Leverage Advanced Customer Analytics to Grow Shareholder Value

The Right Marketing Applications Can Facilitate Customer Equity Optimization (CEO) Strategies

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Today's capricious economy is driving investors to search for new ways to determine which firms to invest in – and which to avoid. As they look for leading indicators of shifts in a firm's potential market value, they are becoming interested in the current and projected worth of its customer base, since that is where all revenue streams originate. As a result of this, investors increasingly expect senior executives to be astute and fluent in discussing changes in the value and management of their company's customer assets. Specifically, investors want to know how well the leadership team is growing its customer equity. Most of us are aware that customer knowledge is mandatory for managing and increasing customer value, however there is a bright new strategic dawn emerging under the banner of customer equity optimization (CEO). This refers to the strategic leverage of advanced customer analytics across the enterprise to engineer customer interaction processes that improve customer asset management and drive shareholder value.

The Focused Executive desiring Customer Value

Until recently, management practice centered on market entry, market share, sales, revenues, and business growth. Most firms developed activities towards these well-accepted KPIs or MBOs. Unfortunately, the first decade of Internet investment uncovered issues requiring major change in business approaches. No longer were conventional premises satisfactory by themselves. Shareholders revolted, and now scrutinize more closely the market potential of the companies they bankroll – by refining their expectations around business value.

Clearly, the financial markets have shown that there are three new overarching focus points that are required for firms to succeed in the 21st century. The first is: **profitability** (short and long term), the second is the **management of 'relationships'** (which include customers, suppliers, partners, franchisees, agents, intermediaries, and even competitors) and the third, is the foundation of a base of significantly detailed and long-term information or a **'knowledge'** base.

New and provocative voices arise and confront business executives everywhere, challenging them to better leverage their customer relationship intelligence assets to grow profitability and customer equity. This new thinking has been driven by recent thought leadership in the field of customer management. Roland T. Rust, university professor and co-author of the book *Driving Customer Equity*, has put it this way:

"Add up the customer lifetime values of all your customers and you have the firm's customer equity, the single most important number for any firm and a very good proxy for the total value of the firm." [1]

Another author and industry analyst, Patricia Seybold, has been blunt about the importance of customer equity, asserting that executives will need analytical tools that help them articulate the shifting value of their customer bases.

"Investors have a right to know how many customers you have, how much you're earning per customer, how well you're treating your customers, and how fast you're growing the value of your customer franchise." [2]

The challenge is clear: executives need to understand and be able to articulate – in detail – precisely what their customer assets are worth and how their business is managing customer relationships to grow shareholder value. For many senior managers, this new expectation may come as a

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Shareholder Value = NPV of Expected Cash Flows = Value of the Customer Asset + Value of Acquired Customers = Sum of Expected Economic Profits (EVA, Residual Income)

Diagram 1 – University of Michigan professor Claes Fornell, a leading expert on Customer Asset Management, has used this formula to discuss how 'maximizing shareholder value results from maximizing customer asset value.'

surprise, but it shouldn't – in a time when a firm's market value can change as quickly as consumer behavior and preferences shift.

The Marketing Science Institute (MSI), a professional association of business marketing thought leaders from both academic and corporate practice,[3] has published material that affirms the rising importance of market-based asset management (which includes customer relationships) as key determinants in a company's market value and shareholder equity:

"There is a quiet revolution in the way that marketing activities are being viewed by some marketing professionals, by enlightened senior managers, and by innovative managers in other functions, particularly in finance. Inviolable assumptions about the purpose, content, and execution of marketing are slowly giving way to assumptions that more accurately reflect how it is practiced in leading organizations … market-based assets (including customer relationships) can potentially influence every driver of 'shareholder value' and this includes 'accelerating the receipt of cash flows – plus lowering a firm's cost of capital.' [4]

The alignment between financial objectives and marketing objectives was demonstrated at a Marketing Science Institute conference presentation by University of Michigan professor Claes Fornell, who is one of the world's leading experts on Customer Asset Management. Professor Fornell showed how **'maximizing shareholder value results from maximizing customer asset value'** and strongly recommends the following decision rule: "Unless an action is likely to increase both capital efficiency and the value of customer assets, don't do it." [5]

As this and other similar studies gain momentum and visibility in the public domain, it seems likely that Patricia Seybold's assertion will manifest – and "company executives will need to report their customer relationship management performance to investors."

