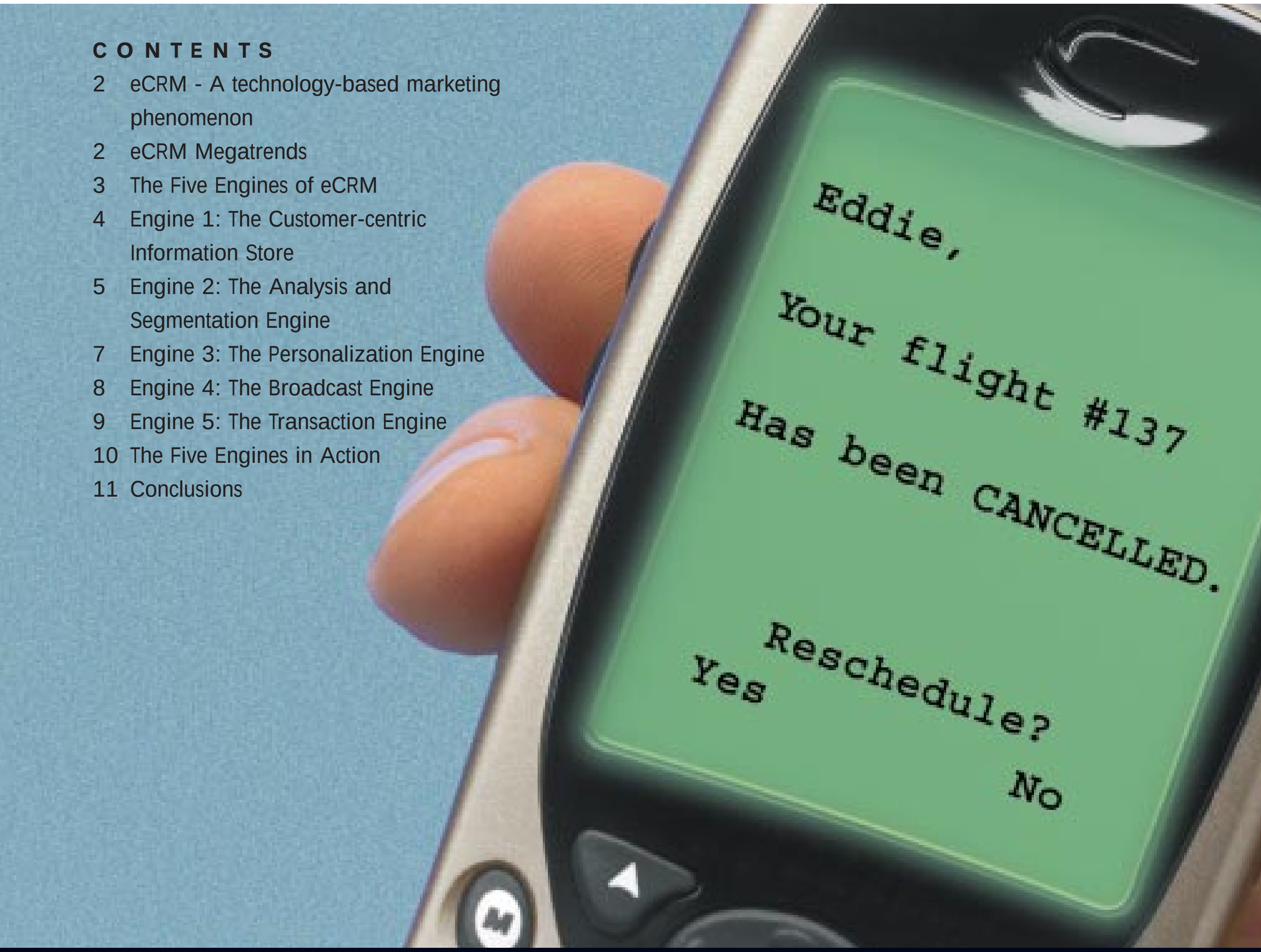
THE POWER OF INTELLIGENT E-BUSINESS

The Power of eCRM

A PRIMER ON THE FIVE ENGINES OF eCRM

BY MICROSTRATEGY, INCORPORATED



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eCRM - A technology-based marketing phenomenon

Remember Norman Rockwell's Saturday Evening Post illustrations of early 20th century America - pristine churches, cozy frame houses, small communities and thriving main streets? They recall an era when small shops bustled with commerce. There were no chain stores or national TV advertisements. Families dealt directly with local shopkeepers who provided them with personalized service. In return, customers remained loyal to their main street stores.

