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MAGAZINE

July/August 2000

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MICROSTRATEGY CLOSES THE LOOP WITH TRANSACTOR

MicroStrategy recently launched MicroStrategy
Transactor™, a platform that enables businesses to "close the loop" by building transaction systems to serve their customers better anytime, anywhere. MicroStrategy
Transactor technology enables the development of responsebased transactions, which allows customers to make instant transactions in response to alerts delivered via Web, wireless and voice.

The software's Intelligent
Transaction Agents™ enable
these complex transactions by
interpreting, integrating and
interacting with information;
Transactor can also operate
with the Internet to expand a
Web site's e-commerce offerings. Run as a standalone
product or in conjunction with
MicroStrategy's Intelligent
E-Business Platform™,



Transactor can operate with enterprise information systems, such as databases, commerce servers and legacy systems, as well as with any XML compliant device such as a WAP phone, PDA or Web browser.



GE CAPITAL FLEET SERVICES AND MICROSTRATEGY AWARDED FOR BI INNOVATION

MicroStrategy and its customer, GE Capital Fleet Services, were recently awarded DM Review's World Class Solutions Award in the

"Business Solutions and Analytical Applications" category and The Data Ware-housing Institute's Best Practices in Data Warehousing Award in the "Warehouse and the Web"

category.

MicroStrategy's acclaimed e-business solution allows GE Capital Fleet

Services to deliver mission-critical information via the World Wide Web, reaching the right people in the field at the right time. Not only will the solution improve customer relationships, it will extend the life of the fleet vehicles while saving time and money. GE Capital Fleet Services expects to save \$1.6 million in printing and postage costs this year.

DM Review's winners, selected from more than 50 case studies, will be featured in the September 2000 issue of the publication. The Data Warehousing Institute will honor MicroStrategy and GE Capital Fleet Services at the Best Practices and Implementation Conference held in Boston, Mass., August 20-25.

AIR FORCE REACHES NEW HEIGHTS WITH MICROSTRATEGY

The Air Force Materiel Command (AFMC) of the U.S. Air Force (USAF) is using the analytical and reporting strength of

OF THE

MicroStrategy's
Intelligent E-Business
Platform™ to make
better financial and
business decisions.

MicroStrategy Web™, an Intelligent E-Business™ tool designed to accommodate a variety of users, will provide AFMC personnel with the valuable insight necessary for improving productivity and decision making. Users can analyze data contained in the Air Force's 12 legacy data systems to assess financial performance and improve forecasting and inventory management.

To facilitate end-user training and product implementation,

the AFMC purchased several hun-

dred licenses of MicroStrategy
Web Multimedia Based
Training™ (MBT).
MicroStrategy Web MBT
offers the Materiel Command
hands-on training and
instruction via the Web, local
area network or CD-ROM.

J.D. EDWARDS AND MICROSTRATEGY ENTER STRATEGIC ALLIANCE

MicroStrategy recently announced an agreement allowing J.D. Edwards to license and resell MicroStrategy's Intelligent E-Business Platform™ globally. By combining the business-to-business software expertise of J.D. Edwards with MicroStrategy's Intelligent E-Business™ technology, customers will benefit from a comprehensive solution that provides unparalleled data analysis capabilities.

This strategic alliance provides customers with valuable insight, enabling better decision making at an enterprise level and beyond. The solution's Web-based environment facilitates real-time knowledge sharing between users at all levels. "Our goal is to support the decision-making process from business-tobusiness across the extended enterprise in an open, collaborative manner to deliver continuous competitive advantage for our customers," said Ed McVaney, president, chief executive officer and chairman of J.D. Edwards.





For more than a decade MicroStrategy Incorporated has built leading-edge business intelligence applications. With MicroStrategy 7, it raises the bar to set a new industry standard. The next generation platform is poised to dominate the market by providing unparalleled insight into business operations and powering sophisticated, Intelligent E-Business™ solutions.

aunched in June 2000, MicroStrategy 7 is the culmination of four years of development, and more than four million lines of code. It brings to market a comprehensive open intelligence platform that is designed to meet emerging e-business trends like narrowcast networks and electronic Customer Relationship Management (eCRM).

"Business intelligence provides the insight that drives numerous functional areas such as customer

marketing, Web site analysis and supply chain management. It is the critical piece needed to successfully solve the e-business puzzle," said Sanju Bansal, chief operating

officer of MicroStrategy. "Without it, you can't do true e-business which involves using every customer touch point and every customer communication as an opportunity to build a relationship. MicroStrategy has done the required analysis very well for years. It's our core strength, and with MicroStrategy 7 we've delivered a superior product that customers will embrace for business intelligence and Intelligent E-Business needs."



by Christian Munson

Powerful Analytics

MicroStrategy 7 offers the critical component Bansal speaks of-the industry's most advanced data analysis functionality.

