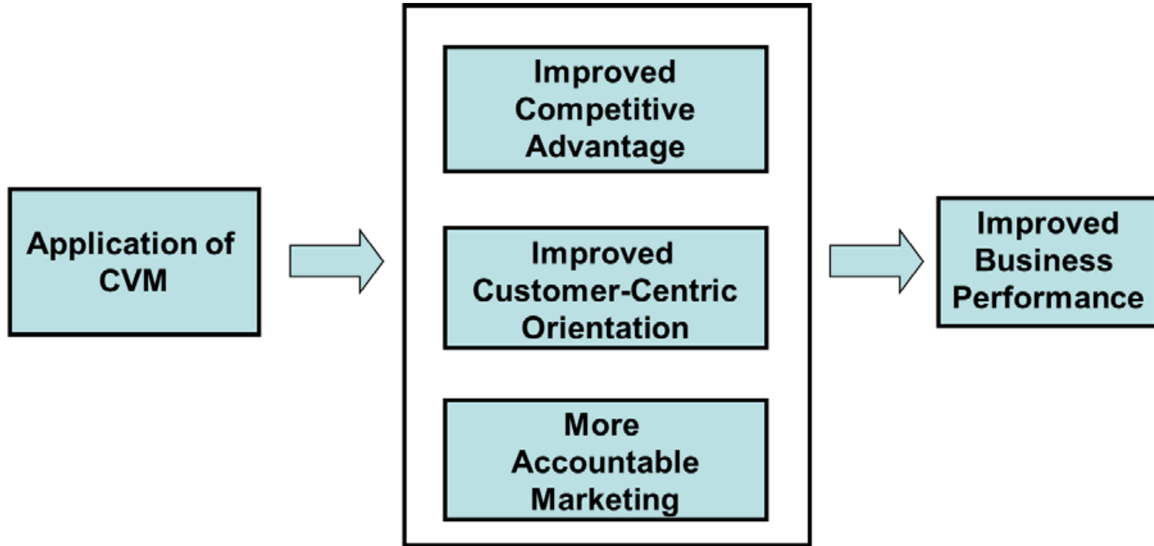


Figure 2. PTC's Best Practice Academy Drives Adoption of Best Practices Throughout Its Customer's Organization

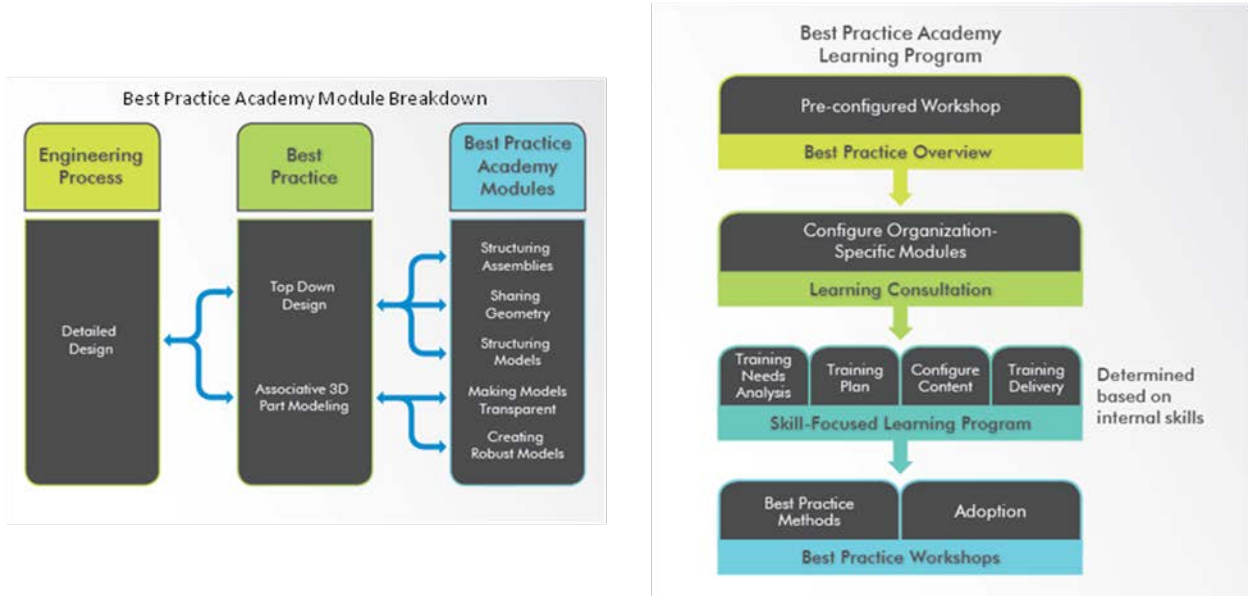


Figure 3. Evaluation of KPN's MIacademy Initiative for Building Up a Strong CI Function

