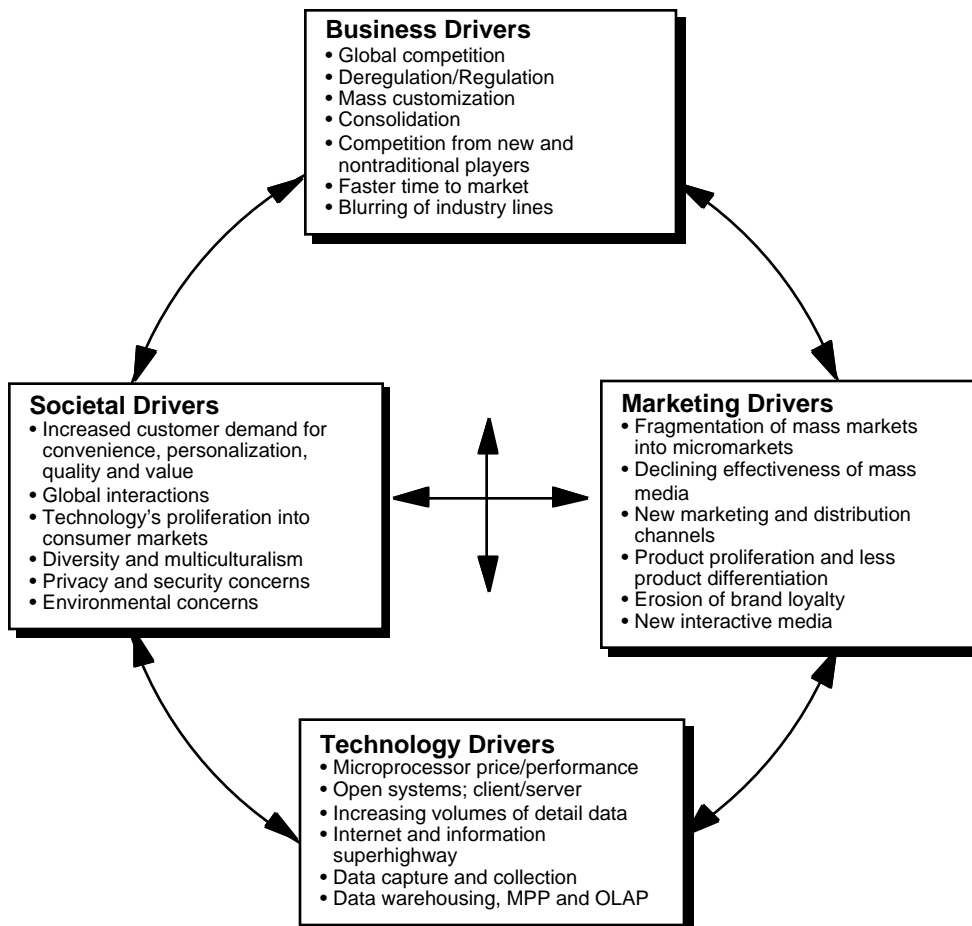


1. How will IT impact marketing organizations and redesign the marketing process?
- 2. What forces will drive the adoption of database marketing?**
- 3. How will database marketing evolve to meet changing user requirements and reflect the changing marketing process?**
- 4. What technologies and tools will enable organizations to develop effective database marketing strategies?**
- 5. How should users evaluate database marketing vendors, and who will be the leading providers of database marketing systems?**
6. How will leading-edge organizations exploit new opportunities with database marketing?

Organizations are facing increased pressure to respond to global competition, rising customer expectations and new market opportunities. To meet these demands, successful marketing organizations are increasingly using technology to enable a relationship-oriented vision, as well as to manage the increasingly complex and information-intensive marketing process. As a result of these forces, database marketing has become a critical issue in many organizations. Although their objectives are similar, many organizations are failing to achieve the potential benefits of database marketing by underestimating the necessary changes in technology, strategy, processes, skill sets and culture. While database marketing represents a significant opportunity for most organizations, it also presents a new set of challenges for both IT and marketing professionals.



What forces will drive the adoption of database marketing?



Source: Gartner Group

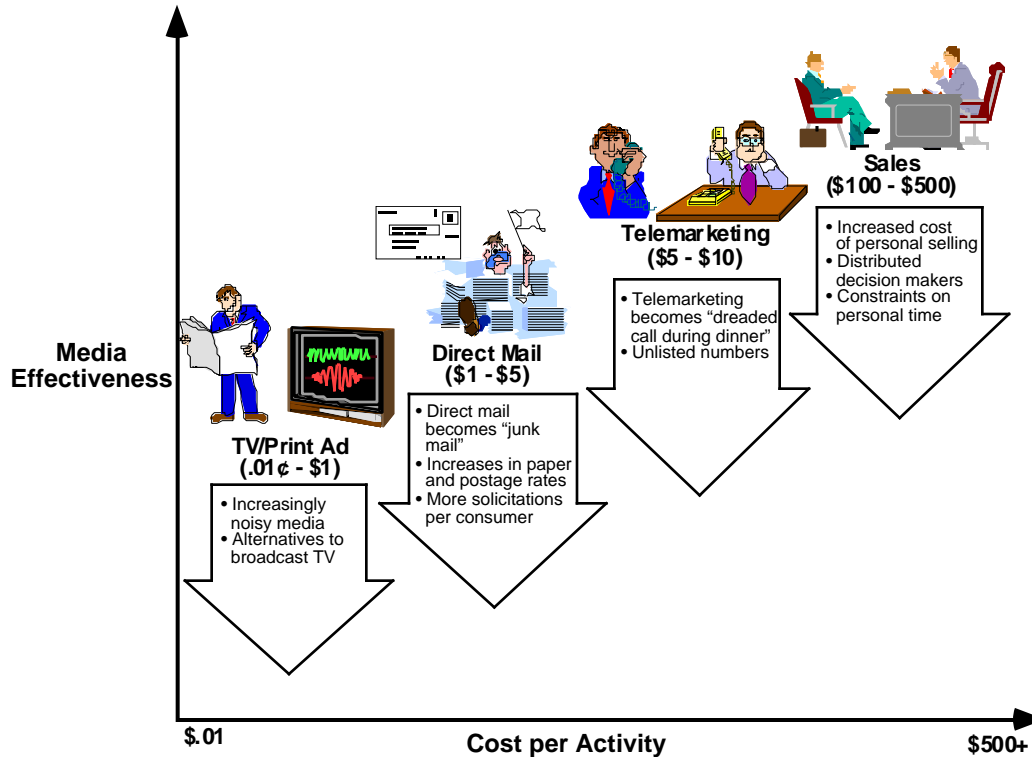
Marketing organizations are facing a vastly different and constantly changing business landscape. The breakdown of the traditional business model of mass marketing, mass production, and undifferentiated products and services supported by a homogenous, single vendor IT infrastructure has been well witnessed and documented. Societal, business, marketing and technology drivers will both enable and propel organizations toward a more *customer-centric enterprise*. The resulting transformation to customized, personalized, information-rich services and products is requiring significant investments in business process redesign, IT infrastructure enhancement and marketing re-engineering.