Users can access complete libraries of mathematical, statistical, financial and other functions that can be applied to any report or customized application built on the platform. The depth and breadth of analytical capabilities allow customers to build highly specific reports. More than 150 analytical functions are available out-of-the-box, including those available in Microsoft Excel and even complex second-level calculations like T-tests or options pricing models. Additionally, it is easy to expand existing libraries by plugging in other

> algorithms. "MicroStrategy 7 offers a wide range of sophisticated functions through a analytical engine embedded in MicroStrategy Intelligence

Server,™ " said Martin D. Izenson, director of Risk Management at Visa International, the world's leading credit card services provider. "Our users are crying out for second-level calculations, and MicroStrategy 7's sophisticated analytical functions make it easy for us to model and execute them. We can now use one platform instead of having to design a more involved workflow to arrive at these computations."





The kinds of second- and thirdlevel calculations that companies are raving about are made possible through a process unique to the MicroStrategy platform known as Collaborative Analysis. MicroStrategy engineers have developed a technique that allows the data warehouse and the MicroStrategy Intelligence Server to work together to bring back result sets that are simply impossible with any other business intelligence architecture. Analysis is first performed in the warehouse using optimized SQL. The results are then passed out to the analytical engine on the midtier where statistical or mathematical computation is performed. The resulting set of data can be passed back to the warehouse where it is joined to another table and passed yet again to the midtier for further analysis. This process can be repeated indefinitely, allowing users to uncover answers to compound business questions in a single report.

Open Platform

The platform's component architecture and open application programming

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MicroStrategy 7 Delivers Unprecedented Business Insight to Western Digital

Western Digital

Western Digital manufactures computer hard drives from components it builds and procures from many vendors. A glitch in any one of these components can ruin a shipment of hard drives and lead to unsatisfied customers. To keep this from happening, Western Digital deployed a custom business intelligence solution with MicroStrategy that helps it monitor the production cycle and assure quality. It recently migrated to MicroStrategy 7TM, the Intelligent E-Business PlatformTM, and now has better insight into its product quality, inventory needs and supplier relationships than ever before. The bottom line result: more efficient operations and satisfied customers.

MicroStrategy 7 offers Western Digital the business intelligence industry's widest range of schema supports and the most advanced analytical capabilities. A pure HTML Web component extends the power of the platform to any user with a Web connection regardless of browser type, and the platform's performance and scalability are unmatched.

MicroStrategy 7's open API architecture makes the enhanced platform easy to integrate, customize and deploy. In fact, Western Digital deployed the platform and began running reports off it in less than a week. The

> platform's features, including a new user interface and improved reporting functions, make it a much easier tool to use. "We capture data from

more than 20 sources in a data warehouse that contains more than 1,000 attributes and more than 30 dimensions," said Douglas Durrant, director for Technology and Architecture at Western Digital. "Prior to MicroStrategy 7, we had no way of hiding this complexity from the users. Standard reports would come back with hundreds of rows of information, and when you need just a couple of them for a particular question it can be quite intimidating. MicroStrategy 7 alleviates that problem by allowing us to hide non-critical data from users who do not need to see it. MicroStrategy 7 lets us show users only the information they need to see."

More manageable data makes reports easier to handle, and MicroStrategy 7's built-in statistical

continued on page 8

interface make it easy to customize solutions to suit the unique needs of each enterprise. All functionality is exposed through the MicroStrategy SDK, which allows customers to plug in third-party applications or to take advantage of the analytic power of the MicroStrategy back end by building on top of the platform. Through the XML- based MicroStrategy Web API customers can customize the

interface and functionality of their Web application to suit end user requirements or to change the look and feel to reflect the corporate identity.

Rapid Deployment

Customers will appreciate MicroStrategy 7's analytical capabilities even more when they discover how easy the platform is to deploy. The platform's Web interface, for example, is pure HTML. It can be deployed to users on any browser, using any operating system across any firewall. This makes it simple to roll out applications that can specifically benefit external constituents like suppliers or customers. MicroStrategy 7 requires no ODBC connection on the client machine, resulting in low installa-

tion

and maintenance costs, and login mapping features allow Rapid Deployment multiple users Intuitive Interface connect to the platform with the same

database login ID. Flexible schema support also minimizes

"The platform's easy integration, complex statistical calculation functions and its unprecedented support for different data schemas are saving our users a lot of time and providing Western Digital with tremendous business insight."

> Douglas Durrant, director for Technology and Architecture at Western Digital

PARTNER POWER WITH 7

NetGenesis and MicroStrategy Partner to Deliver Customer Intelligence to Online Businesses

ow do e-businesses cultivate and maintain relationships with customers they've never met before? It's a lot easier than one might expect, given the proper tools. Online businesses are able to capture huge amounts of data about their customers and visitors with every click they make. On top of that, the data is extraordinarily detailed.

Deciding how to obtain and leverage insight from this data, however, is another matter. This is the herculean challenge that both dot coms and clicks and mortar businesses face today. Customer-centric data warehouses that capture online data hold the key to knowing customers. Their broad, deep sizes run into the terabytes, and require schema-independent and scalable e-business solutions.

Fortunately, selecting the right platform to handle terabytes of data is now a lot easier. NetGenesis, a leader in providing e-customer intelligence to Internet-enabled enterprises, met this

challenge head on when it partnered with MicroStrategy. The company is currently working in concert with MicroStrategy to build a next generation Web site analysis platform and plans to take it to market later this year.

