

MARKET OF ONE

Ready, Aim, Sell!

Technology is helping companies treat their best customers like individuals again. The payoff—and the challenges—can be enormous.

BY JOHN FOLEY

Though 30 million people hold American Express cards, the company wants to treat each of them as a "market of one."

To do this, the charge-card company is rolling out an innovative marketing program it calls CustomExtras. The program uses a new data warehouse and other information technology to add personalized offers and messages to the invoices of selected cardholders.

American Express' goal: to convince its customers to rack up even more charges on their cards—and to reward them for doing so. "Companies spend a lot of money, time, and attention to acquire customers," says Alfred Kelly, the company's executive VP and general manager of customer loyalty in New York. "It's critically important to protect that investment."

Business management experts call the technique one-to-one marketing. It's based on the notion that different customers should be treated differently—and that the best ones should get the most attention. IT is making this possible at companies that include British Airways, Federal Express, and Sears, Roebuck. IT is also helping these innovators jump ahead. "The companies that best pull off one-to-one marketing will be the companies that win," says Mark Voboril, database marketing director in Sprint's Kansas City, Mo., consumer services group.

For IS managers, one-to-one marketing presents new opportunities and new challenges. To make the concept work, IS and marketing groups have to work together closely. IS managers also must learn to co-exist with a rising breed of cross-disciplinary professionals who understand both technology and marketing. In some cases, IS managers must become those executives themselves. American Express' Kelly, for example, though no longer an IS manager, is a former IS executive with PepsiCo Inc. and at the White House. For shipper FedEx, "it's difficult to distinguish anybody who works in the IT unit from the rest of us," says Sharanjit Singh, marketing analysis director. "The thinking is very similar."

One-to-one marketing is made

possible by three technologies: customer databases, interactive media, and systems that support mass customization. Using them, companies can learn more about their customers' idiosyncrasies, form relationships with those customers, and provide them with customized products and services. One-to-one marketing is essentially about understanding customers and delivering personalized service. In that respect, says Don Peppers, a principal of Marketing 1:1 Inc., a Stamford, Conn., consulting firm, and the co-author of a new book on one-to-one selling, it's "fundamentally a very old-fashioned idea" (see story, p. 42).

What's new is that technology, including the World Wide Web, makes it possible for companies to interact with customers in new ways. These technologies let companies create databases that pull data from, and feed information to, those interactions. Consultant Peppers calls this a "learning relationship." At FedEx, for instance, a targeted, database-driven effort to snare small-business customers did 130% better, and yielded nearly 65% more revenue, than a similar mass-marketing campaign.

The market for products and services that support one-to-one marketing seems about to explode. Gartner Group Inc. puts it at "tens of billions" of dollars within five years. "We feel it's huge—staggering," says Bill Hopkins, research director for marketing and technology with the Stamford, Conn., advisory firm. "It's one of the largest growth areas for technology in business."

None of this comes cheaply. An NCR Corp. warehouse used for customer retention can cost \$2 million to \$5 million, says Paul O'Brien, VP with NCR's computer business unit. Exchange Applications, a startup that sells software for managing marketing campaigns, charges up to \$1 million for its software alone. When consulting, systems integration, and hardware are rolled in, "we see companies spending from a half-million dollars to tens of millions to solve this problem," says Andrew Frawley, president and founder of Exchange Applications.

Yet the return on investment can be huge, too. Say, for example, a telephone company has 6 million customers using a call-waiting feature that costs \$5 a month. During the course of a year, some of those customers cancel their service. But if the company could, through bet-

airline business is becoming commodity-like. If you have deep enough pockets, you can easily set up a national-class airline," says Peter Blundell, data architecture manager with British Airways' IT strategy group at Heathrow Airport in London. "We see [personalized customer service] as one of the differentiators among the major carriers that the commodity carriers cannot reproduce."

How American Express Creates A Market Of One

American Express collects a card-holding customer's purchase records and other information, and stores it in a marketing database.