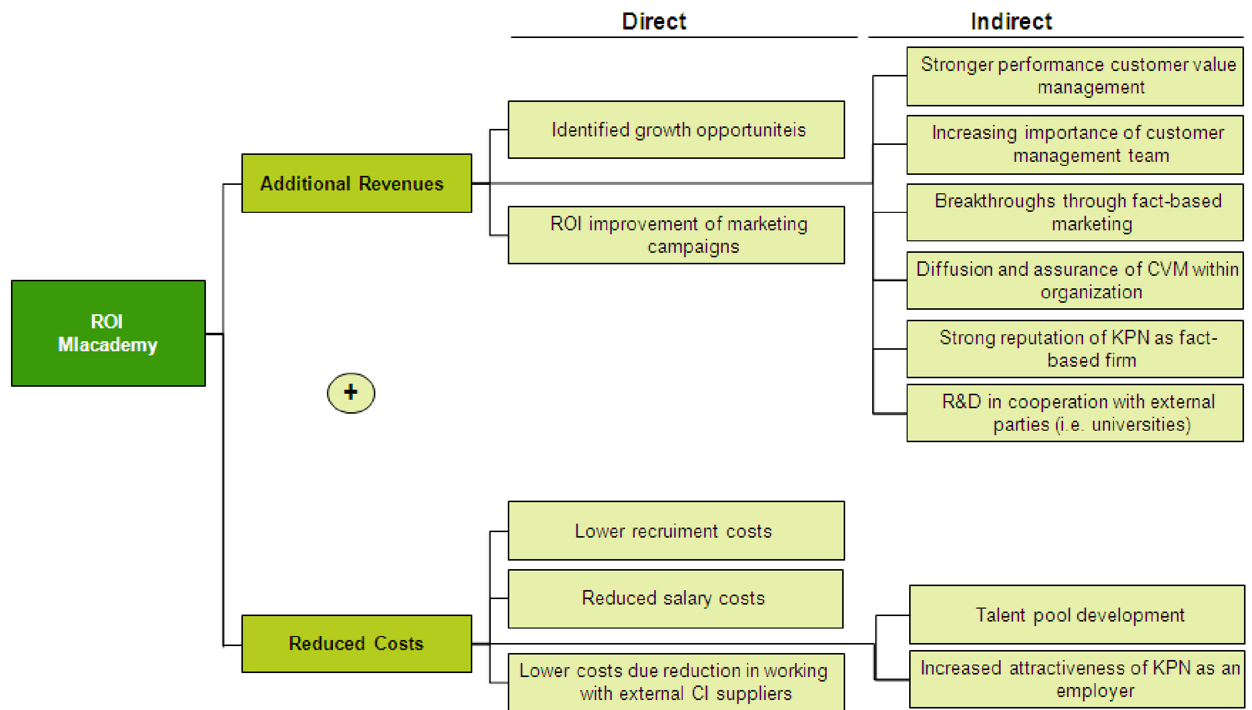
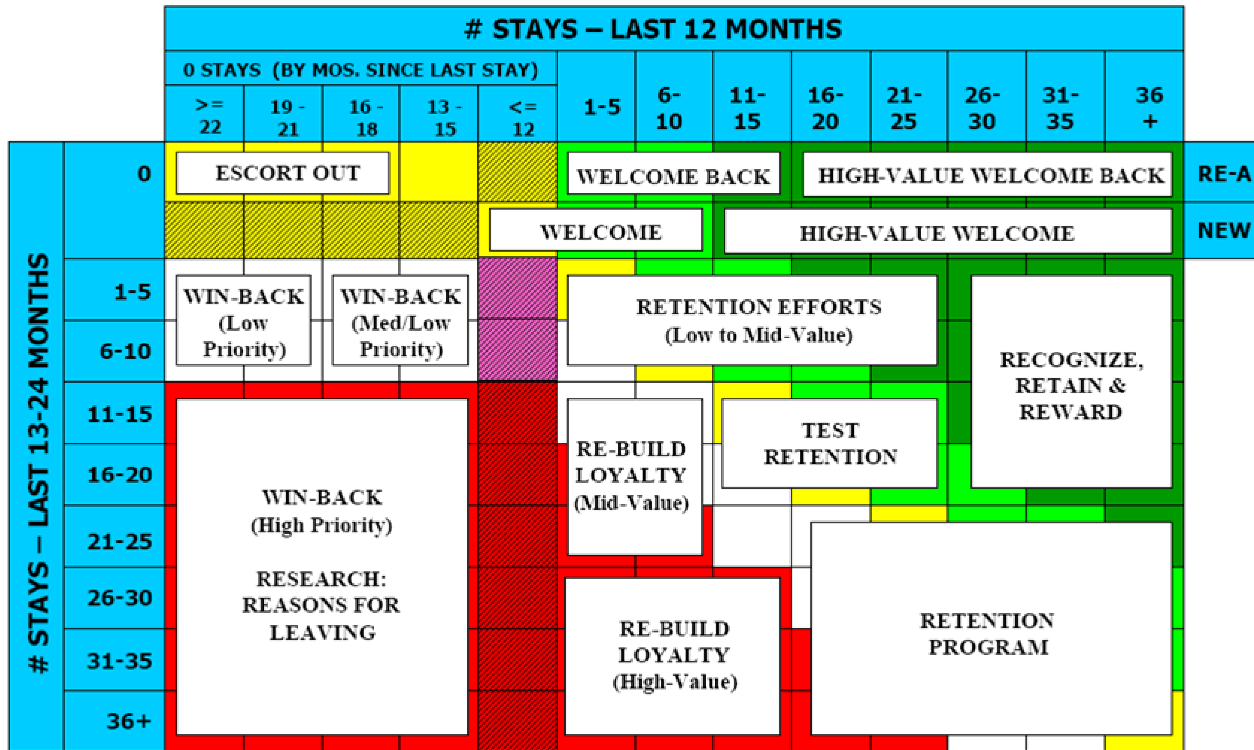