Within the new business framework, forward-thinking organizations have launched a search for new ways to understand the needs of their customers and the markets they serve — often entirely redefining their business from the perspective of the value they provide to the customer. Marketing professionals that have anticipated this change are playing a significantly greater role in these organizations.



The effectiveness of traditional marketing and media channels will continue to decline, and will represent a smaller portion of marketing budgets by 2000 (0.8 probability).

Reader Notes



Source: Gartner Group

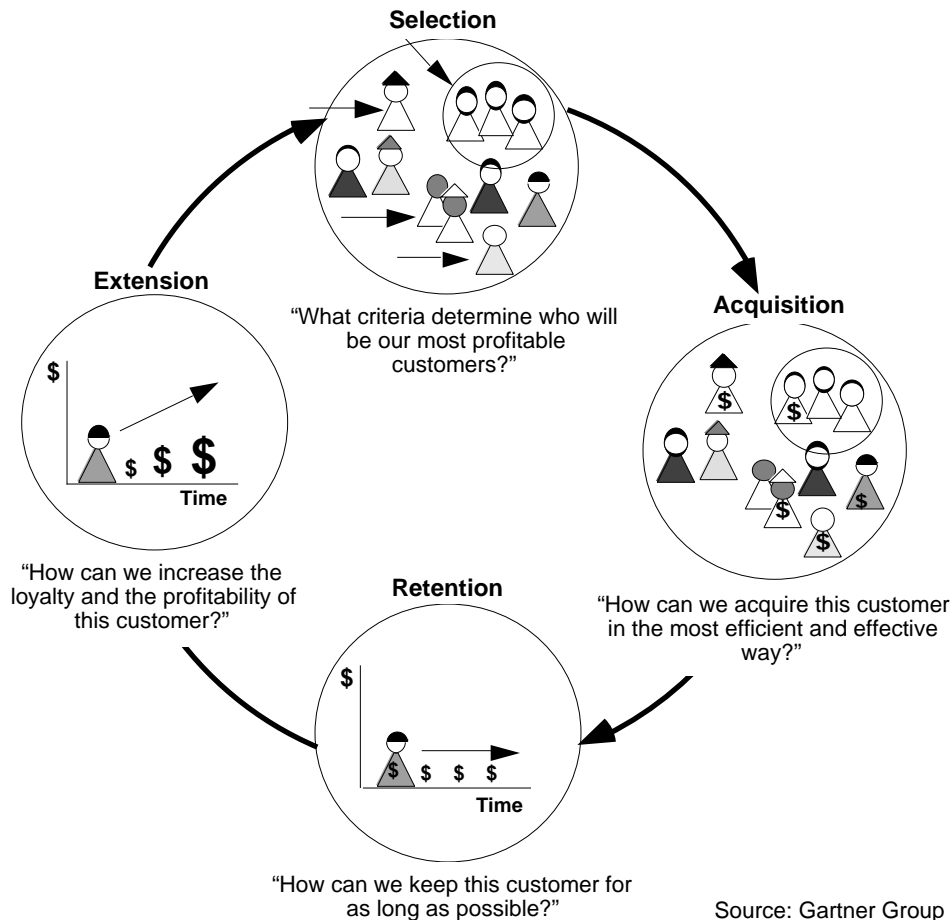
Key Issue: What forces will drive the adoption of database marketing?

Traditional marketing activities and media are increasingly being rendered less effective due to increased competition for customers' attention. As a result, most organizations are finding that to achieve the same results, they have to spend more on marketing, sales and advertising. However, the cumulative effect of more messages being sent out by more organizations that are competing for the same budgets is that each additional marketing dollar achieves fewer results.

Most organizations have not been concerned with, nor are they able to, accurately measure the ROI of their marketing activities. As a result, marketing often invests in programs without understanding the effectiveness or profitability of these initiatives. However, in an age of downsizing and re-engineering, marketing is being required to show demonstrable results for every new investment. This is forcing marketing to measure and examine its activities in order to allocate marketing resources to those activities, channels and media that have the best potential return.



By 2000, leading marketing organizations will increase their focus on customer retention and extension strategies, requiring multiple "points of contact" to be involved in the relationship-marketing process (0.8 probability).