There, proprietary software selects merchant offerings and American Express promotions that fit the customer's profile.

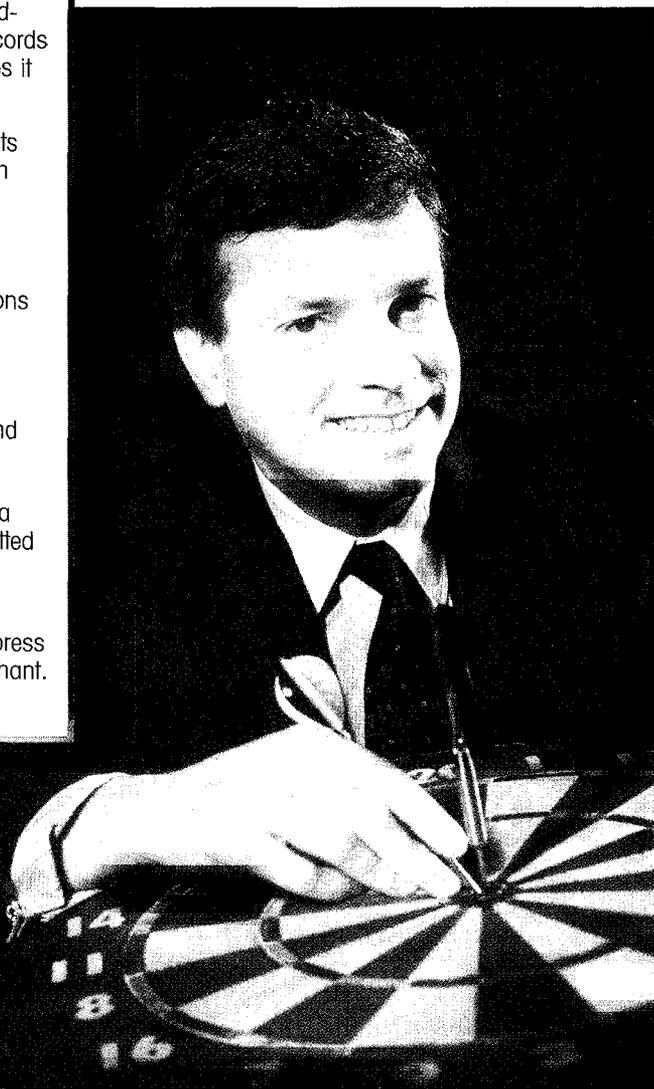
American Express prints these merchant offerings and promotions on the customer's monthly bill.

American Express' marketing database tracks whenever the customer acts on these offers and promotions, watching for the customer's eligibility for reward programs and redemptions. Data from the point of sale is transmitted to the marketing database.

When the customer acts on a merchant offering, American Express shares the results with the merchant.

DATA: AMERICAN EXPRESS

Bull's-eye: Keeping customers is critical, says VP Kelly of American Express.



ter marketing, stop 1% of cancellations—or 60,000 accounts—it would retain \$3.6 million in annual revenue. A 2% improvement would be worth \$7.2 million. "We're talking big multiples in terms of returns," says NCR's O'Brien.

Other benefits are available, too. British Airways uses the one-to-one service model to ward off competition from discount air carriers. "The

To leverage its Executive Club frequent-flier program and pamper its best customers, British Airways has begun transmitting customer-specific information, culled from its frequent-flier database, along with ticket information through its reservation and check-in systems. Airline representatives around the world, as well as flight attendants, have access to information about each

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customer's preferences. "We want to get the message across to every point of contact with that customer," says Blundell. "He's not just known in his home town or city as an important customer."

British Airways' frequent-flier data is stored in a 100-Gbyte Oracle database, which is augmented by a 900-Gbyte NCR data warehouse used for decision-support applications. The use of customer data is a central factor in the proposed alliance between British Airways and American Airlines, which is under review by the British and U.S. governments. "An important part of our alliance proposal is that we have the right to share our customer data," says Blundell. "That's underpinning much of the benefit we get from an alliance."

