Paper 111-26

E-Volution of the Customer: Increasing Customer Loyalty
Through an Intelligent Campaign Solution

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ABSTRACT

In today's world of marketing, selling and servicing customers, organizations have seen a paradigm shift in how potential prospects and customers expect to be treated. This evolution of the customer has gone from days of mass marketing to mass customization in an effort to attract and keep good customers. The once dime-a-dozen customer has now become one of the organization's most valuable assets. To be competitive today, successful companies realize they have to focus their entire organization around the customer. Customers want to be treated as individuals, they want to know if they spend the time to communicate with your company, you will listen and personalize your product or service to meet their specific needs. Wireless and digital communications have given the customer today access to all types of information and knowledge about your products as well as your competitors. So how do organizations make sure they leverage these new digital communication channels (Web, e-mail, PDA, chat, voice-over IP, etc.) in addition to existing communication channels (store, phone, person-to-person, etc.), to ensure they are delivering the right message to the right customer at the right time?

With the wealth of data and information about customers and the speed at which that information can be made available, companies need to have quick access to intelligent customer knowledge. This is the point at which they can make sure they are delivering a marketing campaign, selling the right product or servicing the customer most appropriately and efficiently. E-marketing and e-commerce provide companies with a great opportunity to accelerate those communications with customers and allow an extremely cost-effective way to tailor and personalize communication with each individual person. In this presentation, we will explore how companies can leverage best practices for surfacing customer knowledge and putting that knowledge into action through a marketing-automation solution.

INTRODUCTION

One thing is certain, the customer of today whether an individual or another business, has gained much value over the past 40 years. How companies choose to interact with the customer of today can determine how long that company will thrive and prosper. CRM or Customer Relationship Management is the largest grouping of IT concepts to date. According to Scott Nelson and Tom Berg of Gartner, "CRM is the largest grouping of IT concepts to date. CRM refers to the concept of moving ownership of the customer up to the enterprise level and away from individual departments. These departments are still responsible for customer interactions, but the enterprise is responsible for the customer. To accomplish CRM, the enterprise brings automation to each customer touch point (i.e., initiatives in sales automation, the Internet, point of sale and call centers are all pieces of CRM, but they are not substitutes for it)."

Effective CRM depends on data —data about who customers are, their preferences, their behavior, their status with the company (both past and current), their purchase history, and their classification, based on demographic and psychographic information. Much of the data-intensive work involved in CRM initiatives begins with back-office processes. A repository of customer data must be created within a single, customer-centric data warehouse. Then, this integrated customer view can feed a wide variety of data-analysis processes, from call-behavior analysis and needs analysis to segmentation and campaign analysis. In addition to the application of state-of-the-art data management and analysis techniques, CRM implementation often involves a significant change in a company's business strategy — changes that require not only retooling back-office processes, but in many cases, reorganization of the business functions closer to the customer. Operational processes designed to support a product-driven strategy become ineffective when the company's marketing focus shifts to a customer-centric strategy. Companies must adjust those processes to allow all information coming from customer contact points and other customer-related information to be consolidated and analyzed. Then, newly acquired customer intelligence is translated into real-world changes in how the company manages customer relationships. From implementing Web-based solutions for communicating with customers to initiating automated campaign management strategies, effective and flexible front-office processes are vital in any CRM implementation, serving as both the initial conduit for customer data, and then, after the data is analyzed, affecting changes based on the resulting customer intelligence. To explore the central concept of CRM — the notion that customer information fuels analytical processes that in turn yield business knowledge used to improve company processes — analysts (The Meta Group in particular) have separated CRM components into three main categories: operational, analytical and collaborative. Most attention is paid to operational and analytical CRM, defined as follows:

- Operational CRM, which, building on the notion that customer management plays an important role in a company's success, calls for the automation of horizontally integrated business processes involving customer contact points via multiple, interconnected delivery channels and integration between front- and back-office operations.

- Analytical CRM, which involves the implementation of the advanced data management and analysis tools that make progressive customer relationship management possible. This is the analysis of data created by Operational CRM for the purpose of business performance management.

- While helpful to think of these as separate, the worlds of operations (comprised primarily of "live" transactions) and analysis (or more broadly, decision support) have been moving closer. What is also becoming clear is that analysis needs to pervade all areas of business if sustained competitive advantage is the goal. This paper focuses primarily on Analytical CRM and best practice approaches for leveraging intelligence to enable more effective campaigns.