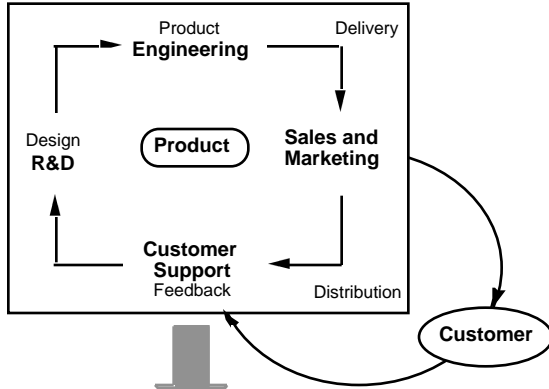
Key Issue: What forces will drive the adoption of database marketing?

Previous marketing models tended to focus exclusively on customer *acquisition* (mass marketing) and then, on customer *selection* (micromarketing and target marketing). However, several studies have shown that it costs between 4 and 10 times as much to acquire a profitable customer as it does to retain an existing one. This awareness has resulted in a heightened emphasis on customer *retention* and *extension*, and has been the driving force of *relationship marketing*. However, customer retention and extension are less dependent on traditional marketing, and are more tied to the value perceived by the customer during every interaction with the organization. Thus, relationship marketing is somewhat of a misnomer, as adding value to the customer relationship is not simply a marketing challenge, but rather a challenge that involves every function within the organization. This business model calls for organizations to differentiate themselves by consistently providing superior service at every point of contact with the customer.

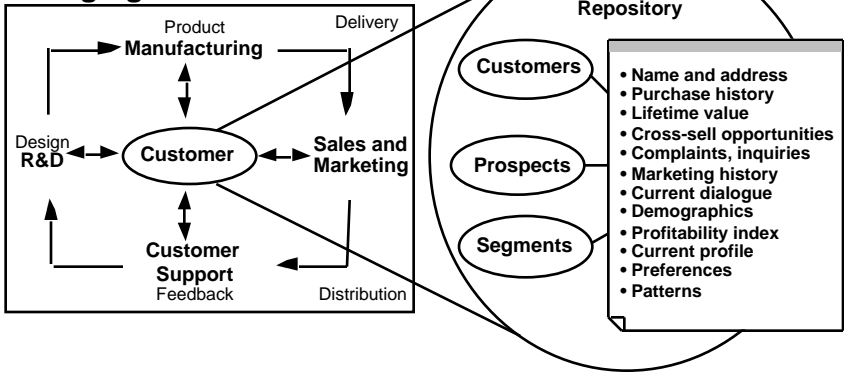


As organizations transition to customer-centric business models, all organizational functions must have access to a consistent picture of the customer relationship.

Traditional Product-centric



Emerging Customer-centric



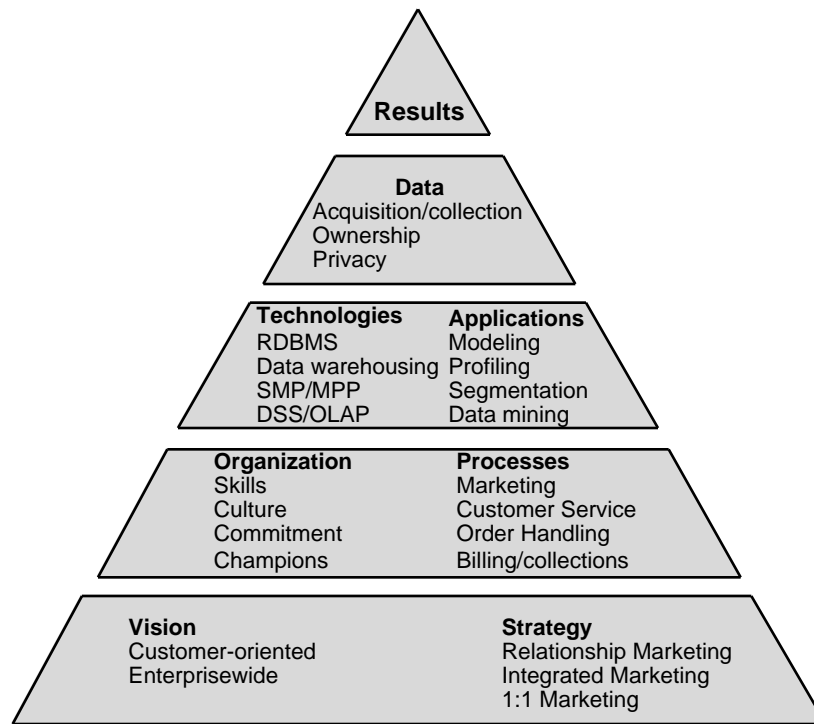
Source: Gartner Group

Key Issue: What forces will drive the adoption of database marketing?

To manage customer relationships more effectively and efficiently, every function must become “closer to the customer” by easily accessing and understanding information on the customer relationship and tailoring operations to unique customer needs. Conceptually, marketing will become integrated into every corporate activity that contributes to building customer relationships. Marketing’s role will be to better understand customers’ needs, preferences and behavior, as well as to define a comprehensive, consistent profile of each individual customer’s relationship with the organization and to share the relevant information throughout the organization. This requires an integrated perspective of customers — one that takes a cross-product, multichannel, enterprisewide view of the customer. The IS department’s role will be to enable this vision by building systems and enhancing the infrastructure needed to capture, store, manage and access this information. From an information sharing, political and cultural perspective, true relationship marketing will require a fundamental organizational change.



How will database marketing evolve to meet changing user requirements and reflect the changing marketing process?



Source: Gartner Group

Most organizations use “database marketing” as a substitute term for “direct marketing with more data.” Although database marketing originated from the direct mail and catalog industry, hence its legacy definition, it has evolved beyond simply an enhanced list selection system.