Similarly, American Express has high expectations for its Custom-Extras program, launched last fall. Kenneth Chenault, the company's vice chairman, believes that what he calls "the personalized customer relationship" could help American Express redefine the entire charge-card industry.

Right Message

Also, there's a practical reason to get the right message to the right customer at the right time: Consumers are weary of the junk correspondence heaped on them. Just last month, Microsoft's Bill Gates proposed that consumers start charging a fee to accept unsolicited phone calls and E-mail. "If salespeople want to contact you and you've set a price for the privilege, they can decide whether it's worth the potential cost," Gates wrote in a recent column distributed by the *New York Times* Syndicate.

Mass marketing is highly inefficient, and practitioners know it. Fewer than 2% of coupons are redeemed, and the number of coupons issued is dropping. Similarly, when it comes to direct mail, a 3% response rate is considered good, says Jim Taraszka, director of database and list services with Moore Response Marketing Services in Lincolnshire, Ill. "What are the other 97% of people doing?" he

'We Know You Have A Dog'

Peapod LP, an eight-year-old grocery delivery business, beats the competition with a database.

Rather than try to deliver more, or cheaper, groceries than its competitors, Peapod uses database technology to outpace them. The Evanston, Ill., business can deliver personalized service because it knows more about its customers than most companies.

Peapod takes all grocery orders online, which lets it track each household purchase. "If you buy diapers, we know you have a kid. If you buy dog food, we know you have a dog," says Thomas Parkinson, Peapod's chief technology officer and co-founder. Third-party data and online surveys augment purchasing data to give Peapod a detailed profile of the 35,000 homes it serves.

Peapod collects customer data in an Informix database running on a Hewlett-Packard HP9000 server. The more data it collects, the more Peapod knows about a customer's preferences. "It becomes very difficult for a customer to switch to a competitor when so much time has been put into customizing," says Parkinson. "It would be like switching from Quick-en to MS Money."

Peapod's database and Universal Event Processor—a proprietary engine that tracks online activity and triggers custom offers and advertisements—is attracting the attention of much larger companies. Its corporate clients include Anheuser-Busch, Bristol Meyers, Kraft Foods, and Ralston Purina.

The concept is catching on. Since it was founded in 1989, Peapod's revenue has doubled each year, ending 1996 at \$30 million. This year, Peapod expects to triple its customer base and double service from five U.S. cities to 10.

Peapod uses its 60-Gbyte cus-

tomers database to create online promotions that target specific households. It can use customers' order history to direct them to other products they may be interested in, Parkinson explains. For example, Peapod recently offered people who purchased baby products several high-margin items such as humidifiers and electronic thermometers.

Top Shopper

Peapod gets its revenue from both shoppers and suppliers. It charges consumers a premium for its service—5% on top of the grocery bill, plus a \$6.95 delivery charge. The company also sells information about its customers to consumer-goods

manufacturers, many of whom are striving to better understand who buys their products and why. In fact, Parkinson says the company's database will be its major profit center in the future. Also, Peapod runs promotions for consumer-goods companies.

Peapod also intends to commercialize its Universal Event Processor, a proprietary database engine that tracks the multiple "events" in a marketing cam-

paign and triggers actions based on predetermined factors. Peapod hopes to turn the database engine into an off-the-shelf product. Though it was written in C, Peapod is using Rogue Wave's development tool to rewrite the database engine in C++ and adding ODBC drivers from Visigenic so it can run on several platforms.

But Parkinson says one-to-one marketing requires a careful balance of customer and corporate interests. "We walk a fine line," he says, "between providing customer service and making them happy, and gathering as much information as we can without pissing them off." —J.F.



Snagged: Customization locks in customer loyalty, says Peapod's Parkinson.

Photo by Churchill & Klein

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asks rhetorically.