IN THE BEGINNING

The marketing business discipline is often considered the art of preparing someone to be sold. Since a company is in business to make money with products and services, clearly substantial attention must be paid to customers.

The application of computer technology to customer files in the 1960s kicked mass marketing into high gear with zip-code segmentation, merging/purging of files, computer generated letters, and direct marketing techniques. Statisticians got involved in the 1970s and began applying analytical applications like lifetime value, list testing, and further segmentation. The 1980s improved database marketing with targeted campaigns driven by population analytics and relational databases. Relationship marketing (now called one-to-one) became the theme for the 1990s. The premise is that long-term customer relationships can be formed and profits increased by understanding individual needs, interpreting their relationship to a company's products and services, and delivering to customers individualized information and products.

This evolution shows the discipline of marketing moving from pushing as much product as possible (with mass marketing) to today's customer focus. Marketing transactional systems are struggling to make a corresponding transition. An alignment between marketing practices and systems is necessary to maximize profits and obtain rapid ROI.

	List Pulling	Database Marketing	Behavioral-based mkting	Enterprise customer mgmt
Business Sponsor	Marketing is main sponsor	Marketing and LOB managers collaborate	Embraced by top management, drive for ROI	Strong customer vision, led by CEO,dominates institution
Types of Providers	Service Bureau based	Service bureau and consultant-driven	Consultants and vendor led, service bureau lag	Vendors and companies lead, consultants are implementers
View of Customer	No customer view, stale data	Better view of customer, open DBMS	Sophisticated use of customer analysis, predictive scoring	Integrated campaigns linked to customer life cycle analysis
Value to customer	Very limited added value	Added value from well designed and executed campaigns	Targeted one-to-one offers, channel flexibility have appeal	Proactive customer treatment programs, need/benefit focus
Channel Impact	Difficult to measure value or coordinate w/channels	Measurement and coordination slow, limited to one or two channels	Better execution with channels, improved channel effectiveness	Cross-channel integration is used, customer-driven

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MARKETING AUTOMATION TAKES OFF

A progressing trend within CRM is for an organization to bring technology closer to the marketing process — hence, the concept of marketing automation. Marketing automation is larger than the components that support marketing, such as database marketing. Marketing automation requires a tight linkage between the front and back offices and sharing customer information at the enterprise level. This process becomes syncronized with the automation of other aspects of the organization such as sales, customer services, digital channels and back-office functions to enable CRM. Because CRM is often too big and too difficult to implement, most enterprises are often referring to marketing automation when they talk about enterprise customer management. What they want is a better way to manage their most important asset — their customers.

MARKETING AUTOMATION BEST PRACTICES

As Campaign Management continues its evolution to higher and higher levels of Marketing Automation it is clear that a number of best practices are emerging that will serve to differentiate the maturity and capability of enterprises with respect to Marketing Automation preparedness and execution. These practices are described below.

The level of the enterprise can be determined by their attainment with respect to the following five best practices:

1. Creation of a Customer Information Repository

2. Automation of the Marketing Process

3. Integration of Campaign Management

4. Enablement of Self-Service Marketing

5. Implementation of Closed-Loop Marketing

1. CREATE A CUSTOMER INFORMATION REPOSITORY

At the heart of any CRM solution is the database that holds the customer information. This serves as the central collective memory of the organization. Promotions come and go. (The prospect data base expands and contracts as it feeds the customer data base), Marketing staff turns over, but the information repository goes on collecting *meaningful* information about every customer contact. The type of repository (e.g., a warehouse, a series of data marts or a complex virtual environment with data scattered throughout) is not as important as its existence. As long as the information is identified and available, it will be an adequate CRM foundation.

This will integrate information on marketing campaigns, prospects, and customers. This database can be gradually built with each new campaign. It needs to be dynamic and time sensitive. It needs to exchange data bi-directionally with other important databases in the company such as Sales, Support, ERP, e-commerce, and/or a data warehouse. Here it is possible to capture leads from all sources such as a Web site, trade shows, phone calls, business reply cards, and advertising responses. Integrity of marketing data is critical and, therefore, functions such as data validation, deduplication, and merge/purge must be available within the system. Data quality is becoming increasingly important — footnote. This is especially important as data can be imported through lists or prospects entering their own data through the Web.