The Information Environment as the 'Value Engine'

The good news is that all of the information about customer asset status and growth that investors may wish to see can be converged into a usable **'customer knowledge center'** *(known today in the technology arena as an 'enterprise data warehouse' or EDW).*

Using analytical CRM technology and processes, a firm can focus on their customers' needs plus strategically manage and increase customer value. Moreover, the power of analytical CRM raises the value of customer assets by increasing profitability and customer satisfaction while reducing churn and the cost of marketing. This has been documented at a number of companies across industries.[6]

Several publications, and particularly an excellent book by Robert Blattberg et al, focus clearly on the issues and the opportunity: "Today's computing technology now makes precise customer asset management possible. Companies can now efficiently obtain and process the information they need to understand customer equity." [7]

Moreover, the authors have added to this thought stream by setting forth what they call Organizational Imperatives for Customer Equity Management. These imperatives may well represent senior executive hot spots as well as things marketers must act to accomplish and continuously document:

1. Know your customers
2. Measure the asset value of each customer

3. Manage acquisition
4. Manage retention
5. Manage add-on selling
6. Balance acquisition, retention and add-on selling
7. Manage customer portfolios
8. Tailor the marketing mix

As marketing becomes ascendant in the business constellation, it becomes arguably the main driver of customer equity – and shareholder value. The support for this view is growing. The MSI report makes the point: "Increasingly, top management is demanding that marketing view its ultimate purpose as contributing to the enhancement of financial returns." [8]

This widens the scope of what is expected of marketing. However, the scope of marketing is already expanding by leaps and bounds, because another new skill set requirement has emerged for marketers – the need to be savvy in the use of technologies, especially analytical CRM.

Thus, the 'quiet revolution' gains momentum as technology evolves, and enlightened senior managers and marketers learn the power and promise of analytical technology tools. Soon, the new golden rule of business will be: "Whoever understands and manages customer equity best, wins."

Customer equity optimization (CEO) is quickly becoming a new knowledge and decisioneering economics. This "CEO" is founded on the use of analytical CRM technology systems to improve the value of a company's customer relationship assets – and in turn generate higher shareholder value.

Marketing as a Technology

Regis McKenna, author and consultant known as the father of relationship marketing, has many years ago advised us, "Marketing is becoming a technology." [9] He adds, "Technology is the greatest catalyst for change in marketing. Technological innovations have had such a huge effect that anyone would find it hard to overstate their repercussions on the business of marketing." McKenna also writes that "software is the most significant technology for marketing executives to understand, for the simple reason that software automates producer-consumer relationships … Just about all of today's marketing innovations are in the software area."

Current technology is proving capable of enabling, accelerating, and optimizing the entire marketing process, performing highly complex and detailed analytical tasks, advising companies when to go to market, how to go to market, and how to decide on which channel and even the words to use to communicate with individual customers.

Technology is providing marketers the tools to manage and grow customer value. Thus companies are focusing now on analytical marketing as a high-ROI value investment.

Naturally, software is powerless without marketers who are trained to use it to best business advantage. This means marketers must not only know and become fluent in analytical tools to understand market dynamics, but must also have the training in analytical marketing to apply their knowledge scientifically and thus fully leverage the technology. Using Analytical Models should be an iterative learning process.

This means that your marketing team (and everyone else's) needs to do everything possible to learn to optimize market-based assets to cultivate ever-higher customer equity. So, when the business looks for short-term, positive results and rapid ROI, they now expect their marketers to:

> Accelerate and enhance cash flows
> Generate cost reductions while growing revenue
> Increase individual customer value streams
> Establish business differentiation in the marketplace
> Identify new opportunities and exploit existing ones
> Identify optimal channel strategies for individual customers
> Apply and master technology to drive rapid ROI
> Measure and report detailed impact of marketing on the business

Marketers are already tasked with a tremendous workload: they must acquire, cultivate, grow, retain and optimize the value of the customer base using hundreds of tools, processes, and systems. They must try to decode the DNA of thousands or millions of individual customers – and leverage the insight to produce ever more cash and earnings. And they do this as millions of consumers or business customers continuously evaluate and shop around, over dozens of channels.

Yet with every activity they undertake, marketers must still ask themselves what likely impact their actions will have on individual or segmented customer relationships. Moreover, as their role escalates in the greater context of the enterprise and its shareholders, they will also need to ask the related question: "What will the impact of this particular activity be on the company's customer equity?"

Marketing as a Science

Not only will marketers need to think more like CEOs, they will also need to think like scientists – choosing from a variety of methods and technologies to create and leverage systematic knowledge in pursuit of effective practices that will achieve desired business outcomes.

According to accomplished marketing expert and author Sergio Zyman, "Marketers are going to have to take a scientific approach to doing their jobs … making assumptions, debating them until an agreement or understanding is reached, and make a plan based on those assumptions. Then soon after the project is launched, analyze the results, and without hesitation, understand unequivocally whether the assumptions were right or wrong, and change them if necessary." [10]

This 'scientific' marketing focus is increasingly going to become the rule rather than the exception, as the value of customer relationships is understood as the key driver of a firm's market value. The analytical processes provide the intelligence for the interactive channels to be more knowledgeable and also more effective in their communications.