Database marketing must be viewed in a much broader context — as a technology-enabled marketing strategy. From a technology perspective, it represents the systems and infrastructure required to capture, analyze and share all the facets of the customer’s relationship with the organization. From a marketing strategy perspective, it represents a process to measure and allocate marketing resources to those activities that have the greatest return and impact on profitable customer relationships. Amidst rapid technological change, conflicting vendor claims and a confusing marketplace, the challenge for organizations will be to correctly align their vision, strategies and goals with the appropriate systems infrastructure and capabilities.



Three Generations of Database Marketing

	First Generation	Second Generation	Third Generation
	Enhanced List Selection and Management Systems	Customer Information Repository	Enterprise-wide Relationship Management System
Goal	Predict direct-mail response rates	Reduce acquisition cost Improve retention	Manage organizational resources Ensure differentiation at every point of contact
Activities	Direct mail Telemarketing Field Sales	All marketing activities Campaign management Market research Media planning	Entire organization; all points of contact Customer service New product development Finance Manufacturing
Tools	Marketing Customer Info. Files Service bureaus Flat-files Merge/purge	Relational database Analytical tools Data warehousing	Middleware Scalable hardware Integration Data mining/visualization
Data	Name and address Demographic overlays Very limited transaction data	Transaction history Marketing communications	All customer interactions All operational data
Early Adopters	Airlines Banks/Credit cards Direct mailers/Catalogues	Financial services Airlines/travel/hotels Telecommunications	Telecommunications
Modeling	Statistical techniques Regression	Statistical and nonlinear methods Neural networks Genetic algorithms Fractals	Self-adjusting algorithms Advanced pattern recognition
Systems Implementation	Stand-alone PCs or mainframes Six months	Unix servers 8-18 months	Massively parallel processing Two or more years
Selection Criteria	Ease of use/fast counts Quick installation Externally managed	Functionality Performance	Interoperability Robustness Scalability
Drawbacks	Stand-alone, proprietary	Migration and support issues	Cost/complexity to manage
Benefits	Tactical Improvements in response rates Reduce the cost of direct marketing	Strategic Allocation of marketing resources Increase marketing effectiveness	Competitive advantage Optimize allocation of enterprise resources

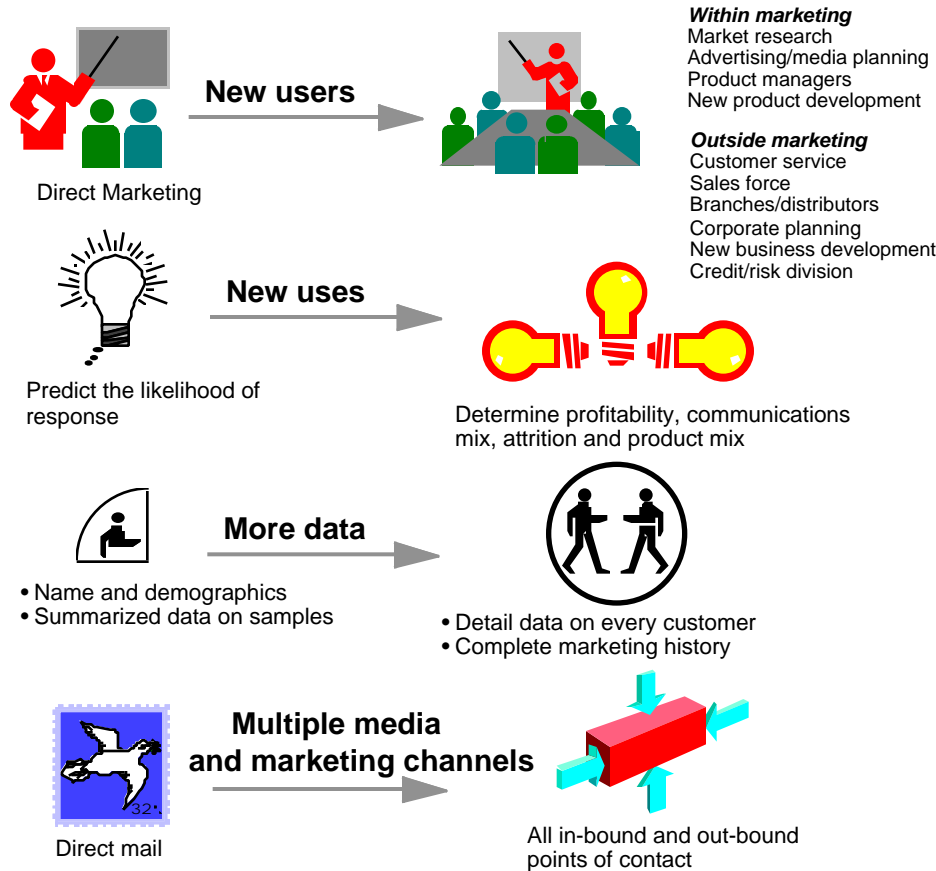
Source: Gartner Group

Key Issue: How will database marketing evolve to meet changing user requirements and reflect the changing marketing process?

Database marketing can be categorized into three generations that reflect the changing dynamics of marketing, as well as the evolution of marketing strategies, systems and techniques. Most of today’s database marketing strategies simply enable organizations to send targeted monologues at customers. Characterized by proprietary systems managed by external service bureaus, first-generation tools restrict data analysis to aggregated data on samples, rather than detailed data on populations. Organizations are facing growing frustration with nonintegrated, fragmented “solutions” that fail to provide a comprehensive picture of their customers’ relationships. However, simply replacing first-generation systems with better technology will not give organizations the expected results. Winning organizations will redesign their business processes and practices to reflect a greater emphasis on personal communication, individual recognition and customer value.



By 1998, 70 percent of organizations using first-generation database marketing strategies will experience diminishing marketing effectiveness and migrate to next-generation database marketing (0.7 probability).