Sharing data in the extended marketing enterprise
Marketing interacts with other important groups such as marketing partners (to perform joint marketing, promotional, and cooperative marketing programs) internal and external sales forces (including distributors, resellers and retailers), and finally leads, prospects, and customers. Therefore, to automate the marketing and campaign management process all the primary participants need to be tied into a common system.

Specific Data Cleansing and Transformation needs:

- Fuzzy matching techniques (including inexact matching on text and numeric fields) to merge the records of one consumer into one combined record

- Use name, address, telephone, e-mail, product purchase, purchase date, company associated information, etc., to make the merge — often, "degrees of fuzziness" can be set for inexact matching Use published address information to validate, verify and correct address information for postal codes, country, state, city, street and house number

- Ability to connect the address cleansing to the Web interface and provide the use with a cleansed address and name and have them confirm the results before saving the information

- Use country and area code listings and phone directories to validate and verify telephone numbers using software

Analytical and Reporting Needs:
GUI (graphical user interface). There are distinctions between query tools designed for the business user and those intended for the analytical expert. The business user tool is directed to specific solutions, usually aimed at sales and marketing requirements. Some solutions can take the typical marketing analytical function beyond its original capability, such as process and workflow reengineering, and assist in the initial cleaning of data by highlighting errors, inconsistencies and omissions. It can often identify the origin of the data problem and may be able to improve quality at the source.

Customer Segmentation. Quantitative segmentation of customer and other data includes a range of powerful exploratory and predictive modeling techniques. . Customer segmentation at leading organizations is becoming increasingly transaction and real-time oriented. The integration of traditional demographic and life-style data with risk scoring systems and merchant history data is letting companies look at customers from a multidimensional perspective. The multi-algorithm approach taken by many solutions allows enterprises to build models and to segment their databases along increasingly finer lines.

Channel Analysis. A few leading multichannel companies have begun to integrate complex analytics of customer channel preferences, ROI, and needs analysis to steer a profitable customer-centric course. With this kind of intelligence, marketing efforts can be directed to unique value propositions that link the right products, and the right pricing of services and delivery, with the appropriate customers. The tiering of service and delivery according to an understanding of customer preferences has led some institutions to successfully de-market costly fee-based services, such as direct personal contact calls and teller services. Channel analysis is also being used by organizations following product-based strategies. The advantages of upselling prospects via effective personal contact are calculated in their analysis and compared with the lower costs of migrating customers to self-service channels.

Product Analysis. Some of the most proficient product analyzers have been large card issuers with terabyte-sized databases. To automate and facilitate the analytical process, vendors have created solutions that allow for rapid modeling. A key distinction between some of the vendors is the degree to which a solution includes data cleansing and consolidation. Also, the development of multiple and interactive modeling algorithms, methodologies, and mining capabilities within one application have been a product-analysis trend.

Data Mining. By its nature, data mining is a highly iterative process with significant repeated trial and error cycles. However, some application vendors have developed processes, databases and file formats that significantly speed up the process. A key component of any analytical application is the strength of its core-processing data capabilities and the range of file formats that it supports.

2) AUTOMATION OF CAMPAIGN MARKETING PROCESS
The Automation of the marketing process involves a number of process steps, as follows:

- Engage the prospect: The system should enable marketers to define reward-based surveys, online contests, and other types of promotions. These promotions should be deployed without any programming

- Through this automated promotion process, these systems can support an incremental profiling process that facilitates the gradual collection of prospect data over time. These profiles can be built by collecting data from all interactions and data sources.

- Clean Marketing database that provides a unique ID to ensure that there is only one record per lead in the database. It should perform data validation using things like postal codes , dedup, and merge/purge capabilities.

- Provide completely configurable lead qualification and rule-based auto-scoring based on any criteria. It should support instant Web-based lead distribution to internal and external sales groups and people. Leads can be routed based on zip code, area code, named accounts, industry type, or any other user-defined criteria. It should also provide a permission system to ensure that internal and external salespeople can only access appropriate lead and opportunity information.

- CRM processes consist of time and event-based profile interactions. They are driven by a **workflow engine** and they present prospects with personalized URL's, e-mail, physical mail, faxes, phone calls and other content. This workflow process should be completely configurable by marketers using the workflow graphical interface.

- The system automates complex marketing operations using pre-built workflows that can be simply selected to implement processes.