One-to-one marketing takes that question seriously. It's made possible by a convergence of technology developments: the ability to accumulate vast amounts of customer data in data warehouses, the interactivity of the Web, and the availability of customer-centric software packages for sales automation and

Data Warehouse Network, a consulting firm in Skibbereen, Ireland. Banks, insurance companies, and utilities will use warehouses for their own skewed offers, he says.

Database marketing, in essence, is not new. Led by pioneers American Express, Citicorp, and Sears, businesses have used databases to blanket the world with marketing messages for 20 years. But marketing experts are getting better at

SP2 warehouse contains data on 60 million past and present Sears credit-card holders.

Data warehousing helps Sears practice what it calls life-stage marketing. The retailer knows that when a customer gets married or buys a home, that event is often reflected in what they purchase. Sears also knows when a washer, dryer, refrigerator, or TV should be serviced or replaced. All that data is used by Sears to target promotions. The store chain also sends letters of appreciation and special offers to its best customers.

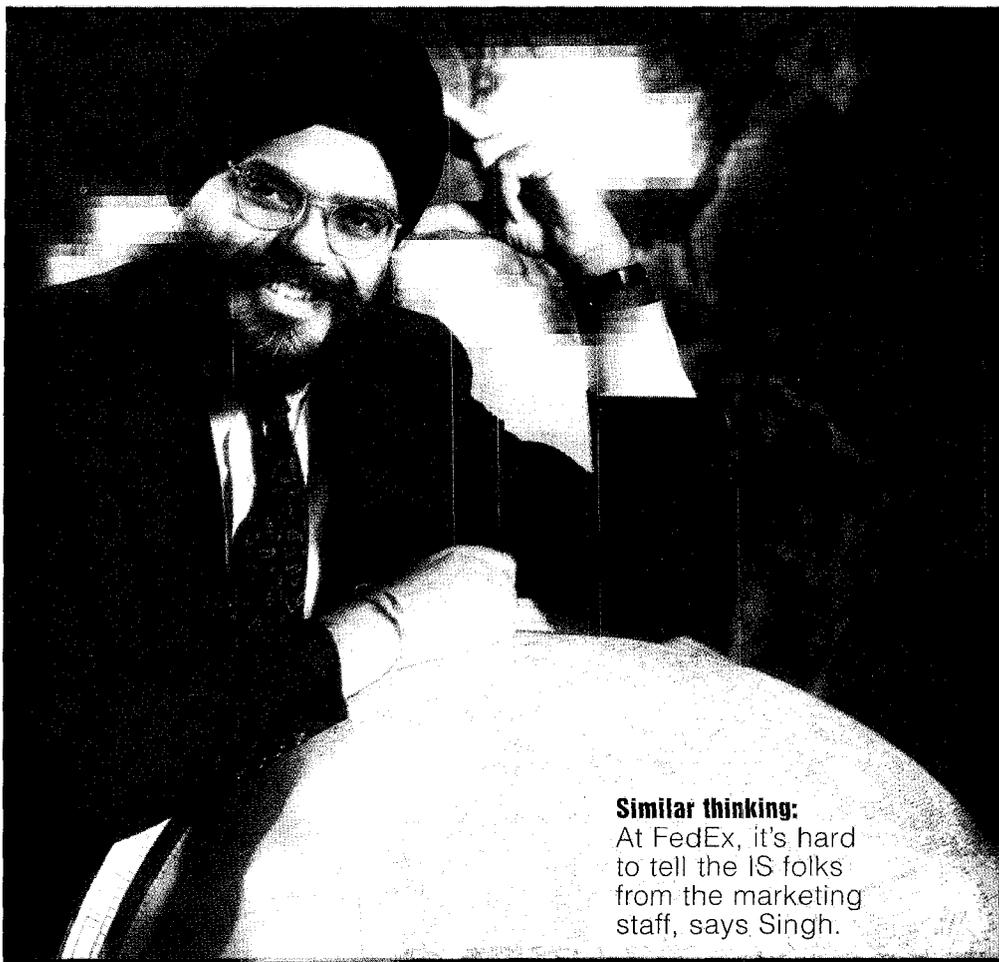
In fact, identifying good customers is part of the challenge. Exchange Applications in Boston divides customers into four quadrants—low profit, high profit, low potential, high potential—and helps companies identify and target the high-profit and high-potential groups. "We often find that it's nobody's job to optimize relationship profitability," says Frawley.