A number of the experts in the field of customer equity underscore the critical nature of customer equity in determining a firm's market value – and thus shareholder value. MSI continues to focus on this important 'valuation' subject:

"The customer-based valuation approach may be a more stable indicator of intrinsic firm value than market capitalization." [11]

Today it is marketers who are anxiously looking for ways to create shareholder wealth – using scientific methods. In fact, understanding and practicing CRM as a science is becoming a key area of marketing competency. So marketing is, one could say, in the business of continuously optimizing its competencies – primarily in the innovative use of high-speed analytical technology. Today's new marketers must think, plan, segment, analyze, execute, and learn faster than the competition – in order to out-market, outsell and outperform.

Relationship management analytical processes and the iterative learning process, combined with the customer knowledge center, thus support and enhance a marketer's ability to optimize customer value and equity. These systems and tools are now more critical than ever. What are these tools? Call them analytical applications, analytical CRM, or customer analytics. They can't substitute for human ingenuity and creativity, but they can certainly accelerate and enrich the process by adding new capabilities that spot opportunities and discover customer behavior and affinity patterns. They enhance the ability to learn from previous campaigns while adding the element of speed – thus optimizing customer communications and relationships.

Judy A. Bayer, a Teradata CRM Practice Partner, has put it well: "The secret of generating rapid ROI and meeting the tidal wave of business demands is this: that the benefits, the rewards, and the ROI come from 'going deeper' into your rich resources of customer data. Yet marketers need to know where to look – and which are the right tools to do it." [12]

Defining the Types of CRM

Before getting into specifics about the analytical tools, it is important to contrast the two basic types of CRM: analytical CRM and operational CRM. To generate intelligence for optimal customer equity management, you need analytical CRM.

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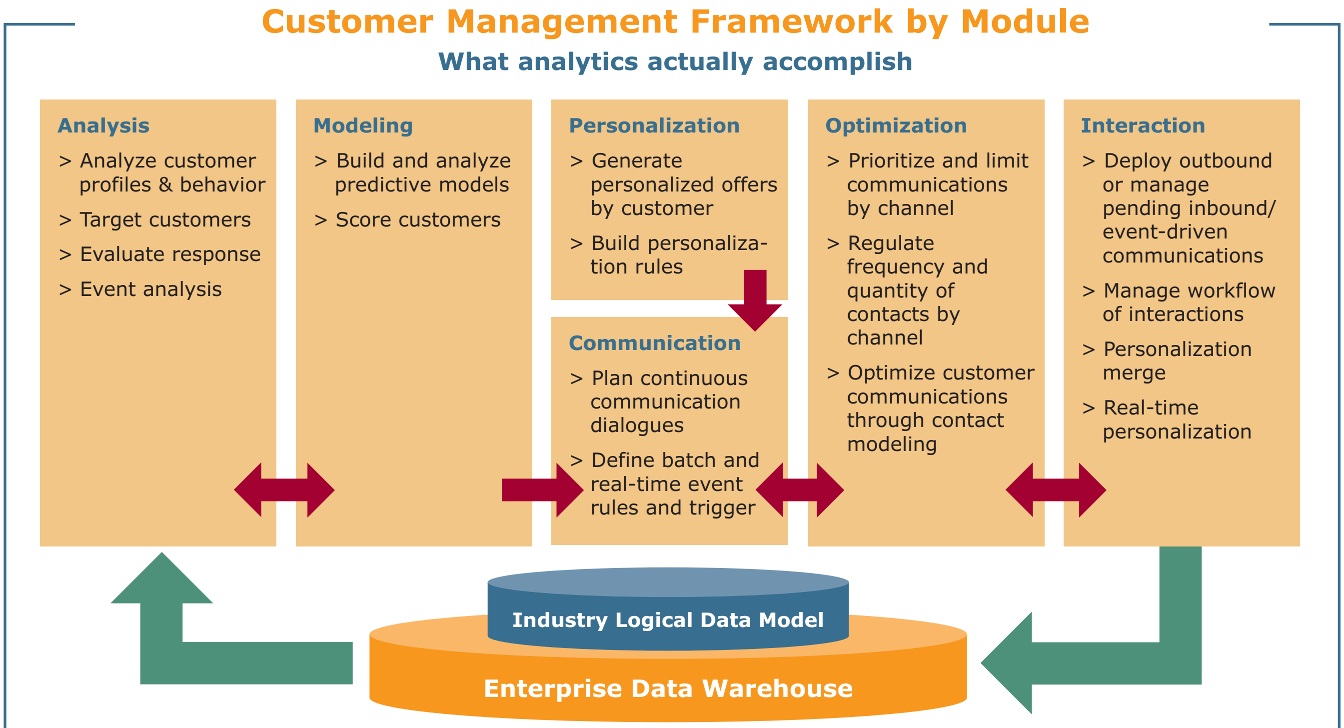

Diagram 2 – The Customer Management Framework includes a wide variety of functional tools that provide different perspectives of customers and their value to the business. In addition, the communication and interaction functions provide insight and capabilities that enrich dialogues with individual customers and enable continuous learning throughout the many relationships over time.