Figure 4. Hilton's Customer Portfolio and Customized Strategies



Bibliography[7]

Anderson E. T., & Simester, D. (2011). A step-by-step guide to smart business experiments. *Harvard Business Review, 89,* 98-105.

Ansari, A. Mela, C., & Neslin, S. (2008). Customer channel migration. *Journal of Marketing Research, 45/1*, 60-76

Applegate, L. M., Piccoli, G., & Def, C. (2008). Hilton Hotels: brand differentiation through customer relationship management. *Harvard Business School Case 9-809-029.*

Band, W. (2010). The Forrester wave: CRM suites for large organizations, Q2 2010 [WWW page]. URL http://www.forrester.com/rb/Research/wave%26trade%3B_crm_suites_for_large_organizations%2C_q2/q/id/55828/t/2.

Becker, J.U., G. Greve & S. Albers (2009), The impact of technological and organizational implementation of CRM on customer acquisition, maintenance, and retention,"*International Journal of Research in Marketing*, 26/3, 207-215.

Blake, B. (n.d.). The customer lens: an approach to customer touch point analysis [WWW page]. URL http://www.gardnerweb.com/marketer/articles/031001.html.

Blattberg, R.C., E.C. Malthouse & S.A. Neslin (2008), Customer lifetime value: Empirical generalizatons and some conceptual questions. *Journal of Interactive Marketing*, 23/2, 157-168

Bohling, T., Bowman, D., LaValle S., Mittal, V., Narayandas, D., Ramani, G., & Varadarajan R. (2006). CRM implementation: effectiveness issues and insights. *Journal of Service Research*, *34/4*, 184-94.

Bolton, R. N., Lemon, K. N., & Verhoef, P. C. (2004). The theoretical underpinnings of customer asset management: a framework and propositions for future research. *Journal of the Academy of Marketing Science, 32/3,* 271-93.

Bügel, M. S., Verhoef, P. C., & Buunk, A. P. (2011). The Role of intimacy in customer-to-firm relationships during the customer lifecycle . *Journal of Retailing and Consumer Services*, 18/4, 247-258

Capital One Financial Corp. (2011). Capital One Financial Corp. 10-Q [WWW page]. URL http://phx.corporate-ir.net/phoenix.zhtml?c=70667&p=irol-irhome.