Since then, the superior economics of mass markets, chain stores, improved highways and mass advertising via television and radio created more attractive value propositions to consumers than the small town shopkeeper's customer service strengths. Now, in the early part of the 21st century, Electronic Customer Relationship Marketing (eCRM) is making it possible to recreate an "old fashioned" customer service experience in every sector of the economy. Marketing of goods and services in industries such as retailing, financial services, healthcare, automotive, steel and agribusiness is shifting from the mass marketing of standardized goods to one-to-one marketing of personalized offers. Web, wireless and voice technologies make it feasible to combine personalized touch and customized service with mass-market efficiencies of selling to millions of customers, recreating the shopping experience of Main Street at near-zero marginal cost. This is the essence of eCRM. None of it was possible five years ago.

eCRM derives from CRM techniques which leveraged call center and direct marketing technology to market mass-produced goods and services to small market sub-segments. eCRM expands on this technology by using next generation segmentation and analysis technologies, comprehensive customer interaction data, multi-channel communications and one-to-one interactions to market customized products and services to ever-more precise segments.

The eCRM business process can be mapped to the following integrated activities:

• designing an interaction based on relevant information
• personalizing every interaction
• reaching the customer at the appropriate place and time
• facilitating the interaction and closing the ensuing transaction

Figure 1 shows the eCRM business process.

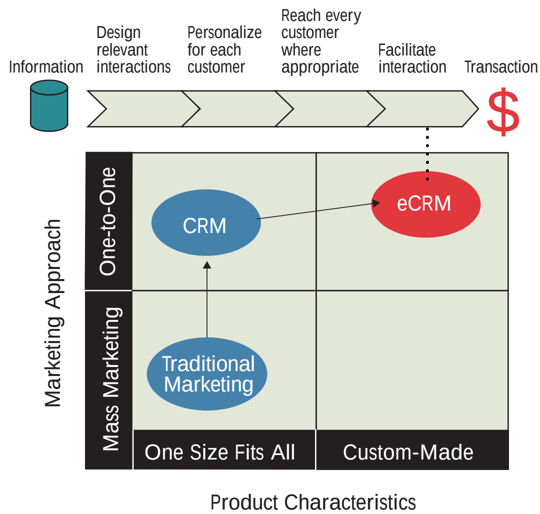


Figure 1: eCRM Expands on CRM

eCRM is one-to-one marketing of custom-made, information-intensive products to millions of customers.

eCRM Megatrends

There are three major trends of the eCRM movement:*
1) Every business is becoming an information business
2) Direct marketing is increasingly important
3) The growth of "the Value Exchange" - non-commercial interactions between customers and companies.

Trend 1: Every Business is an Information Business
In addition to deriving value from physical goods and services, consumers increasingly value information. Consequently, information intensity is an increasing component of a company's value proposition to its customers. Today, every company is an information business, regardless of the sector of the economy.

Trend 2: Ascendancy of Direct Marketing - Strong brands will always be important, but brands will be build increasingly through direct one-to-one marketing. The shift from mass-media marketing to direct marketing is likely to sweep across many sectors of the economy ranging from high tech to bricks and mortar business.

**For a more detailed treatment of these topics, please refer to "The Five Engines of eCRM", a White Paper, MicroStrategy, 2000*

Trend 3: The Value Exchange - The Value Exchange is a mutually beneficial exchange of valued information between a company and its customers. In the Value Exchange model, 90% of customer/company interactions are information transfers, only 10% will be transactions. In the process, the company and customer build a lasting relationship. The Value Exchange is an emerging dominant business practice in the Internet age.

The Five Engines of eCRM

Companies understand that eCRM has significant potential, but they face the challenge of building the required technology infrastructure quickly and cost effectively. A knee-jerk reaction is to buy off-the-shelf applications, cobble together a database of web traffic and online purchase information and launch an eCRM initiative. Unfortunately many such efforts have met with poor results. Recent research indicates that 39% of online shoppers failed in shopping attempts,** and a staggering 66% of loaded online shopping carts were abandoned before the checkout process.*** Less than 5% of unique visitors become customers .**** A better approach is to install a comprehensive software platform of five engines that together enable the eCRM business process. These five engines are (Figure 2):

1. **The Customer-centric Information Store** - to consolidate information about millions of customers together with preferences, permissions and information that may be useful to them
2. **The Analysis and Segmentation Engine** - to leverage this customer information to build a business campaign strategy and evaluate its success
3. **The Personalization Engine** - to personalize the entire customer experience, configuring unique sets of messages and offers to each customer
4. **The Broadcast Engine** - to proactively deliver information and offers to every customer via the media of his or her choice
5. **The Transaction Engine** - to facilitate the interactions between customer and the company, either exchanging information or driving transactions

Properly configured, these five engines collectively form a robust, scalable and flexible platform for eCRM. Both prefabricated and custom-made software can be seamlessly integrated into the platform to provide a virtual shopkeeper to millions of customers. Equipped with such infrastructure, companies can continually create significant customer value at Internet speed, automating the who, what, when, where and how of sales and marketing. Detailed characteristics of each engine are discussed in later sections.