According to META Group, a consulting organization specializing in IT and CRM:

"Operational CRM is the automation of horizontally integrated business processes involving front-office customer touch points across sales, marketing and customer service via multiple, interconnected delivery channels.

Analytical CRM is the analysis of data created on the operational side of CRM and through other relevant operational data sources for the purposes of business performance management and customer-specific analysis." [13]

In fact, the role of analytical tools has become so critical that companies could find themselves out of the game without them. One observer has said: "CRM analytic applications help companies gain the comprehensive understanding of their customer interactions necessary to provide insights into how to increase the lifetime value of their customers … and CRM implementations that lack an analytic component are failing to provide significant improvement to their customer relationships." [14]

In other words, analytical CRM refers to the methodologies that create and exploit knowledge of a company's current and future customers to drive business decisions, processes and strategies. Again, analytical CRM is a relevance-creating process.

For example, an effective way to fully realize and grow a firm's knowledge would be to facilitate a **Customer Management Framework** representing four key dimensions of the marketing process (see Diagram 2).

> Analysis (Ask and answer any question to identify and select opportunities)

> Communication (personalization of offers and messages)
> Interaction (contact, channel and treatment)
> Measurement (evaluation of communication and interaction results)

The Analysis dimension is focused on tools and functions that slice and dice the entire customer asset base virtually any way marketers want to look at it: customer value, customer spending, product affinities, interaction behavior, percentile profiles, and segmentation techniques. This includes the creation and use of analytical segments to build statistical models and associations that identify opportunities to cross sell, up-sell, and grow customer relationships. Part of the process also should include scoring of customers on a variety of criteria. Primarily, the marketer should learn who is most likely to buy what product or service – along with other detailed possibilities. This allows for creating propensity models (attrition, buying, credit, risk, fraud, pricing, functionality, delay action, multi-purchase, etc.).

The Communication dimension is the core of analytical CRM planning, development and relationship management across all channels, product lines, and business units. Using the opportunities identified by *event detectives* and analysis, communication tools help marketers execute the right *customer treatments based on strategic* value objectives and individual customer knowledge assets. This could include single or multiple waves of communication – or involve rules-based event triggers that signal when a customer is ready to buy or has crossed a strategic value threshold. Communications planning also entails personalizing messages and offers by creating custom rules and templates. This is where customer treatments or experiences are designed and produced, prioritizing messages based on resource availability within a particular time window.

The Interaction dimension is focused on managing customer engagement activity across all channels and touch points such as the store or branch, the e-channel, direct mail, kiosks, POS, or the call center. Again, customer engagement is another highly strategic domain where the timing of contact and responses should be managed to optimize the experience for the customer as well as grow the value of the relationship (customer equity) to the business.

Optimizing Relationships

A company optimizes its relationships by understanding what its many customers value and how each one perceives value – then, communicating this value more relevantly and effectively through custom-designed treatments. The intelligence required to do this comes from the vast data that is continuously pumping through the arteries and capillaries of the enterprise – analyzed and exploited by sophisticated analytical software tools.

Analytics makes this intelligence 'actionable' and thus beneficial to the business. It involves tracking and evaluating data, examining highly complex patterns and trends. It expands on traditional data mining by applying statistical and reporting techniques and tools to information culled from customer contacts – often within seconds or minutes of the customer interaction.

In addition to marketing opportunity identification, analytics can lead to more accurate marketing predictions – revealing potential upward and downward shifts in customer value. In the present tense, it makes CRM execution more effective as a result of the new, actionable insights and perspectives it provides. CRM Analytics include segmentation studies, customer migration analysis, Life-Time Value (LTV) modeling, cross-sell/up-sell analysis, new customer models, customer contact optimization, merchandising analysis, customer attrition and churn models, credit risk scoring – and more. Some excellent case examples have been conducted, which include British Airways, Continental Air, The Royal Bank of Canada Group, The National Bank of Australia, and Union Bank of Norway.

For example, most marketers promote to customers based on their current value to the business. But customer value changes. With advanced CRM analytics, a company will be capable of predicting which direction and how quickly specific customers can reasonably be expected to move. A company could then take action to modify customer movement in a mutually satisfying direction. Customer migration analysis, for instance, can help companies better communicate and market to its customers in ways that move them up the value chain. With advanced customer analytics, marketers and business analysts can:

> **Segment customers by business value.** Next, model them to predict their migration into a spectrum of value segments. Then, simulate and predict customer-buying behavior based on a variety of promotion strategies.