"The enterprise-wide powerful analytics of the MicroStrategy 7TM platform provides the foundation for NetGenesis' e-customer intelligence solution," said David George, vice president of Business Development at NetGenesis. "The combination of MicroStrategy and NetGenesis ensures an unparalleled Web site analysis solution that will scale to meet the demands of even the largest Web sites in the industry. Online businesses will be able to analyze customer visit patterns to obtain a 360 degree panoramic view of their online customers."

What does this signify to an e-business? The beginning of beautiful relationships. The technology rising out of the NetGenesis/MicroStrategy partnership

empowers e-businesses to "get to know" consumers. Online businesses can compare the transactions of browsers, buyers, repeat buyers as well as prospective buyers. The system determines where Web visitors are coming from, what the site's top content is and what page most visitors leave from. It can report on a Web visitor who clicks on a particular banner and at what point during the online visit he/she makes a purchase, as well as reveal everything that happened in between.

"Our partnership with MicroStrategy helps business-to-business and businessto-consumer organizations get ahead of the game by transforming undifferentiated e-customer data into effective marketing initiatives," added George.

Indeed, employees at such organizations will be able to answer vital business questions such as which customer segments are the most profitable or how quickly customers can find the information they need. Not only can customer

deployment barriers. MicroStrategy engineers designed the platform to support most data models, including star, snowflake, hybrid, normalized, denormalized, aggregated schemas and others. The platform is ready to work with a company's existing infrastructure, and there are no restrictions that would prevent the business from evolving its data model in the future. Support for common data models also means that migrating existing business intelligence applications to MicroStrategy 7 requires little effort.

"We got MicroStrategy 7 up and running in less than a week," said Douglas Durrant, director for Technology and Architecture at Western Digital Corporation, one of more than 30 beta test customers for MicroStrategy 7. "The platform's easy integration, complex statistical calculation functions and its unprecedented support for different

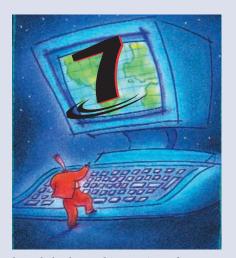
data schemas are saving our users a lot of time and providing Western Digital with tremendous business insight."

Intuitive Interface

While designing a robust platform architecture and packing it full of powerful analytical features, MicroStrategy's software engineers did not forget the user. A completely new interface makes querying a huge data warehouse of detailed information as easy as surfing Yahoo!.

MicroStrategy 7 introduces a new, clear-cut approach to data exploration. Through Investigative Workflows, end users can engage in a guided process of insight discovery. The platform offers contextually sensitive guidance at every point in the analysis process, enabling end users to perform the most complex sets of analyses quickly and intuitively .

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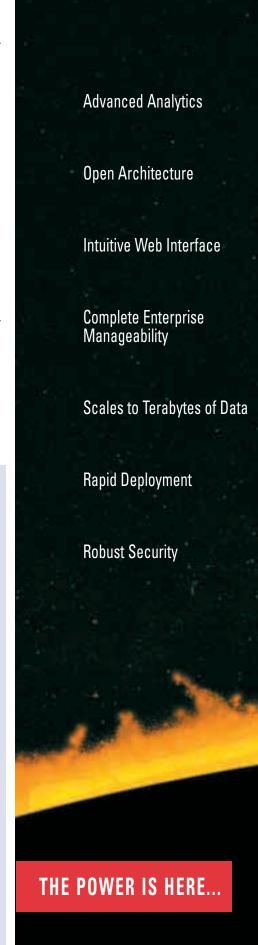
knowledge be used in a variety of ways to bolster retail sales and deliver better services, but gaining such knowledge is a wellknown necessity for surviving in an increasingly competitive online industry.

By delivering these needed advantages, NetGenesis' e-customer intelligence solution can increase an e-business' potential for generating additional revenues. Forrester Research reports that the market for e-commerce is growing nearly 100 percent a year, and many Global 2,500 companies will reach \$5 million of

e-commerce daily within the next five years. The stage is set so that the partnership between NetGenesis and MicroStrategy delivers a powerful, scalable and robust e-business solution that any online business can benefit from to help boost its bottom line.

"We're listening to our customers and delivering what they need by partnering with the leading e-business provider in the industry," said George. "The combination of NetGenesis and MicroStrategy 7 enables online businesses to extract invaluable insight from their large data repositories, enabling them to better understand and meet the needs of their customers, employees or partners with a more unique, customized experience. We believe that successful e-businesses will be the ones that leverage their online customer behavioral data for strategic insights that will enable them to best serve their customers, and to do so will require the most scalable, powerful solution in the market."

1 Carl D. Howe, "Nonstop eCommerce," *The Forrester Report*, Jan. 1999.



Intelligent Report Wizards also guide users on metrics and data attributes to help them build and retrieve exactly the reports they need. On-the-fly pivot functionality enables users to analyze reported information easily from various perspectives. New formatting, graphing and printing features also allow users to create high-quality, detailed presentations.

Additionally, the rich security model enables a truly personalized user experience by delivering profile-based functionality and content. By setting security privileges, permissions and roles appropriately, an administrator gives users a customized view of information when they use MicroStrategy 7. The marketing user, for example, will have access only to marketing reports or marketing information, whereas the finance user will have access to a completely different view of the data, even though they access the same business intelligence project. Personalized interfaces facilitate use by making all available information relevant to the user and eliminating the need to weed through nonessential data.