There's a flip side to this exercise: ridding your company of poor customers. "If you've got customers who are not profitable, why do you want them?" asks Bob Fetter, president of dbIntellect, an EDS subsidiary in Golden, Colo., that builds data warehouses. "It's OK to fire customers."

Reusing Information

Either way, one-to-one marketing requires that all data gathered through contact with a customer be fed into a central repository, usually a data warehouse, and then be used to inform future—or even immediate—interactions with the customer. "You tell me what you want, and then I make it for you," explains consultant Peppers. "Every time we interact, I get a little further up your learning curve."

American Express uses what it calls a closed-loop network to collect and reuse customer information for target marketing. Point-of-sale transactions feed into a massively parallel Quantum Corp. database for use across the enterprise. For the CustomExtras program, American Express has deployed a second database, running on an IBM mainframe with IBM's DB2 relational database software. That



Similar thinking:
At FedEx, it's hard to tell the IS folks from the marketing staff, says Singh.

marketing campaign management.

Production systems that support mass customization are also part of the mix. "Vendors from five or six different technology areas are converging on this market," says Gartner's Hopkins.

In one-to-one marketing, not all customers are created equal. Data warehouses can be used to single out customers for special treatment. Retailers will eventually use warehouses to apply a "sliding scale of discounts" to customers at the point of sale, says Sean Kelly, president of

using data warehouses, statistical modeling, and other technology to target ever-smaller customer segments. "It's a surgical strike instead of carpet bombing," says a Sears spokeswoman.

Sears introduced its general merchandise catalog in 1896, selling everything from appliances to prefabricated houses. Today, the retailer operates a massive data warehouse of customer information that it will use to hone marketing programs for its many lines of business. The 2.5-terabyte Informix-on-IBM

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database draws data from Quantum and uses it to track purchases, rewards, and promotions, and to manage the printing of billing statements with customized offers and messages. The database is capable of supporting hundreds of millions of promotions. "We can target specific offers to specific customers based on their spending patterns," says executive VP Kelly.

Segment marketing, a natural starting point for one-to-one marketing, has helped Capital One Financial Corp., a credit-card company in Falls Church, Va., with 9 million customers, build its business. Segmentation involves identifying groups of potential or current customers with common interests. Once a sale is made, the customer-relationship management principles of one-to-one marketing kick in. Capital One, which offers more than 3,000 credit-card product combinations, tests new concepts on control groups. Last year, it conducted 9,000 such experiments. "We have not found the limits to this concept," says Nigel Morris, president and CEO of Capital One. "Segmentation down to 'one' may absolutely be the right way to go. We drive down targeting with surgical precision until it no longer makes sense."

In fact, Capital One describes itself as an "information-based marketing company," not a credit-card issuer. Its four Oracle data marts, which manage a total of 2 terabytes of data, are expected to more than double in size within two years, says Dave Buch, the company's data-warehousing director.

Signet Bank in Richmond, Va., is following in Capital One's footsteps. Actually, Capital One was spun off from Signet, an \$11.5 billion financial institution, in 1995. This past October, Signet announced the start of a two-year reorganization. "We intend to become a customer-centered marketing organization," Malcolm McDonald, Signet's president and CEO, said at the time. "Our success will depend on understanding exactly what the customer wants."

Credit-card accounts are a rich source of data for one-to-one mar-

Marketing: They Wrote The Book

One-to-one marketing is the most old-fashioned of ideas—and the most up-to-the-minute.