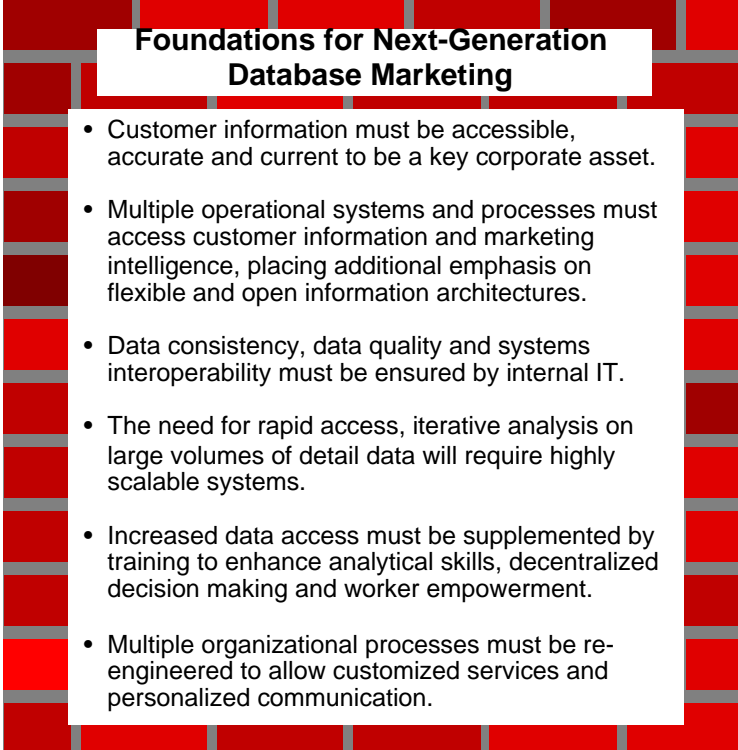
Source: Gartner Group

Key Issue: How will database marketing evolve to meet changing user requirements and reflect the changing marketing process?

Rapid technology and business-practice changes will greatly impact database marketing, resulting in discontinuities between business strategies and IT systems. Marketing must take a long-term view by building the infrastructure to support new users, larger volumes of data, new applications, and multiple new media and marketing channels. These changes will not only require new technologies, but also new strategies for managing and leveraging the use of customer information. Organizations must determine their readiness (e.g., automation of marketing processes, internal skills and capabilities, business objectives, and level of organizational commitment) in order to progress from one generation to the next. Migration also necessitates setting realistic expectations, gaining new skills, incurring significant additional costs and accepting longer payback periods. Those that do not realistically plan for these changes will limit the potential ROI of their systems and face a heightened probability of failure.



Marketing must re-examine their database marketing requirements and partner with internal IS departments to effectively leverage second- and third-generation database marketing.

A graphic with a red and grey grid background. At the top, a white box contains the title "Foundations for Next-Generation Database Marketing". Below this, a larger white box contains a bulleted list of seven points.

Foundations for Next-Generation Database Marketing

- Customer information must be accessible, accurate and current to be a key corporate asset.
- Multiple operational systems and processes must access customer information and marketing intelligence, placing additional emphasis on flexible and open information architectures.
- Data consistency, data quality and systems interoperability must be ensured by internal IT.
- The need for rapid access, iterative analysis on large volumes of detail data will require highly scalable systems.
- Increased data access must be supplemented by training to enhance analytical skills, decentralized decision making and worker empowerment.
- Multiple organizational processes must be re-engineered to allow customized services and personalized communication.

Source: Gartner Group

Key Issue: How will database marketing evolve to meet changing user requirements and reflect the changing marketing process?

As database marketing plays an integral role in the relationship management process, organizations must change the selection, deployment and management of its underlying systems. Traditional marketing concerns of ease-of-use, quick installation and immediate functionality will have to be balanced against the benefits of faster access to more information, a broader range of innovative tools, and the possibility of new, often unexpected, uses. Substantial benefits can be derived from linking database marketing strategies to organizational initiatives outside of the marketing function. Many of these synergies will require the seamless flow of customer information from one organizational process to another (e.g., from marketing to field sales to order handing and fulfillment to customer service). This will require the integration of disparate information systems that previously were stand-alone operational or decision support systems. Therefore, next-generation database marketing strategies will require greater involvement of internal IT departments.



Organizations will derive 80 percent more benefits from second-generation database marketing, most of which will be outside of traditional direct marketing (0.8 probability).

Benefits of Second-Generation Database Marketing

- Improve the selection, acquisition, retention and extension of profitable customer relationships.
- Create synergistic links between marketing and other functions and business processes.
- Enable personal and relevant communications at multiple points of contact with the customer.
- Understand and optimize customer profitability and customer lifetime value.
- Reduce marketing costs by better allocation of marketing resources.
- Optimize the product and communication mix targeted at customer segments.
- Analyze the effectiveness of various communications, media and distribution channels.
- Connect marketing activities to directly attributable marketing results and customer behavior.
- Decrease the time to determine a marketing campaign's performance.
- Integrate customer information into senior management decision making, and introduce customer-orientation into operational functions.
- Reduce marketing expenditures on unprofitable customers.
- Reduce the length of the marketing cycle.

Key Issue: How will database marketing evolve to meet changing user requirements and reflect the changing marketing process?

In order to achieve second- and third-generation benefits, database marketing cannot be viewed as an isolated business strategy, as it has implications on organizational structure, information management and systems, and organizational processes. In order to justify investment in the significant changes required of next-generation database marketing, organizations must look beyond direct marketing strategies to new metrics and new channels. Achieving these benefits will also depend on managing the critical pieces of the migration — technology acquisition, vendor management, change management and process management.



Although advances in technology will accelerate the adoption of database marketing, cultural inertia, resistance and the significant investment required will limit the adoption of enterprisewide relationship management to 20 percent of Type A organizations through 1999 (0.7 probability).