Secure project views make MicroStrategy 7 a business intelligence platform especially suited for external deployment. Because views are specific to users, information confidentiality is maintained. For example, International will deploy MicroStrategy 7



SEVEN REASONS WHY 7 IS UNMATCHED

- 1 Provides scalability to millions of users and terabytes of data.
- 2 Enables the performance required to leverage massive data repositories.
- 3 Increases organization's capability for superior insight through extensive, sophisticated analytics.
- 4 Delivers a platform for rapid application deployment and development.
- 5 Features an intuitive Web-centric interface that is quickly deployable and easy for end users to learn and use.
- 6 Provides user- and data-driven personalization and security.
- Designed for Web application integration.

to member banks who offer its credit card services. Visa International can configure the MicroStrategy architecture to provide each member bank its own personalized view of its data as well as tailor the look and feel of the interface. The banks will have access to reports on their specific programs, but they will not have access to other banks' data.

"This translates into a direct cost savings by freeing up IT resources to

maintain one common project instead of multiple separate ones," said Izenson.

Other features like "page by" and "incremental fetch" also facilitate the user's experience by making reports more manageable. Instead of providing one long run sheet of data, these features allow users to receive manageable pieces of information they can quickly scan and perform further slice and dice analysis on, making it much easier to find what they need when they need it. Consequently, users spend more time using business insight instead of discovering it.

New Platform for the New Economy

pplying that insight to effective business decisions is more important than ever as the e-economy continues to heat up. With competitors only a click away, exceeding customer needs is critical to earning their repeat business, and MicroStrategy 7 delivers the essential analysis capabilities required to know them and the architecture to serve them as effectively as possible.

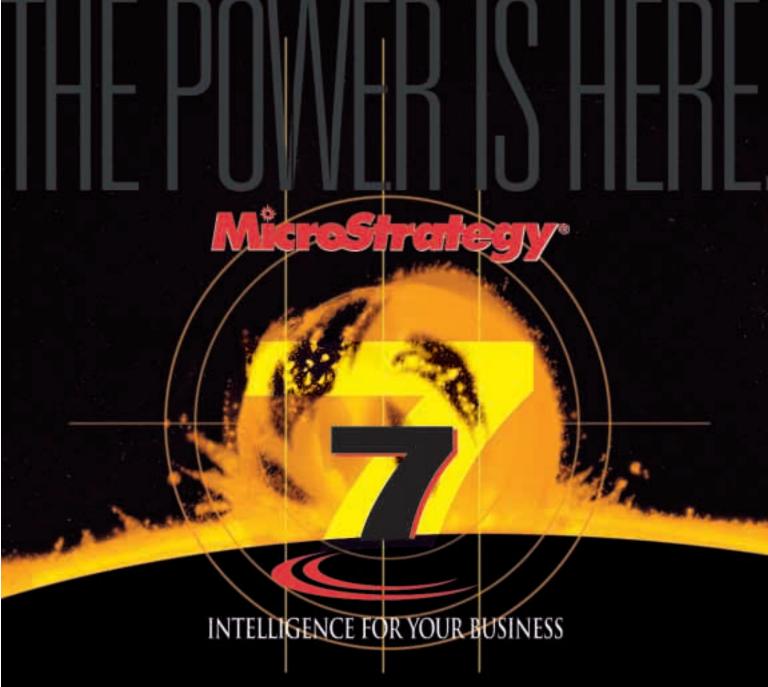
"MicroStrategy 7 launches the next phase of the e-business revolution," said Bansal. "Without sophisticated analytical abilities and an architecture designed to effectively leverage gained insight into stronger customer relationships and more efficient business operations, e-businesses will fold. We are extremely excited about the possibilities we foresee this platform creating for our customers and partners around the world."

Western Digital continued from page 5

analysis functions make the data even more valuable. Western Digital's technical engineers can perform previously impossible analysis on electrical, mechanical, chemical or any other disk drive components without having to transfer data from a retrieved report into another application. Business managers can tap the platform to derive insight into vendor relationships and use it to help assure delivery of quality components. The platform's rich analytical capabilities enable engineers and business managers alike to identify potential issues proactively and take action to correct them before the

affected drives are shipped to customers.

"The MicroStrategy 7 platform goes far beyond anything we've seen or used before," said Durrant. "It truly represents the next generation of business intelligence solutions, and we are excited to make profitable use of its full range of functionality."



MicroStrategy 7 is the next generation platform for Intelligent E-Business.

A high-performance and reliable platform, MicroStrategy 7 provides detailed insight so you can make better, smarter business decisions.

MicroStrategy 7 has the power to serve millions of users and access terabytes of data while supplying the most extensive and in-depth analysis in the industry. Using MicroStrategy 7, companies can ask the critical questions and extract valuable business insight:

- Which suppliers account for the bulk of the most profitable products bought by customers who account for the top 10% of profits? How can we enhance our relationships with those customers and suppliers?
- How many items do I need to order to ensure adequate inventory for a planned promotion based upon response rates of similar customers to similar promotions?
- How effective is my web site in serving my customers' needs? Does their web click stream data indicate that the current site layout encourages transactions?
- What is the correlation between our most profitable customers and our most loyal customers? Can we uncover better practices to retain our most profitable customers?