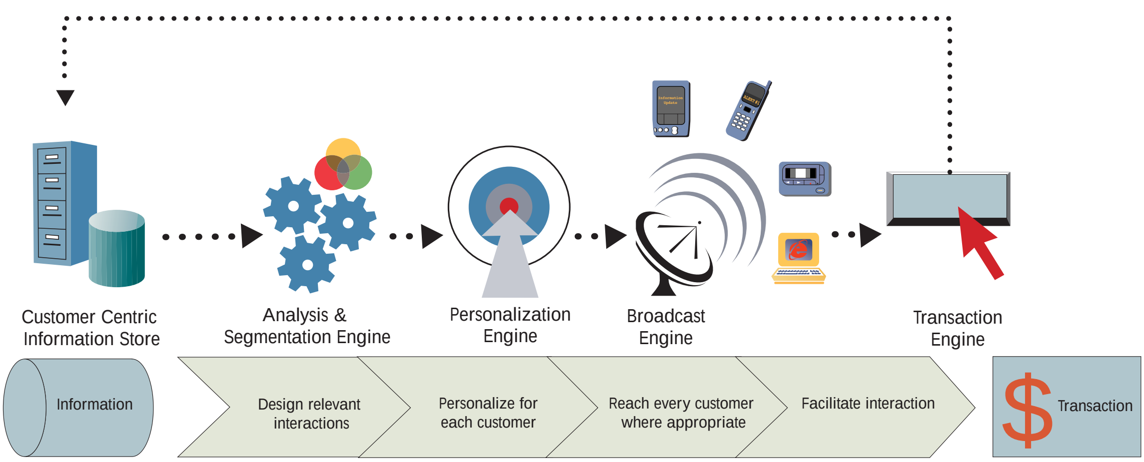


Figure 2: The Five Engines of eCRM

Five engines together provide the platform for an eCRM business process. Without these five engines, eCRM is not a scalable, defensible business practice for a company.

*Source: **The Creative Good. ***Business Week. **** The Boston Consulting Group*

Engine 1: The Customer-centric Information Store

A unified view of every customer

eCRM initiatives depend on a 360-degree customer view. A Customer-centric Information Store integrates data from disparate information sources such as web sites, transactional systems, operational databases, call centers, enterprise resource planning systems and third party data (Figure 3). This engine enables companies to recognize and respond accurately to customers, whether they purchase products through a physical store; telephone a call center, or browse a web site. Consequences of an incomplete customer view are often harsh. Presenting customers with inappropriate offers, diluting loyalty and trust, stall eCRM efforts. (Figure 4)

Construction of a Customer-centric Information Store

Developing a Customer-centric Information Store requires large-scale integration of disparate data from multiple sources. Three factors are critical to its success:

Scalability: Companies tend to underestimate the volume of data that is required for developing a comprehensive 360-degree view of customers and visitors. Clickstream data alone can consume several gigabytes every day. Transactional data, third party and ERP data add exponentially to the volume. Detailed, atomic level capture and retrieval of every customer's profile, preferences and transaction history places additional capacity demands on the technology architecture. Companies must plan for terabyte sized Customer-centric Information Stores.

Flexibility: The Customer-centric Information Store must accommodate multiple data models and database architectures, and allow for integration with other back-end information systems. Without this flexibility, the usefulness of this engine will diminish over time. Customer information stores are dynamic, growing entities that have to keep up with every customer's interaction with the company.

High Performance: Speed and accuracy of access to customer-centric information is essential for enabling a true value exchange with customers. Likewise, the ability to aggregate information at differing levels of abstraction (e.g., transaction, customer, and zip code) makes it possible to discern patterns of customer behavior (e.g., sizes of clothing sold by zip code). In automotive engineering, sports car engines provide the ability to drive at high speeds, turn