  Typical processes include the following:

  1. Collateral fulfillment to manage physical and electronic collateral.

  2. Management and execution of marketing events, including seminars, trade shows, conferences, briefings and meetings. A workflow engine can automate all event steps, including Web-based registration, confirmation, reminders, and notifications. It automatically performs pre-event promotion, attendee profiling, and post event follow-up. All interactions are recorded as part of a profile, so that this information can be used to qualify interest and trigger additional actions.

  3. Inquiry response processes to ensure timely response to Web-based inquires and to ensure that e-mail inquiries do not fall through the cracks. It can use keywords and phrases to search a knowledgebase of frequently asked questions to automate responses. All questions and answers are recorded in the knowledgebase as well as prospect profiles.

  4. The process of performing different types of mail and e-mail campaigns. It can provide a query interface to segment markets and generate targeted lists based on any criteria. Once a list is created,

workflow can send e-mail and/ or physical mail, or initiate any type of CRM process.

5. Event analysis — measuring the effectiveness of campaigns and promotions is vital to getting the most value from marketing resources. Customer acquisition is becoming more and more expensive so effectively allocating resources for these activities is vital. Event assessment is most accurately done using a range of quantitative techniques. There is a renewed interest in design of experiments to understand the impact of marketing events.

3) INTEGRATE CAMPAIGN MANAGEMENT
A campaign management system must give you the ability through a graphical user interface, a point-and-click approach to controlling the campaigns. It is important to define the objectives of the campaign, along with the strategy and tactics to achieve them. With each tactic there is a set of deliverables that also need to include cost, required resources and timeframe. The campaign manager must keep up with the status of each campaign element in real time.

This campaign manager must provide the ability to include customer segments, profiles, customer value and opportunities in determining which message, channel and amount of resources that should be devoted to a particular segment or individual.

Campaign Management Execution
The two basic customer contact scenarios are 1) based on managing sales contacts and 2)tracking responses or leads from many sources, including broad media, direct mail advertising campaigns, referral and direct selling campaigns. FSI management wants to know the effectiveness of sales and marketing initiatives. Campaign management solutions must address customer-channel preferences while considering a company's capacity to effectively manage the sales and service levels for each channel. Campaign management solutions are evolving to provide real-time interactions with other decision- support applications and customer information to refine and dynamically update an individual customer's status, identify the next step, and deliver the appropriate, defined options in a continuous relationship development process. The five solution elements that relate to campaign execution systems are:

List Selection Selecting the candidates for a campaign can require a mix of internal customers and external purchased names. The ability to efficiently screen and filter the desired candidates using a range of sorting filters and attribute selection criteria.

Campaign Design An applications ease of use for campaign designers involves design paradigms that have universal importance. Most often, leading solutions use folder and /or tab structures that permit a variety of campaign design options that can be selected from menus or pick lists. The ability to define schedule and campaign tracking status parameter can be a significant time-saving feature.

Fulfillment The workflow that converts list selection and campaign design into a visible marketing or sales campaign initiative involves a fulfillment process. Often, coordination between third-party- direct mail houses and internal systems interfaces is necessary to have a smooth, ongoing fulfillment cycle management. Proper and timely notification to relevant internal staff, especially front line staff, is important.

Tracking In a closed-loop solution, several collaborative steps, referred to as Refine, Update, Build, and Execute can aid in companies tracking efficiency and lift results. Refine means to process feedback from campaign events that have occurred. Update refers to the posting of results into a data repository, usually a customer-centric data warehouse. Build describes the creation of the new campaign, often based on revised events, or on a singe event that has occurred as a result of a previous campaign. Execute refers to the implementation of a prescribed event over designated channels.

The campaign manager must provide the ability to perform multi-channel, muti-functional, triggered, and event-driven campaigns. All the activities surrounding these campaigns need to be coordinated by making sure that budgets are tracked and the effects are being measured.

- Automatically define splits and samples
- Create and manage control groups — companies are increasingly employing better processes to more carefully match test and control groups on both categorical as well as interval and trend data.
- Apply advanced de-duplication techniques
- Combine customer segments
- Event-driven marketing
- Ability to control the number of messages sent to a consumer over a specified period of time
- Feedback on response rates
- Information on fixed and variable campaign costs
- Automatically maintain record of all outbound and inbound communications
- Record both "hard" and "soft" (inferred) responses
- Integrate Internet channels (Web & e-mail) with traditional channels (direct mail, call centers, direct sales)
- Send out personalized e-mail messages (Automatically identify keywords within incoming e-mail messages and route them to the appropriate departments)
- Capability to insert opt-out options in outgoing e-mails and process opt-out replies
- Study channel, offer, profitability relationships to refine relationships.