Intuitive interfaces and sophisticated analytics combine to make MicroStrategy 7 the most advanced business intelligence platform available.

The Power is Here.



Business Performance at Its Best

Best Buy Benefits from MicroStrategy Application



by Christian Munson

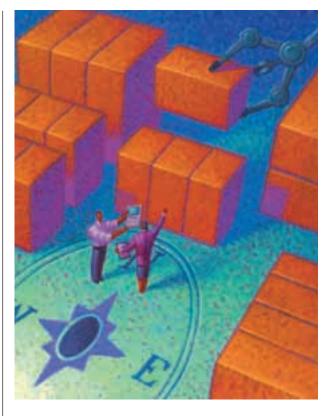
At Best Buy, the nation's leading electronics retailer, merchandise buyers typically start their workdays with coffee, some conversation about the weekend and some intense Web browsing. But they're not surfing Yahoo! or Amazon.com. Buyers point-and-click their browsers right to the company's Business Performance Management (BPM) application, a MicroStrategy-powered tool that has become an essential component of their daily work.

hey can't do their jobs as effectively without it," said Scott Heise, Best Buy's project manager for data warehousing, of the company's legion of more than 200 merchandise buyers. "The BPM yields critical insight that helps our buyers stock store shelves with products that move, keeping our carry-over costs at a minimum and our customers' needs met."

Every time a customer buys a product at one of Best Buy's 358 retail stores across the country, the company collects detailed data about the transaction. It knows the brand of product the customer bought, the vendor it bought the product from, the price it paid for the product and the price the customer paid. Best Buy collects these and countless other product and transaction attributes in an Oracle data warehouse.

With the BPM application, Best Buy gives merchandise buyers, marketing teams and executives desktop access to the collected information. They use it to analyze the information carefully for trends and other business insights that help them make the most effective business decisions possible.

"BPM enables merchandising, marketing and buyer groups to evaluate trends and a broad range of metrics,"



Heise said. "Our vision is that BPM will become the platform on which the entire business makes its decisions."

MicroStrategy Web Delivers Strategic Insight

MicroStrategy Web™ anchors the BPM application. The Intelligent E-Business™ product offers users an array of options for data analysis and exploration. With a few clicks through a customer graphical interface developed with Lancet Software, a MicroStrategy partner, Best Buy's merchandise buyers and other user groups can run predefined reports, create their own queries and download information into Excel spreadsheets for easy offline analysis right from their desktops. By tapping a single source of regularly updated data, the application ensures accuracy

and consistency for all user groups.

"With the BPM, an instantly executive knows how his business unit is performing, and buyers know how the market has responded to their merchandise decisions," said Nancy Nelson, manager of the BPM project at Best Buy. "Whenever identified trends indicate problems, potential users can drill down into the data to get more detailed information, including sales by region, city or even individual store."

Prior to the BPM system, buyers had to sift through paper

reports compiled manually from several disparate data sources. The inefficient process often left specific buyer questions unanswered. Now, buyers can gain virtually instant insight that is improving product selection and vendor relationships.

A buyer responsible for televisions, for example, can use BPM to understand how many Sony TVs he/she should order for northeast stores during the summer season. Looking at historical information and trend forecasts generated from the BPM application, the buyer can order just the right amount of televisions to satisfy customer demands and minimize costs. A marketer can look at the same information to develop successful promotional campaigns.

CUSTOMER SUCCESS BEST BUY

Merchandise buyers can also use the application to identify cross-selling opportunities. With sophisticated market-basket analysis functions, BPM tracks items customers buy together. Knowing that DVD player customers often buy auxiliary cables leads to effective product placement on display floors and to effective salesperson training to steer customers toward specific accessory products. Such analysis leads to increased store revenues, higher customer satisfaction and ultimately greater corporate earnings.

BPM's Bright Future

"The benefits of the MicroStrategy application are a shared pool of accurate information and universal access to it," said Heise. "It is having an enterprise-wide impact, and we think we can continue to "With the BPM, an executive instantly knows how his business unit is performing, and buyers know how the market has responded to their merchandise decisions."

Nancy Nelson, manager of the BPM project at Best Buy

leverage new applications into the BPM's MicroStrategy infrastructure."

Indeed, Best Buy hopes eventually to roll out parts of the BPM application to merchandise vendors so they can work proactively with buyers to assure that store shelves always meet customer product demands. Such an application could increase supply chain efficiency, said Heise, an improvement that would translate directly into greater profitability. The company is also considering the deployment of MicroStrategy BroadcasterTM, an Intelligent E-Business product that integrates seamlessly with the data warehouse to automate the delivery of critical sales and inventory reports through Web, wireless or voice.

"Today at Best Buy, the data ware-house is not a distant IT solution," said Heise. "MicroStrategy has helped make it part of our employees' daily lives, and we expect it to continue yielding the insight required to run our business effectively."