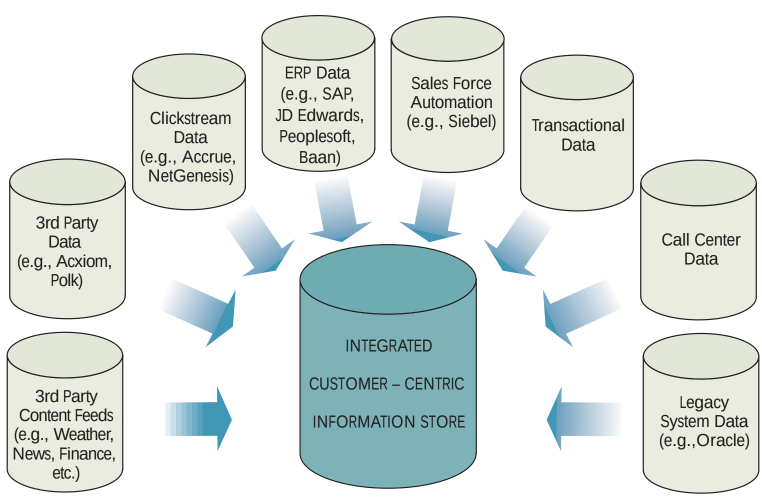


Figure 3: 360–Degree Customer Information

Successful eCRM depends on an integrated view of a customer. This requires combining data from multiple sources.

around tight corners precisely and deliver flawless performance on by-lanes, country roads or highways. Similarly, a high performance Customer-centric Information Store provides accurate information that can be captured in any part of the information store at any level of granularity with maximum flexibility and responsiveness to demand.

Benefits of a Customer-centric Information Store:

- Ensures an informed and seamless dialog with customers across all touch points, i.e. presenting a "single face" to the customer
- Achieves consistency of facts and definitions across corporate functions
- Coordinates information between bricks-and-mortar and online initiatives
- Formulates an increasingly rich picture of each and every customer as data volume increases
- Presents a unified data set for analytically-rich campaign formulation, execution and testing

The Customer-centric Information Store provides the foundation for successful eCRM

Effectively applied, the Customer-centric Information store decreases customer attrition rates and improves retention. Over time, the Customer-centric Information Store forms an inventory of customer trust and loyalty, becoming a valuable corporate asset and giving an enterprises a source of competitive advantage.

SCENARIO	Customer Eric Jones has shopped several times online for sleeping bags, but always abandons product before purchasing
ACTION	Web marketing campaign ensues, offering Erik a discount on sleeping bags
PROBLEM	Erik has been pricing sleeping bags online and purchasing at the brick and mortar store.
SOLUTION	Integrate all Data

Figure 4: Compromising the Offer

What happens when store transactional data is not integrated with clickstream data.

Engine 2: The Analysis and Segmentation Engine

Perfecting Customer Segmentation

Building trusted customer relationships depends on accurate customer segmentation. The Analysis and Segmentation Engine performs business analysis, segmentation and prediction so that customer interactions take place in an appropriate and personalized manner. Without this engine, eCRM lacks the intelligence to be effective - even if it has massive volumes of customer-centric information.

Successful eCRM Analysis and Segmentation Starts with OLAP, supported by Statistics and Data Mining

There are three major categories of analysis and segmentation techniques: Online Analytical Processing (OLAP), Data Mining and Statistics. Briefly, OLAP tools perform complex queries on a database; Data Mining tools discover unforeseen associations using pattern-matching algorithms, and statistical tools perform complex mathematical operations on sets of data. No one technique covers the gamut of eCRM applications. eCRM requires all three techniques.

The new breed of analysis and segmentation is built on iterative, "Collaborative" ROLAP (Relational OLAP) tools and adds the best features of Statistical and Data Mining analysis techniques. Together, they iterate to a final answer to analytical questions. eCRM marketing campaigns are inherently iterative since they require ad-hoc questions about customer preferences, demographics and transaction patterns. With Collaborative ROLAP, campaign formulation evolves through experimentation and discovery. Iteration takes place between a server, where data is stored, and the "middle tier" applications that are used for complex analytical operations. This approach is essential for extracting maximum benefit from an integrated Customer-centric Information Store. The hybrid will successfully hypothesize, target a sub-segment of customers, and verify results. Figure 5 illustrates the power of the hybrid approach for typical marketing problems.

Benefits of the Analysis and Segmentation Engine:

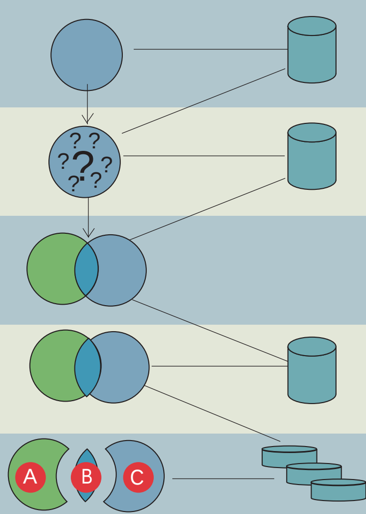
- Precise targeting of customer segments
- Quantifiable, scientific basis for managing customer interactions
- Deeper, more insightful understanding of customer demand patterns
- Clear understanding of customer profitability
- Determination of product/service attribute preferences
- Identification of customer attrition risk factors

Business Situation: Company X has spent $ millions on successive marketing campaigns. Customer retention fails to improve. Profitability is dropping. Wall Street analysts are asking tough questions...