Capon N., & Senn, C. (2010). Global customer management programs: how to make them really work. *California Management Review*, *52,* 32-55.

Davenport, T. H., & Harris, J. G. (2005). *Competing on analytics: the new science of winning.* Boston: Harvard Business School Press.

Day, G. (2003). Creating a superior customer-relating capability. *MSI Working Paper Series*, *03-001,* 21–36.

De Lollis, B. (2010). Hilton: revenue from mobile apps soaring 200% monthly [WWW page]. URL http://travel.usatoday.com/hotels/post/2010/09/hilton-iphone-apps-340000-downloads-hilton-apps-no-1-among-hotels/125113/1.

Dhar, R., & Glazer, R. (2003). Hedging customers. *Harvard Business Review*, *81/5,* 86-92.

Diana, A. (2010), Europe remains a global leader for CRM software adoption [WWW.page}. URL http://crmsearch.com/crm-europe.php

DoubleClick. (2004). *Retail Details: Best Practices in Multichannel Integration.* New York: DoubleClick.

Gensler, S., Leeflang, P. S.H., & Skiera B. (2012). Influence of online use on product usage behavior and consequences for customer channel migration strategies. *International Journal of Research in Marketing*. 29/2 192–201

Gupta, S., & Lehmann, D. (2005). *Managing customers as investments: the strategic value of customers in the long run.* Philadelphia: Wharton School Publishing.

Gupta, S., Lehmann, D. & Stuart, J. A. (2004). Valuing customers. *Journal of Marketing Research*, *41/1,* 7–18.

Haenlein, Michael (2011), A social network analysis of customer-level revenue distribution, *Marketing Letters*, 22/1, 15 – 29

Hedges, G. (2011). Behind the scenes: PTC University "Educates" [WWW page]. URL http://creo.ptc.com/2011/04/26/behind-the-scenes-adoption-aids-for-creo-1-0.

Hennig-Thurau, T., E.C. Malthouse, C. Friege, S. Gensler, L. Lobschat, A. Rangaswamy & B. Skiera (2010), The impact of new media on customer relationships, *Journal of Service Research*, 13/3, 311-330.

Hilton Worldwide. (2009). Hilton Worldwide launches most comprehensive iPhone applications in the lodging industry [WWW page]. URL http://hiltonworldwideglobalmediacenter.com/index.cfm/newsroom/detail/14005.

Hinz, O., Skiera, B., Barrot, C., & Becker, J. (2012). Seeding strategies for viral marketing: an empirical comparison (forthcoming). *Journal of Marketing, 76.*

Hoekstra, J. C., & Verhoef, P. C. (2010). Customer intelligence–marketing interface: influences on firm performance (working paper). University of Groningen.

Hoover, J. N. (2008). Hilton's welcome mat starts on the web. *Informationweek, 1202,* 43-44.

Jayachandran, S., Sharma, S., Kaufman, P., & Raman, P. (2005). The role of relational information processes and technology use in customer relationship management. *Journal of Marketing*, *69/4,* 177-92.

Johnson, M. D., & Selnes, F. (2004). Customer portfolio management: toward a dynamic theory of exchange relationships. *Journal of Marketing*, *68/2*, 1-17

Kim, S.H.& T. Mukhopadhyay, Determining optimal CRM implementation strategies *Information Systems Research*, 22/3, 624-639

Kleinberger, H., Badgett, M., & Boyce, M. S. (2007). *Turning shoppers into advocates: the customer focused retail enterprise.* Cambridge, MA: IBM Institute for Business Value

Konus, U., P.C. Verhoef & S.A. Neslin (2008), Multi-channel customer segmentation, *Journal of Retailing,* 84/4, 398-413

Konus, U., Neslin, S. A., & Verhoef, P. C. (2011). The effect of search channel elimination on purchase incidence, order size and channel choice (working paper). Eindhoven University of Technology.

Konus, U., Trampe, D., & Verhoef, P. C. (2009). Customer responses to forced channel migration (working paper). University of Groningen.

Kumar, V. (2008). *Managing Customers for Profit: Strategies to Increase Profits and Build Loyalty*, Philadelphia: Wharton Publishing.

Kumar, V., Aksoy, L., Donkers, B., Venkatesan, R., Wiesel, T., & Tillmanns, S. (2010). Undervalued or overvalued customers: capturing total customer engagement value. *Journal of Service Research, 13/3*, 297-310.