That's the premise of *Enterprise One To One* (Doubleday, New York, 1997, \$34.95), a new book by Don Peppers and Marsha Rogers. They're the principals of Marketing 1:1 Inc., a Stamford, Conn., consultancy that specializes in customer relationship management and one-to-one marketing. The firm's clients include AT&T, NCR, Owens Corning, Pitney Bowes, and 3M.

Peppers and Rogers first laid out their ideas in *The One-to-One Future*, a book published in 1993. That future, they say today, is now. "We're at the end of the old-fashioned kind of aggregate market competition and at the very beginning of a new phase," Peppers says.

What's especially new, Peppers adds, is the way customer databases, interactive media, the World Wide Web, and other technologies help companies do business and retain their most valuable customers.

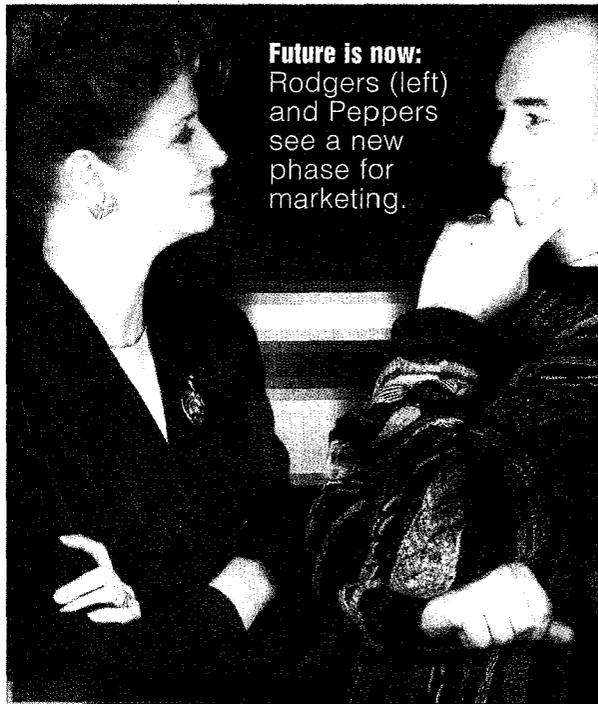
Peppers and Rogers' new book discusses two important concepts: a customer's lifetime value and vintage—the year that a customer started doing business with the company. With one-to-one marketing, they say, "the basis is share of customer, not just market share." That may sound obvious, but it isn't.

Their book provides many examples of companies moving in this direction. Ritz-Carlton knows which hotel guests like mints on their pillows. Levi Strauss sells made-to-fit jeans. Streamline, a Boston startup, tracks and delivers everything the average household needs.

But some of the ideas—such as

custom-made "asymmetrical" bras and membership cards for Burger King restaurants—may seem far-fetched. There are also some one-to-one flops, including an MCI marketing program called Customer First that failed because the sales organization was rewarded for gaining customers, but not for keeping them.

The book ends with a discussion of the substantial investment in IT that a company must make to do one-to-



Future is now: Rodgers (left) and Peppers see a new phase for marketing.

one marketing. While they acknowledge that the numbers can be intimidating at first, Peppers and Rogers promise that the return on investment can be greater than 50% within just 18 months.

Like many other management books, *Enterprise One To One* was written for business executives seeking ways to energize their organizations. Though IT is central to the discussion, this is not a technology book. When Peppers and Rogers discuss "windows," for example, they're talking about business opportunities, not the PC operating system.

Still, for technology managers who want a concise introduction to one-to-one marketing, *Enterprise One to One* is a good place to start. —J.F.

Photo by Bill Cramer

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keting. MasterCard lets its 22,000 member banks access a data warehouse of purchasing history. Visa is in the midst of building a warehouse to be accessed by retail stores. Other sources include frequent-flier numbers, "loyalty" cards, phone calls, and warranty cards. The trick, say one-to-one consultants, is to use that intelligence to better serve customers at every contact point, including phone centers, billing statements, direct mail, point of sale, kiosks, and ATM machines.