> **Perform a marketing influencers analysis** to identify which customers can be influenced in their value migration. Then, communicate to them in ways that move them in the right direction.

> **Make accurate assessments** of each customer's affinity to a message, timing, a product, or services.

> **Manage frequency of customer contact** and learn and re-learn which channel should be used for specific messages as times and offers change.

> **Perform detailed customer value analysis**, to include market basket analysis, product structure analysis, cross-product correlation analysis, multiple campaign response models, customer growth models, churn and attrition models, and customer Life Time Value models to spot profit opportunities.

> **Build/use a knowledge system** that encompasses continuous learning and abilities to derive value from customer relationships by 'knowing' the lifecycle, business cycles, project affinities, payment actions, and satisfaction criteria.

Customer Value and 'Relevance'

The one thing that customers MUST perceive from business offers and messages before they will pay any attention – the starting point for all customer relationships – is "relevance." Gartner, a top IT and strategy consulting firm, has made the point: "It is relevancy that leads to value for the customer." [15]

Products, services and communications to customers must be relevant to their individual needs, interests and preferences. What's required is rapid line of sight to your detailed customer information – where the relevance resides. Invest in your technology and information environment and you are investing in relevant offers and messages to your individual customers. A relevance-generating knowledge information infrastructure by necessity includes an enterprise data warehouse – which provides an integrated decisioning environment – for an authentic customer-centric business model.

As analyst Lou Agosta of GIGA Information Group has said: "Data warehousing for the first time ever enables the capabilities of technology to catch up with the rhetoric of the '360 degree view' of the customer. If a firm had $200 million in sales and were able to improve sales revenue through cross-sell/up-sell, better campaign management and response by just ten percent, then that is another $20 million in revenue." [16]

As an aside, Agosta has also recommended that companies mine and analyze data 'in-the-database' rather than extract it for analysis and mining elsewhere, which is inefficient and results in a lower quality of intelligence.

Of course, it is critical that your systems capture and centralize data streams across all channels and customer touch points – so that the marketing knowledge base delivers a holistic and integrated view of customers. A holistic view includes everything – customer transactions, interactions, service history, profiles, interactive survey data, click-stream/browsing behavior (from tracking systems), references, demographics, psychographics and in fact all available and useful data surrounding that customer.

This includes data from every department – and from outside your business in some cases. Excellent examples of the centralized creation of the data warehouse foundation have been achieved by 3M, SBC, e-Trade.com, Burlington Northern Santa Fe, and Travelocity.com.

Based on a holistic approach, your company's different departments – sales, marketing, service, finance, and operations – can conduct business sharing the same view of each customer. As a result, each individual customer experience with the company is consistent – and customer equity can be more effectively managed and measured.

How Companies Empower Marketers with CRM to Shape Relationships

There are countless ways to analyze and evaluate your customer assets. The applications and approaches are plentiful, but there are a few basic tools that you should know about. Here are a few of them – and how they shape customer relationships.

Percentile Analysis allows marketers to segment customers into many different types of ranked groups. The rankings should be based on spending levels, average dollars in market basket, purchase history over specified date periods – or any other 'marketing user-defined' criteria. For example, marketers may use analytical software modules to create a chart showing top spenders within a segment. Then chart relationships between any two customer segment attributes. Comparison charts should be created to analyze different customer segments against the same or different criteria. Plus, results should be saved and stored at any time. Systems like this should also have the added ability to export results into spreadsheets or tab-delimited formats – making it possible to share results with a wider audience – including senior management. Executives should know information about customers by segments, services, profitability, channel, and contribution characteristics.

Using **Cross-Segment Analysis**, marketers can discover and analyze key metrics across different customer groups using cross-tab style visualization. This process should easily measure relative performance and interaction of promotions as demonstrated by the behavior of segments. Data changes should be monitored as the group or segment attributes change. Customers at each cell intersection should be selected and grouped (targeted) into a new segment for use in other analyses, campaigns, or reports.

Each intersection cell contains multiple measures. And each measure should have its own date range, channel, or card type. Marketers know that multiple date ranges for 'time over time' analysis is important. Measures should be represented graphically. In most cases, the user will define a function (sum, average, min, max) that the system will apply to the attribute. Examples include total-spending amounts, average transactions per period, and maximum hold time. Optionally, the user may choose totals for the rows and columns to be on the report. Cross-Segment Analysis enhances the marketing process with detailed customer intelligence – and the power to build complex reports with ease and flexibility.