Challenge: Chief Marketing Officer suspects that current personalized marketing campaigns are wrongly targeted. Calls for best talent to “run the numbers” and make recommendations for new campaign effort.

Hypothesis from focus group interviews: Frequent customers may shop at company X’s store because they are conveniently located, not because they are brand loyal. They could defect easily.

QUESTION	ANALYSIS & SEGMENTATION ACTIVITY	TECHNICAL APPLICATION
1 Who are our most frequent shoppers?	Frequent Shoppers	Query the database, applying *statistical functions* to determine the top 20% of frequent shoppers.
2 What do they have in common?	Attributes of Frequent Shoppers	Using Data Mining tools, identify trends in the frequent customer segment.
3 Do they live close to our stores?	Frequent Customers living near physical store	Establish correlation between location and sale frequency data.
4 How can we resegment them?	Verification of 3 customer segments	Verify 3 new customer segments: frequent customers not living near a store, frequent customers living near a store and infrequent customers living near a store.
5 How can a campaign be constructed to reach these three segments.	Identification of Segment Details	OLAP queries the database for detailed customer information on the three segments.



Campaign A
Frequent Customers

- Cross-sell and up-sell ensuring continuing brand loyalty
- Anticipate additional products that customer values

Campaign B
Frequent and Convenience-Based Customers

- Offer coupons for products with affinities to products bought by this segment
- Incentive promotions to reward frequent shoppers

Campaign C
Convenience-Based Customers

- Promote simpler ways for customer to shop
- Leverage geographic advantage and market basket analysis to increase each transaction value

Figure 5: The Power of an eCRM Analysis and Segmentation Engine
A powerful new breed of analysis and segmentation is emerging - iterative, “Collaborative” ROLAP. This allows companies to sub-segment their customer base with increasingly sophisticated precision. The example above demonstrates how it can be leveraged in a marketing campaign.

** For a more detailed treatment of these topics, please refer to Relational OLAP: An Enterprise-Wide Data Delivery Architecture MicroStrategy White Paper, 1994*

Engine 3: The Personalization Engine

Personalization through technology

A Personalization Engine makes it possible to personalize products and services for customers in a cost-effective manner, by lowering the marginal cost of personalization. Until now, personalized attention and service were labor intensive and not scalable to serve a large customer base without high costs. Most companies provide personalized attention to a small group of clients who are "worth it." Today, every Amazon.com customer gets personal recommendations for books due to Amazon's personalization technology. The addition of thousands of customers to Amazon's base has a minimal effect on their cost to sustain this high level of service. This "scalable" personalization is unprecedented in business history.

Customer Experience Personalization (CEP):

Classic approaches to personalization fall into three broad categories: Rules-based, Collaborative Filtering and Inference Models. Customer Experience Personalization (CEP) utilizes all three in conjunction with large volumes of information to create a unique experience for each customer. (Figure 6)

Personalization is Database driven

CEP is proactive and data driven. For example, National Weather Service reports on pollen count could be used in conjunction with patient profiles to alert specific asthma patients to renew allergy medication. This is superior to personalization that relies on static information about customer transactions.

Leveraging subscription-based information

Customers dislike information clutter. Given a chance, they will indicate their preferences for the type of information they receive, the periodicity of subsequent communication and the device for reaching them. For example, a customer's interest in receiving news on Federal interest rate changes can be leveraged by a bank to package an offer for a low-interest credit card. A good Personalization Engine should include tools to create subscription services and interfaces that provide "in-a-box" capability.

Breaking away from the web

Web-content personalization is necessary, but not sufficient, for CEP. A customer who responds positively to a cleverly worded email may prefer brevity in voice mail. True personalization demands that each customer experience is tailored to the type of device. Armed with a powerful personalization engine, a company can provide unique experiences to the same customer on different devices. An added benefit of this is formulation is a richer picture of customer preferences.