This system needs to be able to provide insight for understanding the effect of combined marketing activities. For example:

1. Did running the ad increase attendance at the seminar and generate additional revenue?
2. Did combining the traditional and web elements reduce the time it took to execute the campaign, and did it generate better leads?
3. What is the effect of combined activities, such as the ad, Web site, seminar, and white paper?

4) ENABLE SELF-SERVICE MARKETING
Enable prospect request by using the Web to tie the request into a collateral management system that can process requests automatically. It should be able to immediately confirm whether the collateral is available and, if so, provide the relevant shipping information. If the collateral is unavailable, it can keep the prospect informed and notify the proper company representative. It should automatically keep tab on costs, and tie the entire service into an external fulfillment operation.

Another example is registration for marketing events, whether they are seminars, conferences, meetings, or appointments. These can be integrated with an event management module that suggests an appropriate event and prequalifies a prospect to determine their eligibility. Once the prospect is registered, it can launch a sequence of actions to confirm their registration, mail a registration package, and execute the other steps to manage and conduct the event. It can also allow the registrant to check on the status of their registration, to reschedule, or to cancel conveniently from their desktop.

5) IMPLEMENT CLOSED-LOOP MARKETING

To understand the true value of marketing campaigns, it is necessary to measure them by the revenue they generate.

Answering questions such as:

• What is the true quality of the lead?

• How many seminar attendees ended up buying?

• How much revenue did these campaigns generate and what were the marketing costs to acquire these customers?

To track revenue that is generated by a marketing campaign automatically, a closed-loop system is needed that integrated your marketing system with other systems and databases (SFA, ERP, E-commerce) to extract revenue information.

Response Analysis The end user analyst that pores over campaign results is often tasked with the nearly impossible goal of reporting on the business value of database marketing. This value analysis is usually a bottom-up method, beginning with granular analysis of individual campaigns, which may contain many cells. A solution's ability to automate the integration of design, tracking and response analysis is a differentiator between market leaders and older database marketing execution solutions.

The ability to provide closed-loop reporting on marketing expenditures is critical in measuring the success of your marketing efforts. This will require information such as campaign ROI, cost per lead, leads per region and most effective sources and channels.

ANALYTICAL TECHNIQUES: THE HEART OF CUSTOMER KNOWLEDGE

Integration of Customer Analytics into the campaign management process is paramount for achieving highly targeted campaigns to support increased ROI. With this approach companies are more able to measure the effect that marketing activities have on the organizational goals including profits and attaining desired growth rates.

The ability to accurately define segments, effectively analyze campaign response and better target groups for continuous improvement is key. This entails understanding the various effects of different treatments and cross-selling efforts across customer segments.

Some of the most powerful approaches to lifetime value and customer profitability analysis are borrowed from bio-statisticians and quality engineers, using time-to-event models, also known as survival analysis, failure analysis and proportional hazards models. These approaches include a time dimension that can better reflect when an event is more likely:

that a cross- or up-sell opportunity is ripe

that a customer may be likely to leave so preventive action

that a current customer who is not profitable today has a strong potential to be profitable in the future.

2001 AND BEYOND FOR INTELLIGENT MARKETING: GROWTH OPPORTUNITIES IN E-COMMERCE, WIRELESS, AND EBPP WITHIN THE FINANCIAL SERVICES INDUSTRY

ECOMMERCE AND ECRM

Financial Services companies today have increasingly looked to eCommerce as an essential part of their business strategy. As eCommerce and eBusiness is rapidly being folded into their strategic development, B2B and B2C eCommerce has become the key driver for the implementation of customer relationship management applications in both the institutional and retail levels. While the year 2000 has been dominated by mass market B2C developments, most of the attention in 2001 will be turned to the B2B sector. The functionality offered by the Internet is opening up new opportunities for value creation such as increasing per customer share of wallet and entering new lines of business and geographical expansions. According to research from Datamonitor there will be an estimated 16.7 million online banking customers, 11.3 million online brokerage customers and approximately 40 million insurance policies sold online.