Kumar, V., & Shah, D. (2009). Expanding the role of marketing: from customer equity to market capitalization. *Journal of Marketing*, *73/6,* 119-36.

Kumar, V., Venkatesan, R., Bohling, T. R., & Beckmann, D. (2008). The power of CLV: managing customer lifetime value at IBM. *Marketing Science*, *27/4*, 585–99.

Kumar V., K.N. Lemon and A. Parasuraman (2006), Managing customers for value - An overview and research agenda, *Journal of Service Research*, 9/2, 87-94

Michelli, J. (2007). *The Starbucks experience: 5 principles for turning ordinary into extraordinary*. New York: McGraw–Hill.

Neslin, S.A., S. Gupta, W.A. Kamakura, J.X Lu and C.H. Mason (2006), Defection detection: Measuring and understanding the predictive accuracy of customer churn models, *Journal of Marketing Research,* 43/2, 204-211.

Neslin, S.A., D. Grewal, R. Leghorn, V. Shankar, M.L. Teerling, J.S. Thomas and P.C. Verhoef (2006), Challenges and opportunities in multichannel customer management, *Journal of Service Research,* 9/2, 95-112.

Neslin, S.A. and V. Shankar (2009), Key issues in multichannel customer management: Current knowledge and future directions, *Journal of Interactive Marketing*, 23/1, 70-81.

Nitzan I., & Libai, B. (2011). Social effects on customer retention. *Journal of Marketing*. 75/6, 24-38

Parametric Technology Corporation. (2010). Straight talk from 3D CAD users [WWW page]. URL http://www.ptc.com/WCMS/files/113815/en/5547B_DYK_Rosenbauer_CS_EN.pdf.

Pauwels, K., J. Silva-Risso, S. Srinivasan & D. M. Hanssens (2004), New products, sales promotions, and firm value: The case of the automobile industry, *Journal of Marketing,* 68/4, 142-156.

Pauwels, K., Ambler, T., Clark, B. H., LaPointe, P., Reibstein, D., Skiera, B., Wierenga, B., & Wiesel, T. (2009). Dashboards as a service: why, what, how, and what research is needed. *Journal of Service Research, 12/2,* 175-89.

Payne A. and P. Frow (2005). A strategic framework for customer relationship management, *Journal of Marketing*, 69/4, 167-176

Reinartz, W., Krafft, M., & Hoyer, W. (2004). The CRM process: its measurement and impact on performance. *Journal of Marketing Research, 41/3*, 293-305.

Rierson, M., & Lattin, J. (2007). Capital One: leveraging information-based marketing. *Stanford Graduate School of Business Case M-316.*

Rigby, D. K., & Ledingham, D. (2004). CRM done right. *Harvard Business Review, 84/11*, 118-29.

Rigby, D. K., Reichheld, F. F., & Schefter, P. (2002). Avoid the four perils of CRM. *Harvard Business Review, 80/2*, 5–11.

Risselada, H. (2012). *Analyzing Behavior in Customer Relationships Accounting for Customer-to-Customer Interactions*, Dissertation, University of Groningen

Rust, R. T., Lemon, K. N., & Zeithaml, V. A. (2004). Return on marketing: using customer equity to focus marketing strategy. *Journal of Marketing, 68/1*, 109-27.

Rust, R. T., Zeithaml, V. A., & Lemon, K. N. (2000). *Driving customer equity: how customer lifetime value is reshaping corporate strategy.* New York: The Free Press.

Schmitt, P., Skiera, B., & Van den Bulte, C. (2011). Referral programs and customer value. *Journal of Marketing*, *75/1*, 46-59.

Schonfeld, E. (2010). Forrester Forecast: online retail sales will grow to $250 billion by 2014 [WWW page]. URL http://techcrunch.com/2010/03/08/forrester-forecast-online-retail-sales-will-grow-to-250-billion-by-2014/.

Shah, D., Rust, R. T., Parasuraman, A., Staelin, R., & Day, G. S. (2006). The path to customer centricity. *Journal of Service Research, 9/2,* 113-24.

Skiera, B., Berns, M., & Horn, L. (2011). Customer equity sustainability ratio: a new metric for assessing a firm's future orientation. *Journal of Marketing*, *75/3,* 118-31.

Szymanski, D.M., S.G. Bharadwaj and P.R. Varadarajan (1993), Standardization versus adaptation of international marketing strategy: An empirical investigation, *Journal of Marketing*, 57/4, 1-17.