	TRADING SERVICE	SCHOOL SERVICE	COMPLAINT SERVICE
WHO: Who should be sent information services? Dynamically generated lists from the analysis and segmentation engine coupled with subscription-based information generate a target list for interaction.	STOCK BROKER: Trading Service	PARENT: School Service	SALES ACCOUNT EXECUTIVE: Complaint Service
WHAT: What content should be included in these customer information services?	Summary of detailed portfolio analysis by industry sector	Voice synhesized report of school closings in an interactive voice response menu	Spreadsheet with customer complaintssorted by severity level and product type
WHERE: Where should the customer information service be delivered? This involves effectively utilizingthe knowledge customer contactpoints (e.g., email, phone, WAP phone, pager).	Delivery via pager	Delivery via cell phone	Delivery via web
WHEN: When should information services be sent to customers? The CEP engine analyzes customer behavior to offer products and services at the time potential customers need them most.	After 6pm must be notified instantly of unusual international stock trading volumes via. pager	During school days, must be notified of child related school closings via telephone.	Notify when critical customer complaints are made, notify via email from 9-5pm, via phone after 5pm.
HOW: How should the information be incorporated the customer information service? CEP will dynamically alter content, format information to effectively deliver it though the appropriate customer communication device.		Hello Jane, your children's schools are getting out early: Press 1 for closure reason Press 2 for traffic reports Press 3 for weather reports	

Figure 6: Customer Experience Personalization in Action

Customer Experience Personalization (CEP) breaks new ground in who, what, where, when and how to personalize for each customer. CEP is more data intensive, goes beyond the web, and leverages user subscriptions to create value-added services like the examples shown above.

Engine 4: The Broadcast Engine

The Broadcast Engine – enabling 24/7 customer interactions

Continuous customer interaction and value exchange require 24/7 access to customers. While the web is becoming increasingly pervasive, few customers are on line all day. However, they are increasingly reachable through other communication devices. A recent META Group study projects that the average number of communication devices per consumer will quadruple in the next three years (Figure 7). This is not just a consumer phenomenon but a business shift as well. Corporate use of wireless technology will quadruple in the next three years. Successful eCRM requires an engine that reaches millions of customers wherever they are: at home, via phone or TV set-top box, at work - via email, or on the road via WAP phone or pager. A scalable Broadcast Engine that is built on an open architecture and supports all communication devices enables this level of customer interaction.

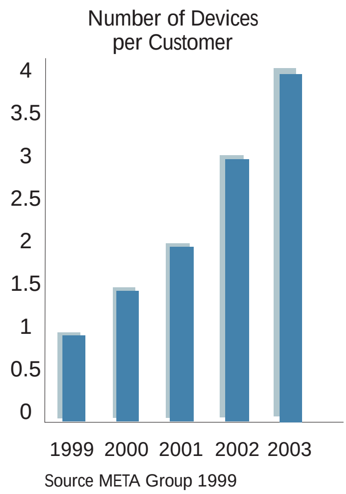


Figure 7: Growth in Personal Communication Devices

Consumers have a growing appetite for multiple communication channels. Implication: eCRM initiatives need to leverage this phenomenon.

Characteristics of a Broadcast Engine

Multimedia/Multi-Channel (MMMC) Capability: Static text email has limited appeal and increasingly resembles "junk mail." Multimedia communication that combines graphics, video and audio stimulates increased viewership. Reaching customers through the channels of their choice is even more important. An email from an online brokerage informing a client of a 20% fall in a stock is useless if the customer is not online. Such information is best delivered to the customer's cell phone or pager. Multi-channel broadcasting of personalized information enables recipients to rapidly transform information into action. An intelligent Broadcast Engine identifies and delivers information through web, wireless and by voice, using text-to-speech synthesis, and capitalizes on the media possibilities offered by each device.

Open Architecture: Rapid technological change has brought new information sources, as well as communication and information transfer services. An open architecture allows for the integration of new data sources and transmission methods as they emerge (e.g., broadband media). In order to be open and flexible, the architecture should adhere to Internet protocols, have broad data base support, and open, documented APIs. The open nature of the Broadcast Engine will allow it to keep pace with e-business as it continues to evolve.

Scalability: The Broadcast Engine must be capable of reaching millions of users. Without large-scale reach, eCRM initiatives will stall as a business grows.

Broadcast Engine Benefits

Integrated Channel Strategy: With multi-channel capability, companies can leverage each channel's unique benefits. Few customers would like constant interruptions on their cell phones giving them promotional material. But a crisp voice message relating a significant shift in stock prices would be appreciated. A tempting product offer in a well crafted, graphically rich format is best sent to a desktop PC email box connected through a high bandwidth link. A Broadcast Engine enables an integrated and flexible communications strategy for each individual customer.