Enablers

- Changing marketing mind set
- Advances in processing and storage capabilities
- Acceptance of new corporate metrics (e.g., activity-based costing, customer lifetime value)
- Multiple electronic customer interfaces facilitating the capture of digital information feeds about customer interactions (e.g., ATM, Internet and PC-based systems POS systems)
- Automation of points of contact (e.g., customer service, order handling and sales force)
- Data warehousing initiatives
- Advances in data discovery tools (e.g., data mining, visualization, modeling and segmentation techniques)



Inhibitors

- Lack of organizational vision and commitment to relationship marketing
- Slow learning curve and lack of experience
- Conflicting cultures between marketing and IT
- Multiple outsourced components of the customer relationship (e.g., order fulfillment, customer service and telemarketing)
- Lack of systems interoperability
- Data consistency and integration issues from stand-alone decision support systems and islands of information

Source: Gartner Group

Key Issue: How will database marketing evolve to meet changing user requirements and reflect the changing marketing process?

The changing business environment, the diminishing returns from traditional marketing, and the increasingly information-intensive and complex marketing process will undoubtedly force organizations to automate their marketing processes. However, the transition will be a slow and painful one for most organizations. Although technology will play a significant role in the solution, technology alone is not the panacea. Achieving competitive advantage from relationship marketing will hinge on organizations making the necessary changes in culture, technology and processes. Marketing organizations will need to possess a strong vision and be supported by deep organizational commitment in order to succeed.



What technologies and tools will enable organizations to develop effective database marketing strategies?

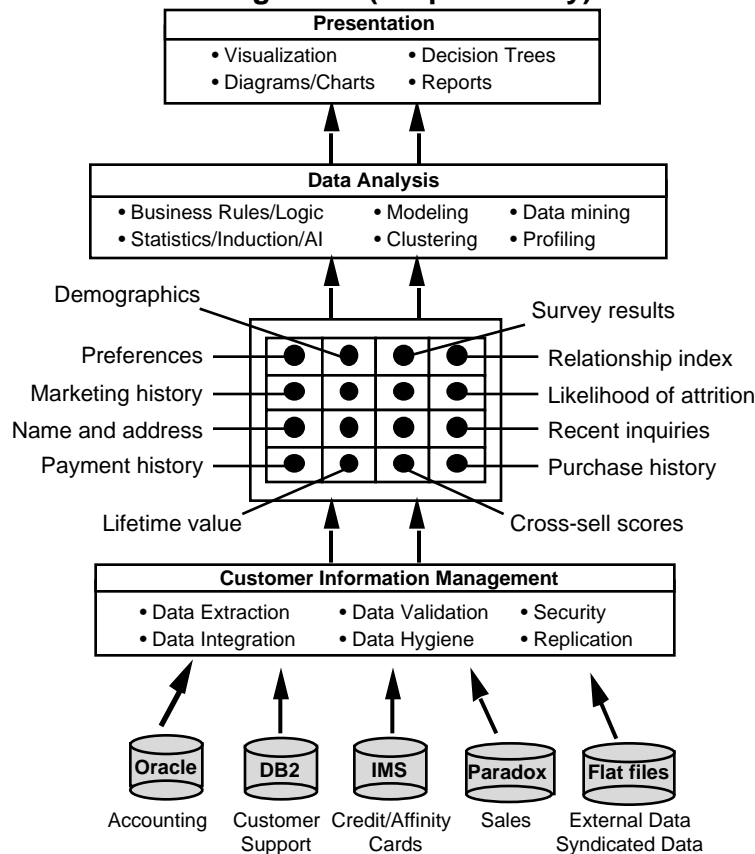
	Currently		Toward	Enabled by
Data	Summary data on samples	➔	Large volumes of detail data on population	<ul style="list-style-type: none"> • Large storage capacity
Access	Limited access to customer information	➔	Multiple functions and business decision access customer information	<ul style="list-style-type: none"> • Parallel processing • Greater involvement of IS
Updates	Quarter or monthly updates done by service bureau	➔	Scheduled and on-demand updates done daily	<ul style="list-style-type: none"> • RDBMS • Data warehousing
Models	Static models predicting response	➔	Self-adjusting models predicting profitability	<ul style="list-style-type: none"> • New analysis tools • Visualization/GIS
Systems	Stand-alone, proprietary systems	➔	Integrated systems supported by open architectures	<ul style="list-style-type: none"> • Middleware • Standards (ODBC)
Communications	Periodic, targeted monologues	➔	Event triggered, continuous dialogue	<ul style="list-style-type: none"> • Data hygiene tools • New modeling techniques
Marketing cycle	Marketing driven — Months between customer action and marketing reaction	➔	Customer driven — Instantaneous response to customer action	<ul style="list-style-type: none"> • Interactive media

Source: Gartner Group

For organizations to build lasting relationships with customers through personal and relevant communications, customer relationships must be analyzed and understood in their complete context, not simply by modeling name and demographics or even transaction histories. Today, most organizations only capture a fraction of the data elements that represent the full context of customer relationships. The length of the marketing cycle — the time between when a customer’s action is captured and when marketing action is taken — must also shrink to seconds to represent the length of the transaction cycle. Several emerging technologies, new vendors, and innovative applications will be catalysts for this change. Today, data warehousing initiatives are enabling marketing to access important data about customer interactions previously “locked” in numerous operational and proprietary systems (e.g., call center, customer service or dealers). In addition, advanced modeling algorithms and segmentation techniques (e.g., clustering, neural networks, rule-based systems and generic algorithms) are becoming commercially feasible and are being incorporated into mainstream packages. MPP is also being pioneered by the most advanced marketing departments to uncover profitable insights from detailed data on customers’ behavior.



By 1999, 70 percent of second-generation and third-generation database marketing strategies will rely on data warehousing, leveraging standard RDBMS for centralized customer information management (0.7 probability).