FINDING THE "BEST" SOLUTION

MicroStrategy and Lancet Codevelop Best Buy Application



Three years ago, Lancet Software Development, Inc. began its relationship with MicroStrategy when it recommended a MicroStrategy product to best meet the data warehousing needs of a Zenica Pharmaceuticals subsidiary. Since then, Lancet and MicroStrategy have partnered to help several joint customers, including Premier Healthcare, ProVantage and GE Capital Fleet Services, turn information into businessdriving insight. The two companies recently crossed paths again at Best Buy, where they are working to achieve a more streamlined, consistent approach to handling information.

The concerted project involves a backend analytical system powered by MicroStrategy WebTM, along with a user interface designed by Lancet through which Best Buy employees can access business information. In the past,

employees retrieved information through different applications depending on their job function. Thanks to Lancet's technology, teams within the company can use the product to run different reports without sacrificing consistency. Every screen has the "same look and feel," according to Deb Graven, a consultant for Lancet. "Providing a single portal to corporate information for all users makes the data easier to use and gives users greater confidence in it."

Lancet teams work side by side with Best Buy employees to facilitate production. In addition to creating the custom screen interface in accordance with Best Buy's criteria, Lancet trains the retailer's employees on how to use the software. The team also incorporates feedback when redesigning the interface, to accommodate future needs.

As a result, a knowledge transfer occurs by answering general questions, providing training classes for future Best Buy system administrators and providing specific, targeted training material so

that employees are not overwhelmed by enormous user manuals.

"It's not like, 'We're the consultants. Everybody stand back. Nobody try this yourself because it's too dangerous,'" said Tom Niccum, president of Lancet. "Best Buy is fully participating in the work, which is clearly the best way to transfer knowledge."

Best Buy's success is the result of the combined expertise of two distinct companies coming together to provide the best possible solution for the client. "Clearly MicroStrategy has the industryleading business intelligence. We look at ourselves as adding to the overall solution by having a world-class Web interface that complements that platform," stated Niccum. "Lancet specializes in building a personalized interface on top of the MicroStrategy product suite." Together, as partners, MicroStrategy and Lancet can meet the increasing demands of customers following the trend toward customized Web access to corporate information.

360 Degrees of Service

Permission, the Internet and New Technologies Are Making eCRM a One-to-One Reality

by Gaurav Rewari

he objective of marketing strategies is always the same—attract, satisfy and ultimately win over the customer. Many businesses are seeking out new methods for gaining the intelligence and insight that enable them to cultivate personalized relationships with millions of unique customers. Like any race, the first company to discover a successful

solution wins. The reward is a loyal customer base and an advantage over the competition.

Electronic Customer Relationship Management (eCRM) is the newest contestant in the marketing race. Combining traditional CRM with e-business applications, eCRM is the process of developing and managing individual relationships with indi-

vidual customers. This article explores the transition of CRM to eCRM, and why the path to true one-to-one relationships was elusive for so long. We'll also discuss how

eCRM is the process of developing and managing individual relationships with individual customers



businesses can employ eCRM to leverage the data affiliated with each customer, enabling them to have a more complete understanding of each person than ever before.

This new multi-channel direct marketing engine was turning out to be less like a boom box and more like a violin: give it to a novice and the sound would empty out a hall in minutes, but in the hands of a virtuoso it could be pure magic.

CRM Evolves

Strong vendor offerings exist within the broad CRM categories of sales, service and marketing. So far, however, these solutions have fallen short of bringing eCRM to life. Many reasons can account for this occurrence, the most important of which is that CRM evolved with different vendors carving out their own niches in complete isolation from the others. It was believed that the cost of a fractured view of a customer was manageable, as long as the number of customer touch points stayed limited.

The Internet emerged to redirect the fate of eCRM, and dispelled the notion that organizations could get by with a limited view of the customer. It isn't merely that new channels were made available; rather, it is the fact that the Web is so inexpensive and ubiquitous, the fact that it renders "information like water," that makes it seem like such a perfect vehicle for enabling true eCRM. When you consider that, on average, only one out of every 10 interactions with a customer is a transaction, or, conversely, that nine out of those 10 must be marketing and service related, you begin to appreciate the incredible attraction that a cheap and effective communication medium holds for marketers everywhere.

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Wireless Takes the Throne

Recently, we've been witnessing the worlds of Internet and wireless technologies coming together at a punishing pace. We tend to think of PCs as being pretty commonplace; for a sense

of scale, though, consider that by 2004 some 1.3 billion people are expected to have wireless access to the Web, up from just 5.7 million last year (IDC). Additionally, in places like Scandinavia and Japan, one in two people already owns a cell phone.

Even though wires may have built the Web, wireless technologies will come to

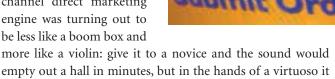
rule it. Wireless access provides one more critical benefit that the wired Web, for all its riches, just did not possess: the customer can be reached wherever he/she is. It became obvious that the reign of bricks-and-mortar was over and customers were soon going to expect and demand sales, marketing and service across a whole new spectrum of touch points, both wired and wireless.

New Medium Rejects Old Style

For the Internet to realize its full potential as the ultimate oneto-one medium for customer contact, companies couldn't treat it like just another channel. They had to revisit the

suitability of the marketing techniques being employed, techniques that might have been successful elsewhere but are ineffective on the Internet. Businesses had to explore brand-new techniques. This new multichannel direct marketing engine was turning out to be less like a boom box and

could be pure magic.