Increased Customer Switching Costs: Competitors are a mouse click away on the web, so customers' costs of switching to other sites are low. Customers' switching costs increase as the number of channels of interaction with the company increases. Fewer customers are likely to shift to a new service provider if they have to renew email addresses, cell phone numbers, and WAP phone alert service numbers. A Broadcast

Engine with multi-channel capability increases the likelihood of customer retention.

Speed to Transaction: The Broadcast Engine delivers offers anytime and anywhere. The likelihood of brokering or consummating a transaction increases dramatically when a company can reach the customer first. A video retailer can alert film buffs about new video releases through a voice mail or pager and secure transactions faster than stores that merely have web sites or storefronts. The Broadcast Engine accelerates the speed of a transaction cycle and allows a company to be "first to transaction."

Engine 5: The Transaction Engine

Interactions lead to trusted relationships

An effective Transaction Engine promotes information exchange between every customer and the enterprise. Like the small town shopkeeper who often conversed with his customers, the Transaction Engine maintains customer contact and transmits information to the Customer-centric Information Store for later use. Leveraging the other four eCRM Engines, the Transaction Engine develops informed life-long customer relationships. (Figure 8)

		CUSTOMER ACTIVITY	DATA SOURCES	BACK-END TRANSACTION ENGINE ACTIVITY
Information Gathering	1	Customer John Smith visits auto manufacturer website for information on SUVs.	Manufacturers Website	Retrieve information from website
	2	John wants to know Consumer Reports ratings on SUVs.	Consumer Reports	Search for external information initiated. Results broadcast to customer.
	3	John solicits opinions from other SUV enthusiasts.	Automobile Magazines	SUV articles from Car and Driver and Road and Track are faxed to John.
Transaction Negotiation	4	John would like to test drive specific models.	Dealer Database	Text to speech call is generated with data-driven voice menu to let John arrange a time for a test drive
	5	John wants to review Dealer Invoice price and Manufacturer's Suggested Retail prices.	Dealer Database	Dealership warehouse queried for price information
	6	John is interested in trade-in prices and leasing information.	Dealer Website	John is pointed to trade-in form at dealer web site. John fills in the data and is given "Blue Book" values
Transaction Closure	7	John's wife Jane wants to know how much insurance they require for the SUV.	Insurance Portal	Text-to-speech call is generated with insurance options/prices and a menu offering to fax policies and forms to John.
	8	At the dealer's office, John wants specifics on extended warranties.	Manufacturer Website	Manufacturer sends warranty information, satisfaction rating and customer comments to John's WAP phone.
	9	John and Jane decide to buy the car and put in delivery requirements.	Dealer Database	Information from the brick and mortar store is recorded.
Post-Transaction Service	10	John and Jane sign all the paperwork and complete the transaction.	Manufacturer Website	Existing customer info is queried to minimize paperwork.
	11	John and Jane decide to drive their SUV to Florida for a vacation.	Travel Site	John is sent a web link for maps, travel guides and campground information.
	12	Two months later, John visits a jamboree for off-road vehicles.	Dealer/ Manufacturer Database	John is sent an email with an invitation to special events organized by the manufacturer and dealer.

Figure 8: The Transaction Engine in Action

The example above shows the Transaction Engine assisting a customer who is shopping for an automobile.

Brokering Informed Transactions

The Transaction Engine facilitates the value exchange and provides a single interface to any set of information sources. The Transaction Engine also acts as an third-party purchase facilitator for the consumer. The consumer provides relevant preferences via any device, and the Transaction Engine vends the relevant information. Smart consumers want trustworthy product information before every potential purchase. To gain confidence in their product purchases, customers will interact with many vendors to gather information, conduct comparative analysis and then decide which products to buy. The Transaction Engine promotes and ultimately brokers customer transactions.

Avoiding Inundation

Companies will have billions of interactive customer contacts a year. They have to avoid inundating customers with unwanted information and services. Through the utilization of subscription methods (via web, wireless or voice) customers can sign up for unique interactive information services based on their own preferences. The Transaction Engine performs this function, and keeps track of the customer subscriptions and uses this information to initiate interactions with individual customers.

Importance of Permission

Without the customer's permission, a company is locked out of a potentially lucrative relationship. As part of a value exchange, customers grant companies the permission to interrupt the flow of their daily life with interactions. This is of significant value to the company as it represents the customer's trust and loyalty. These translate directly to superior economics for campaigns in terms of higher response rates and lower conversion costs. Research shows permission-based marketing response rates are more than double traditional media.* Permissioning capabilities are a core characteristic of The Transaction Engine.