Pattern Detection is similar to a market basket analysis but performed over time – with a panoramic view of purchase patterns, which can help predict future customer behavior. Like a market basket analysis, this module helps to identify common product purchase combinations. However, the marketer's insight and control are expanded with Pattern Detection, because of its ability to evaluate a product purchase at a single point in time – examining patterns of activity leading up to the purchase and activity that follows it.

The primary benefit of Pattern Detection is the ability to find a predictive path leading up to a purchase or equally important insight, resulting in better **understanding of a customer's modified behavior** because of that purchase. For example, a marketing analyst might learn what leads to a customer's purchase of a specific hand tool. Is it the result of previously purchased accessories prior to the hand tool purchase, or is it driven by some other cause, say, a promotion or other purchase? Likewise, marketers should learn from customer behavior after the purchase of the hand tool – to guide future customers in the same situation through the lifecycle. With Pattern Detection, a marketer should predict and shape your customers' future interactions.

Analysis also includes modeling, which can help marketers find the most likely customer 'responder' for a given offer or message – through automated creation and validation of a statistical model. This dramatically improves marketing productivity by adding a sharp focus to messaging and offer generation. Marketers should know the right customers for all of your offers and messages and expect better returns. Specifically, the module scores each individual customer or group based on 'likelihood to respond.'

Modeling puts logistic regression and other tools to work to determine the most significant variables that affect response behavior. The module scores each individual customer or group, and marketers will accelerate the cycle time and should go to market quickly with much more accurate targeting of communications.

Personalization rules components give marketers the power to tailor offers and messages to individual customers. The term 'rules,' used here means simply: "if this is the case, then perform a specific action," which implies flexibility to enable tasks and data to be easily changed by replacing one or more rules. This technology is increasingly adopted in an online or dynamic customer interactive situation.

For example, marketers can personalize with 'rules' a number of ways:

> Product Offer Rules, identifying products or services to assign to customers based on specific customer attributes and inventory levels.

> Discount Rules, using a variety of factors including past customer behavior, inventory levels, or product classifications – to determine discounts per product, per customer or per communication.

> Inventory Reduction Rules, examining inventory levels and customer preferences to offer products with high inventories to the customer most likely to buy them.

> Image Rules, with the ability to personalize product images in an offer or message.

> Response Rules, with the ability to provide a customer with a communication based on the specific way they responded to a prior communication.

To put analytical intelligence to work, marketers use **Communication tools** to plan and manage all customer treatments and experiences. Communication management should administer all aspects of promotional activities such as creating, planning, and managing communications and marketing programs for all media such as television, radio, direct mail, print, web, and e-mail. There are numerous software technologies that perform these functions, but they need to be integrated and directly accessing the firm's customer knowledge warehouse.

The purpose of these tools is to simplify the complex communication management function by orchestrating communications to individual customers across multiple channels, product lines, and business units. It helps marketers determine and apply the best communication tactics for each single opportunity. Marketing analysts can define and execute the ***four basic types of customer communications:***

> **prospecting campaigns** – when you don't know who the customer is;

> **single step campaigns** – with sophisticated 'splitting' capability;

> **continuous campaigns** – that are re-run over time on a defined schedule; and

> **Multi-step campaigns** – that manage individual customer communications through the system.

Basically, a firm must ensure that campaigns and communications reach each individual customer with the right message at the right time – and through the preferred channel. In fact, analyst Elizabeth Roche of METAGroup has said that,

"End-state CRM looks like this: customers are so well understood that customer life cycle treatments can be differentiated based on the customer's strategic value to the organization … and enable the business user/marketer to holistically manage the customer segment in terms of their portfolio of segment-specific offers and personalized, consistent treatments across all channels … Thus, a panoramic view of the customer is achieved."

SOURCE: CRM Update Circa 2004: Part 1 – Back to Basics – Infusion: CRM Enterprise Application Strategies, META Group Delta 2800, 26 February 2004, Elizabeth Roche

We agree wholeheartedly with this and further add that this is the key to optimizing customer equity – managing all interactions with customers wherever they touch the business, with every moment of engagement shaped by value/equity increasing tactics.