The Web introduced new channels of contact with customers, which rendered existing CRM applications glaringly deficient because they had not planned for a complete view of the customer across all touch points. Additionally, as a result of the low cost of frequent interaction on the Internet, direct marketers embraced the new medium with an approach that yielded returns on promotion no better than traditional direct marketing campaigns. And so, early attempts to create eCRM were ineffective and didn't deliver on the promise of the Internet as the ultimate one-to-one marketing medium.

Opting for a Fresh Approach

Permission marketing, explored in Yahoo! Vice President Seth Godin's recent book of the same name, involves a customer allowing a company to market to him/her things in which

Forrester Research estimates that the average response rate is 18 percent for opt-in e-mail compared with 0.65 percent for banner ads and two percent for traditional direct marketing.

he/she indicates an interest. Also called opt-in marketing, this technique converts most of today's communication with a customer or prospect from "spam" to something of value. Since the customer has willingly participated in the decision to be marketed to, he/she is less likely to view the communication as an intrusion in much the same way that one is not likely to view a monthly bank statement as a nuisance.

This type of pitch stands in sharp contrast to almost all the marketing we see in the world around us. Techniques like print advertising, radio and TV advertising, direct mail, telepromotions and banner ads fall under the category of interruption marketing and, at their very best, average a two percent

response rate. The common premise underlying all these techniques is to find a way to interrupt the customer from what he/she is doing and be acknowledged. As audiences grow, interruption marketers are left with no choice but to scream louder to get noticed, creating a downward spiral of increasing marketing budgets and diminishing campaign returns.

Permission marketing, on the other hand, requires an easy way for customers to dictate their particular choices on what they wish to have mar-

keted to them. It also requires an inexpensive way for a company to communicate frequently with every individual customer. In other words, permission marketing requires something like the Internet.

Permission Pays Off

Early results, as seen with Deutsche Banc Alex. Brown, are already showing that companies adopting permission-based techniques have realized double-digit response rates and triple digit ROIs. Forrester Research estimates that the average response rate is 18 percent for opt-in e-mail compared with 0.65 percent for banner ads and two percent for traditional direct marketing. These numbers validate the theory that permission marketing is the secret to making direct marketing work on the Web.



One in a Million Success

We've discussed how initial CRM efforts were hampered by the lack of a single view of the customer and how the addition of more customer touch points only served to exacerbate the problem caused by lack of a single customer-centric data warehouse. Additionally, we saw how the Internet could be harnessed fully as a scalable one-to-one communication medium only if it were used to market in a completely different way from what had been done in the past. These techniques include things like permission marketing, offer customization and the automation of sales, service and marketing, which have deep implications on the requirements of an eCRM solution.

eCRM can enable companies of all sizes and across all industries to offer one-to-one relationships to customers—the kind of interaction that their grandparents enjoyed but presented to them in contemporary ways at reasonable prices. Businesses today are using MicroStrategy's Intelligent E-Business Platform™ to achieve this one-to-one reality with their customers. The five "engines" essential to one-to-one marketing—customer-centric data warehouse, analytical engine, personalization capabilities, broadcast technology and transaction engine—are embodied in this comprehensive software platform that enable an organization to leverage



the full potential of eCRM. Companies armed with this technology can maximize interactions with cutomers, offering knowledge and trust, insight, advice, convenience and speed to transaction.

Godin, Seth. Permission Marketing: Turning Strangers into Friends, and Friends into Customers. New York: Simon and Schuster, 1999.

Peppers, Don and Martha Rogers, PhD. The One to One Manager: Real-World Lessons in Customer Relationship Management. New York: Doubleday, 1999.

■ Gaurav Rewari has been closely involved in the growth of MicroStrategy's business intelligence products and services in various ascending capacities since 1994. Currently, he is vice president of MicroStrategy Applications, a division of MicroStrategy, Inc., which was formed in January 2000. In this role, Mr. Rewari oversees both the technical and marketing teams which are developing future application offerings, with a focus on next generation eCRM applications that will go on top of MicroStrategy's core platform. He holds B.S., M.S. and E.E. degrees in electrical engineering and computer science from the Massachusetts Institute of Technology.



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Intelligent Retailing: When the Product You Want Finds You

The Age of Getting What You Want, When and How You Want It by Darius A. Baghai

Intelligence



ost people understand how retail works. The right item, size, color and cost converge at the right moment, and a purchase is made. Stores offer us what they think we want, and we consume according to our needs and desires.

Pervasive and intuitive, retail is a \$2 trillion industry in which every consumer plays a role. Essentially, a company brings together a variety of products at one or more locations so that you, the customer, will come and find what you need when you need it. In order for a retailer to make money, however, it must decide on the best products to store on its shelves before you have need to buy them. It has to make sure that it sells enough of those products to pay for the items that don't sell, as well as overhead and any incentives for bringing you back as a regular customer.