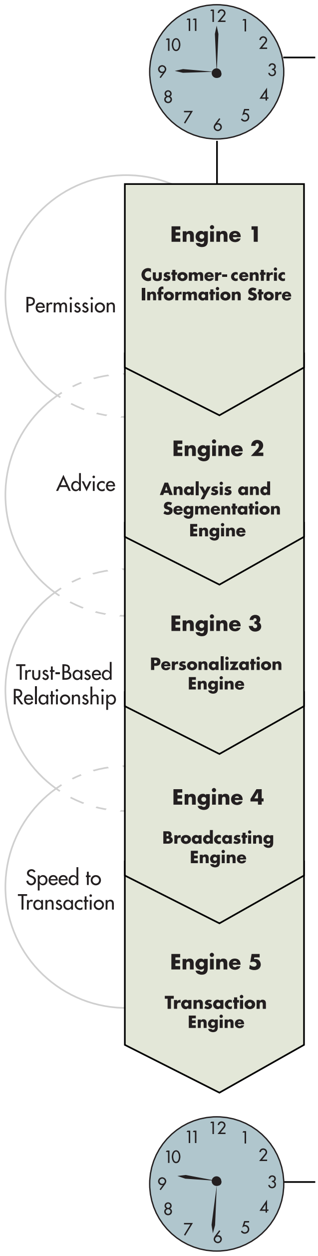
The Five Engines in Action

Imagine this eCRM scenario: A customer visits a bricks and mortar store and registers at a kiosk. Later, at home, the customer receives a "thank you for visiting" email along with a special offer. Intrigued, the customer clicks on the hyperlink to the online store, gets friendly advice from a virtual shopping assistant and designs his or her own wardrobe. A few days later, the customer is alerted by a dynamically generated phone call that a preferred sweater style has become available. The customer makes a purchase by pressing keys on the phone keypad and picks up the package from the store that evening.

In the above example, the Customer-centric Information Store (Engine 1) provides an integrated view of both online and off line interactions between a company and the customer. Likewise, the Analysis and Segmentation Engine (Engine 2) helps to determine the type of sweater the customer is likely to purchase. The Personalization Engine (Engine 3) provides the customized wardrobe and shopping experience. The Broadcast Engine (Engine 4) reaches out to the customer and presents him or her with a unique bargain, while the Transaction Engine (Engine 5) facilitates the flow of information between the customer and company and closes the ensuing transaction. This eCRM scenario is made possible by an underlying technology infrastructure powered by the Five Engines working together in a seamless, integrated manner.

Increasingly, customers demand this level of personal, attentive, value-added shopping experiences. They demand the one-to-one interaction that their grandparents enjoyed, but presented to them in contemporary ways at reasonable prices. Figure 9 shows another example of using the eCRM Engines to create value for customers by providing attractive service and product offerings at appropriate times. The Five Engines play a central role in enabling important facets of a companys' interactions with customers - permission, advice, trust and speed to transaction.

Source: INT Strategies



9:00 AM

Trigger Event:
A tanker runs aground offshore causing a major spill in an ecologically sensitive area.

Customer-centric Information Store stores the incoming news report.

John Smith who is registered with a financial services institution that uses eCRM techniques, has a portfolio with significant investment in the oil industry. The spill suggests increased stock volatility in this sector. The Analysis and Segmentation Engine selects investors such as John for special messaging.

The Personalization Engine compares John's portfolio to a well-balanced standard and retrieves other market and analyst information suggesting movement in petroleum stocks. Messages with this and alternative investment choices are prepared for routing via web, wireless, and voice.

The email is routed and John's cell phone is called. John wants to know more about the spill. A voice synthesis of the oil company's response is read out.

John checks his email, and approves the recommendation. He puts in a sell order for several of his oil and transportation sector investments and a buy order for three low Beta utility sector stocks.

The Market opens in New York at 9:30am and The Transaction Engine confirms the order placement and completion with a call to John's cell phone at 9:32am. John avoids a downturn in these sectors.

9:32 AM

John Smith's portfolio is rebalanced and risk-adjusted. The Smith family's financial security is protected.

Figure 9: Collapsing time and space to serve customers
In the example above, a financial services firm practicing eCRM techniques, swiftly acts on new information to serve their clients.

Conclusions

The principal thesis of this paper can be underscored by the following:

- **eCRM is a new chapter in Relationship Marketing**
- **eCRM goes beyond the Web**
- **Companies with the best customer data win**
- **eCRM technology is a strategic investment**

For a comprehensive version of “The Five Engines of eCRM” a White Paper, go to www.microstrategy.com/ecrmwhitepaper or call 888-537-8135

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