More Than A Web Site

On top of all this, the Web can dramatically lower the cost and raise the efficiency of interacting with customers. Last month, for instance, Liberty Financial Cos., a mutual fund company in Boston, began offering financial services on the Web using BroadVision Inc.'s One-To-One applications software. "I don't like to think of it as merely a Web site," says Iang Jeon, VP of electronic commerce with Liberty Financial. "It's a personalized interactive experience."

Two Liberty units have launched Web sites: Stein Roe's site is intended for individual investors (<http://www.steinroe.com>), and Keyport Life's, for brokers (<http://www.keyport.com>). The technology platform—BroadVision's software and Sybase databases on Sun Microsystems servers—makes it possible to create and manage profiles of Web-site visitors, and to target individuals and common interest groups with content, advertising, and incentives. Liberty is catering to its clientele, whose average age is over 50. The customizable sites, for example, let aging baby boomers pick a bigger type size. The Web sites also tie into Liberty's back-office data systems. "We can have an online dialog with a customer, broker, or agent," says Jeon. "There are many opportunities to target messages when they're traversing the site."

Though many kinds of software support target marketing, no vendor provides the whole package. As a result, consultants and systems integrators that specialize in customer-centric databases and applications

are thriving. "Everybody's growing in this business," says Fetter. His company, dbIntellect, generated \$40 million in 1996, its third year in business. Other vendors with expertise in this area include Acxiom, Exchange Partners, IBM, KPMG Peat Marwick, Oracle, SAS Institute, and Tessera Enterprise Systems.

New services, some the result of partnerships, are popping up to meet the demand. NCR is teaming with AMR Corp.'s Sabre Decision Technologies unit in Dallas to offer a customer-retention service aimed at telecommunications companies. The offering combines NCR's data-warehouse solutions with analysis models that grew out of AMR's airline business. Similarly, in January KPMG introduced Market Information Management, a service combin-



Differentiator:
Blundell says personalized service sets British Airways apart from other carriers.

ing resources from KPMG's data-warehousing, resource-planning, and consumer-markets practices.

The service, aimed at retailers and consumer goods manufacturers, combines the technologies needed to let companies analyze the current and potential value of customers, implement strategies that squeeze more profit from existing customers, and gain new ones, says Barret Hildebrand, manager of the service. KPMG combines products from Hewlett-Packard, Oracle, Pine Cone Systems, SAS Institute, and others.

Entrepreneurs see opportunity, too. Peapod LP, a \$30 million company that operates in five U.S. cities, has found a lucrative niche providing a highly individualized service: grocery shopping. The Chicago-area

company takes grocery orders online, gathers the goods, and delivers them to 35,000 households. A key factor in Peapod's success is a data warehouse that tracks purchases and lets it serve up promotional offers aimed at any of Peapod's customers. "We know everything about them," says chief technology officer and co-founder Thomas Parkinson (see story, p. 36).

The move to one-to-one marketing requires that IT and marketing organizations work closely together. It's creating a new breed of cross-discipline professionals who understand both technology and marketing. Peapod, for instance, has created specialists with backgrounds in both database administration and computer graphics. At Federal Express, business managers

in the market planning and analysis group work side by side with computer scientists in an adjunct IT unit.

But there's a dearth of professionals who can assemble all the technology pieces to support one-to-one marketing. "There's a small group of people that have really done it," says Richard Birt, a consultant with Acxiom in Conway, Ark. "People who are good at this have instant employment and life-

time employment."

Also, marketing departments have been known to act independently. Birt says 40% of the projects he works on are initiated by marketing departments that control their own IT purchases. But experts say enterprisewide one-to-one marketing requires the involvement of a central IT group. For companies moving in this direction, that means technology managers and their marketing counterparts need to map out a strategy for the future. "Unless you want to continually be playing catch up, you should be thinking of these issues now," says data-warehouse consultant Sean Kelly.

The challenge is big. But the secret to one-to-one marketing is: Think small. ●