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Analytical CRM in Action

Step-by-Step Customer Life Time Value (LTV) Campaign

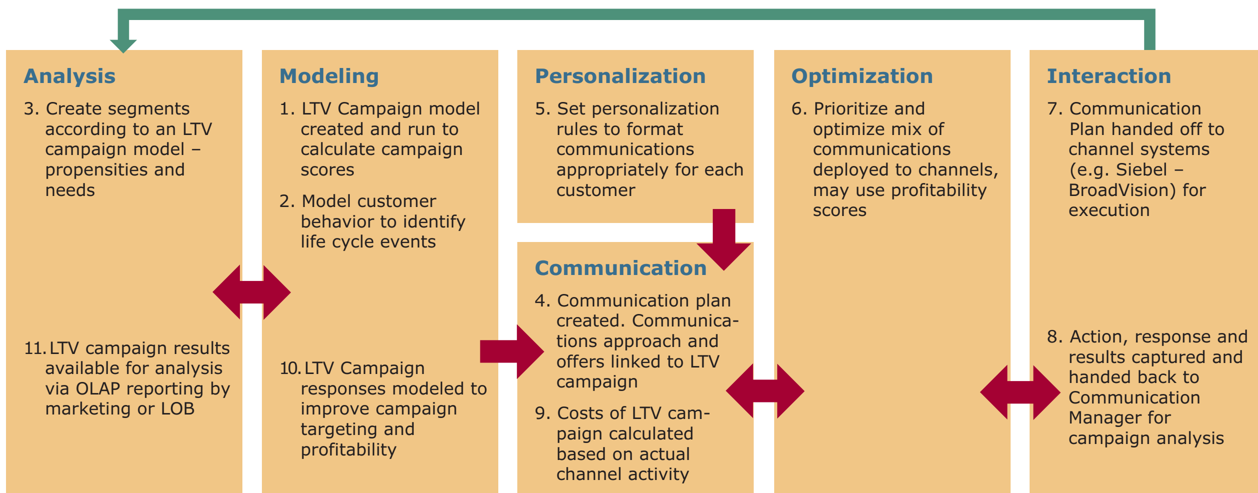

Diagram 3 – This chart maps out a step-by-step process for conducting an LTV campaign using analytical CRM software.

Driving Customer Value and Equity Using Event-based Communication

'Events' can be defined as "any significant change in a specified condition." Marketers should use event triggers to provide sophisticated event definition and thus drive intelligent customer treatments based on customer-initiated activity, rather than solely on 'push' campaigns. In the banking business, the customer event could be a large withdrawal or deposit. In retailing, it could be a significant transaction or large dollar purchase – or even something as simple as a birthday. In other words, a significant event is any occurrence that can be managed as a business opportunity. For more detail on event-based marketing, see the Teradata white paper "The Power of Event Based Marketing." [17]

Event triggers are established and managed by rules software, used in conjunction with an enterprise data warehouse (EDW) – and allow marketers to manage 'events' by defining and developing event rules that drive highly effective one-to-one marketing.

Event-based marketing is based on the premise that new value-producing action is best and most effective when tailored to the actions of individual customers. It thrives on detailed customer interaction and specific behavior. Best of all, it is calculated to produce rapid responses, or intervention, aimed at creating pre-defined business value. In short, event-based marketing is appealing to payback-minded executives because event technology has in many cases paid for itself several times over – within months or weeks of implementation.

Putting the Theory to Work

For example, here is how a marketer would use an analytical customer management framework to conduct a lifetime value (LTV) campaign as listed in the numbers 1-11 in Diagram 3 showing "Analytical CRM in Action." First, using the Analytical functions (1), an LTV campaign model would be created and run to calculate campaign scores. Then, customer behavior would be modeled to identify life cycle event (2). Next, using the Analysis tools, the user would create segments (3) according to the LTV campaign model around customer propensities and needs. Then, a Communication plan would be established (4) with offers linked to the LTV campaign, and communications would be personalized (5), using rules to format the messaging most effectively for customers.

Using Optimization techniques (6), the firm would prioritize and optimize the mix of communications deployed to various channels. Making use of Interaction tools (7), the communication plan would be handed over to the interaction/contact systems for execution. The **'customer responses'** from these communications would be captured (8) and sent back to the Communication Manager for analysis. At this point, campaign costs are calculated (9), and further modeling (10) would be done to improve targeting and profitability. To complete the cycle, the LTV campaign results would be analyzed further (11) and reported or evaluated by management and/or executives.

Managing Results and Determining Future Investments Based on ROI

The results of this and all other campaigns can be documented and summarized for senior management by a variety of methods. For a framework your company could use to report its progress in using analytical CRM to manage customer asset value and business performance from analytical CRM activities, use the three helpful charts in the Teradata white paper "Show Me the ROI." [18] They use standard metrics for evaluating operational performance – which involve simple mathematical calculations. Note that all CRM performance metrics should be compared in year-over-year terms – so you can see how effective your company is practicing CRM. You can also contact the author of this article to discuss the objectives of a focused workshop on ROI for your CRM investments (email: ron.swift@ncr.com).

Investors' 'Right to Know'

Your entire extended business constituency of employees, customers, partners and shareholders is evolving and learning more about your business and its key drivers – at a rapid pace. You need to stay ahead of them – and their questions. All of us are aware that a business is only as healthy as its customer relationship assets – and that its future prospects are a calculated extension of the collective current net value of its customer relationships. Having said this, all constituents, including shareholders, will be ever more curious about the health of a company's customer base.