Tasari, C. A., Bolton, R. N., Hutt, M. D., & Walker, B. A. (2011). Balancing risk and return in a customer portfolio. *Journal of Marketing*, *75/3*, 1-17.

Temkin, B. D. & Belanger, N. (2004). Customer analytics helps boost loyalty [WWW page]. URL http://www.forrester.com/rb/Research/customer_analytics_help_boost_loyalty/ q/id/34190/t/2.

Thompson, B. (2006). You can get to know your guest: an interview with Hilton Hotels' Jim Vonderheide [WWW page]. URL http://www.customerthink.com.

Van Doorn, J., Lemon, K. N., Mittal, V., Nass, S., Pick, D, Pirner, P., & Verhoef, P. C. (2010). Customer engagement behavior: theoretical foundations and research directions. *Journal of Service Research, 13/3*, 253-66.

Venkatesan R., & Kumar, V. (2004). A customer lifetime value framework for customer selection and resource allocation strategy. *Journal of Marketing*, *68/4,* 106-25.

Verhoef, P. C., Lemon, K. N., Parasuraman, A., Roggeveen, A., Tsiros, M., & Schlesinger, L. A. (2009). Customer experience creation: determinants, dynamics and management strategies. *Journal of Retailing, 85/1*, 31-41.

Verhoef, P. C., Reinartz, W., & Krafft, M. (2010). Customer engagement as a new perspective in customer management. *Journal of Service Research, 13/3*, 247-52.

Verhoef, P. C., van Doorn, J., & Dorotic M. (2007). Customer value management: an overview and research agenda. *Marketing- Journal of Research in Management*, *2*, 51-68.

Verhoef, P. C. & K.N. Lemon (2011), Key lessons from customer value management research, in *Fast Forward Series*, Boston: Marketing Science Institute

Watkins, E. (2010). Hilton reborn. *National Real Estate Investor, 52,* 70-71.

Wieringa, J.E. & P.C. Verhoef (2007), Understanding customer switching behavior in a liberalizing market: An exploratory study, *Journal of Service Research*, 10/2, 174-186*,*

Wilson, H., Street, R., & Bruce, L. (2008). *The multichannel challenge integrating customer experiences for profit.* Amsterdam: Butterworth-Heinemann.

Winer, R. S. (2001). A framework for customer relationship management. *California Management Review*, *43/4*, 89-105.

Woodruff, R.B. (1997), Customer value: The next source for competitive advantage, *Journal of the Academy of Marketing Science*, 25/2, 139-152

Yim, C. K., Tse, D. K., & Chan, K. W. (2008). Strengthening Customer loyalty through intimacy and passion: roles of customer-firm affection and customer staff relationships in services. *Journal of Marketing Research, 45/6*, 741-56.

ENDNOTES

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[1] One can distinguish between customer value from a customer perspective and a firm perspective. In this article we focus on customer value from a firm perspective, thereby focusing on the (long-term monetary) value of a customer for a firm. When one focuses on customer value from a customer perspective, one is interested to what extent the firm provides value to the customer (e.g., Woodruff 1997).

[2] Our definition of CVM has some similarities with CRM definitions, such as for example provided by Payne and Frow (2005). The focus of CVM is, however, clearly on the use of customer data to develop (customer centric) strategies for the creation of long-term customer value. CRM definitions usually have a broader focus by also mentioning business outcomes, such as shareholder value and including IT. Hence, we clearly distinguish between CVM and CRM. Furthermore, we abstain from using the term of CRM instead of CVM, as CRM also frequently has a negative connotation in practice and is frequently only linked to software of providers, such as Oracle and Microsoft.

[3] We thank Erin Doyle (Boston College MBA, 2013), for input in the development of this case example.

[4] For additional information on PTC University, see: http://www.ptc.com/products/ptc-university/.

[5] To become certified, a call center must successfully pass a detailed audit of its recruiting, training, employee incentives, quality assurance capabilities, and management roles and responsibilities. In addition, a call center must perform within the top 20% of customer service scores, based on J.D. Power and Associates cross-industry customer satisfaction benchmarks. Criteria include knowledge, concern about the customer, usefulness of information, convenience, ease of access, and timely resolution. See www.jdpower.com.

[6] We thank Marteyn Roose from KPN and Natasha Walk from MIcompany for input in the development of this case example.

[7] An very extended additional reading list can be found in Verhoef and Lemon (2011)