Source: Gartner Group

Key Issue: What technologies and tools will enable organizations to develop effective database marketing strategies?

Many database marketers process their data through service bureaus, requiring weeks or even months for turnaround. However, aggressive marketers are shrinking the turnaround time between a customer’s action and marketing’s reaction to days by leveraging internal data warehousing facilities to automate the time- and resource-expensive processes of extracting and cleansing customer data. Additionally, the need to share marketing intelligence with multiple internal functions and operational systems (e.g., a customer service department needing to access cross-sell or up-sell predictive information) will mean customer information must be stored in a centralized data warehouse rather than accessed on an ad-hoc, periodic basis from a specialized proprietary marketing database. In certain cases, data marts (a subset of a data warehouse in a specialized database) will allow for greater flexibility or increased performance. However, the data mart must be incorporated into the overall data warehouse architecture and managed and populated from the central data warehouse.



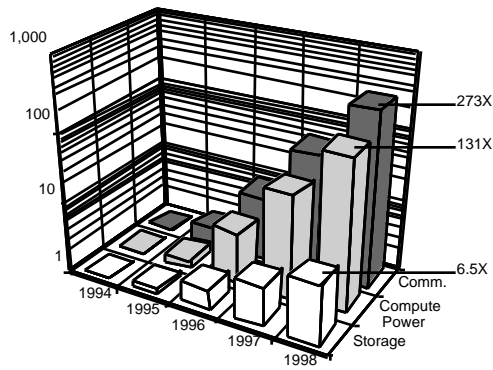
Strategic Planning Assumption

By 2000, 60 percent of second- and third-generation database marketing strategies will require scalable, parallel systems (0.7 probability).

Database Marketing

Reader Notes

Processing Required in a Typical Commercial Data-Intensive Application (1994 Relative)



Assumptions:

	Growth Rate Estimates				Overall
	1994	1995	1996	1997	
No. of records	20%	20%	20%	20%	107%
data per record	0%	40%	50%	50%	215%
No. of users	20%	50%	60%	40%	303%
No. of queries per user	10%	30%	30%	30%	142%
No. of records accessed per query	0%	40%	75%	75%	329%
Processor power	52%	52%	52%	52%	434%

Key Enabling Qualities of Parallel Processing

- Very large database capacities
- Scalable computing power
- High upper performance levels
- High-speed processor interconnect
- Support for simultaneously complex queries
- Inherent parallelism of key modeling and data mining techniques
- Microprocessor price/performance
- Highly redundant/available resources
- Client/server extensible
- Wide outboard connectivity
- Flexible architecture
- Partitioning capabilities
- Parallel relational database support
- Support for numerous users

Key Limitations of Parallel Processing

- High initial investment
- Higher risk
- Difficult to program with limited internal skills availability
- Speed-up is architecture dependant
- Immature technology
- Few parallelized applications
- Poor systems administration tools

Source: Gartner Group

Key Issue: What technologies and tools will enable organizations to develop effective database marketing strategies?

Time has always been a critical element in marketing. Currently, query performance and turnaround time for updates are among the primary complaints against today's first-generation tools and service bureaus. Several factors require significantly faster processing performance — the quantity of detail data, the need for rapid, iterative analysis on these data, increasingly compute-intensive applications and modeling techniques, and a growing number of users with access to customer data. As a result, there has been a decided trend toward the use of scalable, parallel systems to support database marketing initiatives. Organizations are leveraging the capabilities of SMPs and MPP systems to meet their current and future needs, and to build the infrastructure for "innovative computing," enabling the automated exploration and discovery of knowledge.



GartnerGroup

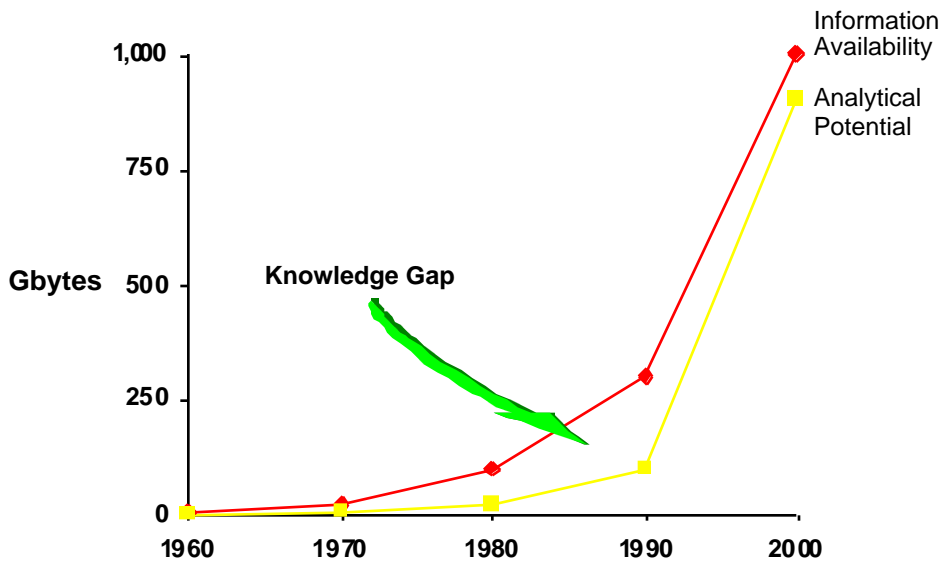
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The speed of data availability and the introduction of new tools will significantly outpace the adoption of new analytical skills, requiring investments in training and new skills for marketing professionals to double by 2000 (0.7 probability).

The Marketing Knowledge Gap



Source: Gartner Group

Key Issue: What technologies and tools will enable organizations to develop effective database marketing strategies?