The challenge issued at the beginning of this article by Patricia Seybold says it all: investors will soon be asking tough questions about customer asset management, and tomorrow's senior managers will need to know how to articulate the response. Executives whose companies survive and flourish tomorrow will need to:

> Lead 'the marketing evolution' in their business environment by making shrewd investments in CRM analytics that will optimize customer equity and drive shareholder value

> Invest in the education of the marketing and services people to maximize competencies and insight into the management and optimization of customer equity

> Ensure that the company's technology systems represent a flexible, integrated decisioning environment with a clear process that links corporate strategy and marketing tactics

> Collaborate closely with IT/CRM vendors to manage and achieve a solid balance between quality customer experiences and positive business results

> Document the progress in customer equity optimization. Ultimately, "marketing is a navigation tool that enables/reinforces the market sensing and opportunity recognition abilities of CEOs." [19]

As investors or stakeholders allocate their resources to partner with a firm for profitability of both parties, it becomes increasingly important that the assets of the firm generate the most value to all parties. As the age of customer equity optimization dawns, customers are also becoming 'somewhat stakeholders'. Many customers now depend on value-providing firms to establish, grow, protect, and nurture the relationship and the supply or flow of products or services. FedEx is an example of this stakeholder dependency as part of the extended enterprise.

Leadership teams working to grow customer equity are creating customer value. The marketing game has been elevated to to a lifetime-courtship process. The sales contract is more than just a transaction; it is the culmination of all interactions. And as we cultivate relationships – CEOs must have customer equity calculation and management tools in order to lead toward higher profitability, customer satisfaction, and shareholder value.

The future holds great promise and success for firms that develop and grow their own information and knowledge assets: about their customers, suppliers, channels, franchisees, and partners. Customer Equity Optimization is indeed the new CEO – and the business that best exploits and optimizes its knowledge assets will have the power to shape its own destiny.

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Reference Notes

1 Good Customer Relationships Add up Over a Lifetime, Washington Business Journal, May 21, 2004 – and, *Driving Customer Equity: How Customer Lifetime Value is Reshaping Corporate Strategy*, Roland Rust, Valarie Zeithaml, Katherine Lemon, The Free Press, 2000

2 Patricia Seybold, *The Customer Revolution: How to Thrive when Customers Are in Control*, Crown Business, 2001, www.psgroup.com

3 Marketing Science Institute web site: www.msi.org

4 Rajendra K. Srivastava, Tasadduq A. Shervani, and Liam Fahey, "Market Based Assets and Shareholder Value: A Framework for Analysis," MSI Working Paper Series Report No. 97-119, 1997

5 Claes Fornell, "Customer Satisfaction, Capital Efficiency and Shareholder Value," Marketing Science Institute Conference, Report No. 00-107, 2000

6 Ronald S. Swift, "The New Economic Opportunity for Business: Creating Increased Profitability Through CRM," www.CRMproject.com, 2001 and *Accelerating Customer Relationships*, Prentice Hall PTR, 2000

7 Robert C. Blattberg, Gary Getz, Jacquelyn S. Thomas, *Customer Equity: Building and Managing Relationships as Valuable Assets,* HBR Press, 2001

8 "Market Based Assets and Shareholder Value: A Framework for Analysis," MSI Report No. 97-119

9 Regis McKenna, *Total Access,* Harvard Business School Press, 2002

10 Sergio Zyman, *The End of Marketing As We Know It,* Harper Business, NY, 1999

11 Sunil Gupta, Donald R. Lehman and Jennifer Ames Stuart, "Valuing Customers," MSI Working Paper Series, Report No. 01-119, 2001

12 Judy A. Bayer, "Eyes Wide Open: Ten Ways to Generate Rapid ROI with CRM," Teradata White Paper, June 2002

13 Elizabeth Roche, "META Group Sees Continued Strong Growth for CRM Initiatives", META Group press release, May 12, 2000. *Note: Elizabeth Roche, META Group's Vice President and Director, Infusion: Customer Relationship Management, is a leading authority on CRM applications and related enterprise architectures.*

14 Rich Clayton, 'Best Practices Insights for CRM Analytics,' Hyperion/META Group press release, January 17, 2000

15 W. Janowski and A. Sarner, Gartner Research Note, "Creating the Illusion of One-to-One", August 2001

16 Lou Agosta, "Justifying IT Investments: Data Warehousing", Giga Information Group IdeaByte, May 14, 2001

17 Chris Twogood, "The Power of Event Based Marketing" Teradata white paper, January 2003

18 Judy A. Bayer, "Show Me the ROI: Deliver and Measure Serious Returns on Serious CRM," Teradata White Paper, June 2002

19 George Day, "Marketing and the CEO's Growth Imperative", MSI Board of Trustees Meeting presentation, April 25, 2002