FSI companies have created a new competitive advantage by extending their CRM strategies to one or more new e-channels. These companies are looking to technology solutions that can deliver and sustain CRM capabilities via the Internet, or other digital channels, to support existing and new products and enhance existing relationships. We have already witnessed this model taking place across the globe. For example, recently HSBC and Merrill Lynch settled a joint venture to launch a worldwide e-wealth management service aimed at affluent clients.

WIRELESS FRENZY

Wireless devices will be a key Internet access device that will tie the user in to the service providers. The mobile phone, for example, is the only access device that can be used from anywhere. It is set to become the dominant access device. The mobile phone itself integrates sound with Web site access. This will become ever more strategic to FSI's that seek a competitive advantage by being able to reach and interact with a customer anytime and anywhere for suggestions, alerts and advice on financial well being.

At the end of 2000, 3.89 million users of wireless financial services content or transactional capabilities will exist in Western Europe, versus 4.81 in Asia. In the United States and Canada, that number will be approximately 450,000. By 2005, the number of users of wireless financial services will have grown to 83.7 million in Asia, 76.6 million in Western Europe, and 35 million in North America.

Wireless financial services spending is highest and wireless financial services rollouts most advanced in Western Europe and parts of Asia. This is because wireless data delivery technologies are more advanced in these regions than in any other world area. While wireless financial services spending in Western Europe is slightly ahead of that in Asia.

Globally, wireless financial services spending will grow seven fold by 2005. Spending in Western Europe will rise from $88.1 million to $583.1 million, in Asia from $71.2 million to $443.3 million, and in North America from $56.6 million to $698.7 million.

MARKETING MEETS ELECTRONIC BILL PAYMENT AND PRESENTMENT

Electronic bill payment and presentment (EBPP) is a process allowing consumers to view and pay their bills online. EBPP is one of the more complex Internet commerce undertakings and many billers and payment enablers must participate to present a strong value proposition to consumers. Banks have the most to win or lose with EBPP, and are now beginning to demonstrate an awareness of the potential for net gains in this marketspace. Billers must strategically view EBPP as a marketing opportunity rather than just an opportunity

to reduce costs. Consumer adoption was slow in 2000, but will steadily increase in 2001 as the number of EBPP billers grows significantly to reach critical mass. A key for success in this market will be for major EBPP providers to adopt open standards and cooperation.

The focus of many Financial Service Industry companies is on providing the right products and services, and on understanding the complete relationship with a customer, including delivery channel preferences and potential lifetime value. The challenge for most FSI's is to deliver this intelligence to sales and service personnel in a timely and usable manner. The key is the ability to connect the information and customer intelligence locked in data warehouses and data marts with the folks in marketing who need to use it.

SUMMARY

Today's marketing efforts require knowing and understanding more about your customers than ever before. This ability to obtain true insights into customer needs and behavior can best be accomplished through analytical CRM techniques. Beginning with smart acquisition and an applied understanding of customer needs (through predictive and descriptive "wallowing" in the data) combined with excellent execution and superior domain knowledge, profitable campaigns and customer communication will be the outcome.

The best practices and approaches discussed in this paper will ensure marketing strategies are more effective by giving greater understanding of customers through:

- Incorporating customer information from all touch-points to generate a single customer view

- Helping to create "smart campaigns" by identifying the most profitable customers, for the relevant opportunity, through the desired channel, at the most appropriate time

- Coordinating systems and processes to design and implement marketing strategies more quickly.

For over 24 years, SAS has been helping businesses gain a comprehensive understanding of their customers. Today, through the incorporation of Intrinsic technology, SAS can help our customers form more effective marketing strategies by giving them the ability to act on that customer knowledge quickly and effectively through intelligent marketing automation.

ENABLE INTELLIGENT MARKETING CAMPAIGNS

- Customer-Centric View

- Advanced Customer Analytics

- Campaign Learning and Measurement

- Campaign Execution

- Fully integrated environment for Enterprise Marketing Automation establishing one environment that encompasses the entire business process for creating marketing strategies including:

  1. customer data from all channels and external/purchase data
  2. customer analysis including segmentation, profiling, customer profitability
  3. campaign development and execution (with offer personalization, permission-based marketing & event-driven marketing)
  4. campaign analysis (measurement of campaign success-response management)

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