Automated customer interfaces (e.g., home PCs, ATMs and the Internet) are leading to an explosion of hard, accurate data on customers and their behavior. These devices move beyond simply recording customer transactions to capturing a customer's every interaction with the organization. Also, data from multiple operational systems are being made available to end-users through data warehousing initiatives.

However, neither the tools nor the analytical capabilities of the nontechnical user have kept up with the pace of information availability. Thus, simply increasing data access to vast amounts of complex and detailed data will overwhelm users rather than enhance their decision making processes. Although innovative analysis tools such as data mining, data visualization and geographic information systems, will enable marketers to interact through natural interfaces and leverage innate human pattern recognition capabilities, these tools will also need to be supported by new analytical skills, and require significant investments in training.



How should users evaluate database marketing vendors, and who will be the leading providers of database marketing systems?

Internal capabilities		High	Medium	Low	Not Avail
Project Management	Needs assessment		X		
	Requirements definition			X	
	Vendor evaluation		X		
	Technology evaluation			X	
	Large DSS project expertise				X
	Tools selection		X		
Marketing Strategy	Vendor management				
	Marketing process analysis				X
	Direct marketing strategies	X			
	Customer loyalty strategies		X		
	Customer information flow analysis			X	
	Creative/message development	X			
	Metrics development		X		
	Cost analysis			X	
Systems Development	Systems integration		X		
	Relational data model design		X		
	4GL development	X			
	Data re-engineering, transformation			X	
	Architecture design		X		
	Application customization			X	
	Third-party data management		X		
	Visualization model design				X
	Modeling selection		X		
	Data interpretation	X			
	Segmentation analysis		X		
Ongoing operations	Data quality maintenance				X
	Database modification		X		
	Data warehousing support	X			
	User training				X
	Direct marketing/direct mail			X	
	Order fulfillment		X		

Source: Gartner Group

Prior to deciding on whether to build, buy or outsource a database marketing project, organizations must evaluate their own internal competencies. Database marketing requires a combination of capabilities that most organizations retain internally. Lacking technology expertise or internal support, many marketing organizations rely on vendors that have a strong marketing vision to develop and manage their systems. However, a common pitfall is to assume a vendor's marketing savvy is linked to their technology experience. Many direct marketing consultants and service bureaus have a limited technology vision, offering only applications requiring proprietary skills that are tied to their proprietary database formats. Thus, selected partners must be evaluated on their technology vision as well as for their understanding of database marketing strategies. Most companies should consider using consultants and systems integrators to assist them in database marketing if: 1) business success is being seriously hampered by systems, processes or architectures; 2) internal expertise (e.g., technology capabilities, business processes or organizational design expertise) to design a complete database marketing strategy is lacking; or 3) the project's completion date is considered urgent.



No single vendor will provide an integrated database marketing solution before 1997 (0.7 probability).

Data Providers D&B IS Metromail RL Polk	Strengths <ul style="list-style-type: none"> • Data on prospects • Managing large databases Weaknesses <ul style="list-style-type: none"> • Lack of technology vision • Supporting external data
Service Bureaus Direct Marketing Consultants ACS Acxiom David Shepard Assoc. Epsilon Harte Hanks May & Speh	Strengths <ul style="list-style-type: none"> • Experience in direct marketing • Functionality • Creative and fulfillment services Weaknesses <ul style="list-style-type: none"> • Proprietary systems • Narrow focus on direct marketing • Slow, unresponsive to change • Conflict with internal IS • Not modifiable
Systems Providers Okra Customer Focus International Customer Insight Corp. Customer Potential Mgmt. AT&T GIS	Strengths <ul style="list-style-type: none"> • Functionality • Ease of use Weaknesses <ul style="list-style-type: none"> • Lack of marketing vision • General purpose applications • Often proprietary
Systems Integrators/Consultants Arthur D. Little Bain McKinsey Deloitte Touche EDS	Strengths <ul style="list-style-type: none"> • High-level strategic consulting • Top management buy-in • Change management experience Weaknesses <ul style="list-style-type: none"> • Expensive • Lack of implementation experience

Source: Gartner Group

Key Issue: How should users evaluate database marketing vendors, and who will be the leading providers of database marketing systems?

Due to the increasing attention and hype surrounding database marketing, vendors ranging from hardware and software providers to service bureaus, consultants and direct marketers are jumping on the bandwagon to position themselves as “database marketing solution providers.” Thus, choosing a strategic partner has become an increasingly important, yet complicated, process with significant implications on future marketing strategies.

User organizations should not expect an integrated solution to be offered by any one vendor during the planning period. Thus, organizations must evaluate vendors’ ability to support the significant integration required when combining multiple best-of-breed components. In response, certain vendors are positioning themselves as quasi-systems integrators, and are building project management skills to work with internal IS as well as traditional software and hardware providers. Organizations must be extremely cautious when partnering with third-party vendors to define and develop the infrastructure to support future database marketing initiatives and customer-centric business processes.



Critical Success Factors**Change Management**

- Setting expectations
- Gaining senior management buy-in
- Determining new skills and new capabilities requirements
- Gaining key advocates within multiple constituencies
- Managing the multiple constituencies involved
- Maintaining continuous, face-to-face communication with project participants

Process Management

- Developing the right metrics for success
- Making a business case focusing on the business objectives
- Balancing technology acquisition while enhancing the marketing strategies
- Process redesign and re-engineering

Project Management

- Understanding the scope of database marketing
- Deciding when to build, buy or outsource
- Preventing procrastination from endless study
- Involving end-users appropriately

Technology Management

- Translating marketing requirements into systems requirements
- Developing data models and determining data integration requirements
- Applications testing and development
- Balancing technology transfer with transferring new skills
- Understanding current and future performance requirements

Vendor Management

- Avoiding over-reliance on vendors while selecting strategic partners
- Developing formal change-management and problem-resolution processes
- Contract negotiation