As it turns out, most retailers guess accurately enough to make anywhere from five to nine percent net profit margins. This is after going through all the



Insight



Customer

difficulty of buying from thousands of suppliers, shipping through various shippers, distributing to all their stores, and stocking tens or hundreds of thousands of SKUs (stock keep unit, which represents a unique product in a store) on their shelves. Without the slightest effort or intention, those single-digit profit margins can become net loss margins.

Retailers can achieve greater profits by leveraging business intelligence to understand changing consumer behavior. Companies like Best Buy and PETsMART, for example, are incorporating technology into their business models to provide them with the information they need to serve customers effectively and distinguish themselves from the competition.

Retail savvy runs along three basic principles: intelligence, insight and exemplary customer service. Factoring these key points into your business strategies will enable you to distinguish yourself as a leading and reliable retailer in an industry that never lacks competition.

Intelligence: Knowing How Your Business Makes Money

In order to know whether a business has been profitable, the amount of revenues, cost of goods and operating costs must be analyzed in time to make adjustments. Unfortunately, many retailers historically have had slow and distributed informa-

tion systems that didn't afford timely

financial or operational analysis. Secondly, retailers need to know their top-selling products. Old-style accounting procedures using green bar reports or other spreadsheet-based programs

continued on page 18

Retail savvy runs along three basic principles: intelligence, insight and exemplary customer service.

Factoring these key points into your business strategies will enable you to distinguish yourself as a leading and reliable retailer in an industry that never lacks competition.

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INDUSTRY INSIGHT

provided an initial solution. But a problem arises when you begin to ask more sophisticated questions, like which products are selling in which stores during what time of the year in what colors, styles or sizes—and to what types of customers. Without the proper tools, accessing such in-depth information can be tedious and costly.



Business intelligence companies like MicroStrategy have designed software that empowers businesses to confront such mind-bending questions, whose answers are usually hidden in millions of rows of transactions. For example, Best Buy discovered that by analyzing and adjusting product assortment, it was able to increase sales because the optimal combination of products was on the store shelves (full story on page 10). This illustrates how retailers can turn data into actionable information to serve their customers better.

Insight: Distinguish the Products and Customers That Make Up Your Profits

When a retailer has the ability to analyze most of its information, it is able to uncover tremendous insight into its business and its customers. Analyzing 100,000 SKUs to find which sell and which don't over the course of a year is challenging at best, when it entails sifting through hundreds of gigabytes or even terabytes of data. It is only after such a search, however, that you find the insight that leads to marketing or customer care breakthroughs.

Retail superstore PETsMART, for instance, employs MicroStrategy technology to gain the "intuition" needed to make more accurate inventory investments. "MicroStrategy has provided us with the information we need to make daily decisions on such things as invento-

them that you can provide it. As Peppers and Rogers have reinforced in their book *The One to One Manager*, customer care and loyalty increase when retailers market information to their customers that is personalized, relevant and timely. Customers are inundated with mass-produced, irrelevant and dated information and products that confuse them and waste their time, not to mention fill their wastebaskets.

Retailers like Kmart and Blockbuster are currently using MicroStrategy software to analyze their products and customers. They plan on connecting with the customer by delivering personalized information and even enabling their customers to make immediate transactions via Web, wireless and voice. This is where intelligence and insight can enable a business to foster customer loyalty. This tech-

Retailers like Kmart and Blockbuster are currently using MicroStrategy software to analyze their products and customers. They plan on connecting with the customer by delivering personalized information and even enabling their customers to make immediate transactions via Web, wireless and voice.

ry quantity, pricing, assortment and location placement information that is anticipated to contribute positively to improving PETsMART's bottom line," said Patty Madril, PETsMART's divisional inventory manager for imports.

Customer Care: Building Relationships and Establishing Trust

Everyone is talking about Customer Relationship Management (CRM), but oftentimes a few basic facts are overlooked. CRM requires knowing what customers want, when they are most likely to want it, and finally, how to inform nology essentially is allowing the right product to find the customer when the customer needs it most. Not a bad concept, especially when one reflects on how much time was spent trying to find something at the mall the last time you wanted something.

Darius A. Baghai is MicroStrategy's Industry Solutions manager for Retail. In addition to having spent almost two years in MicroStrategy's consulting division, he has also practiced corporate and intellectual property law, and holds a J.D. degree from Pepperdine University and a B.S. in cybernetics from University of California—Los Angeles.



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Consulting Services Helps Customers Get the Most out of Their Applications

marketplace, businesses are rethinking the way they engage their customers and are adopting high tech applications using MicroStrategy's Intelligent E-Business Platform™. But before businesses reap the rewards of valuable insight, greater revenues and stronger customer relationships they need to plan, build and deploy the applications—and consider-

able measures can be involved.

That's where MicroStrategy's consultants can help. A dynamic mix of topranking university graduates and seasoned industry veterans, MicroStrategy's consulting force of more than 500 employees is credited with overcoming some of the industry's most complex business and technology hurdles. Over the company's 10-year history, MicroStrategy's consultants have applied

their skills to help more than 900 customers in numerous industries.

Consulting Services is part of MicroStrategy's Professional Services division, a key corporate department consisting of Consulting and Education Services teams. Customers may call upon Professional Services to help them get started with a software application, for professional instruction or for technical support after deployment. Each facet of Professional Services works to ensure that clients are leveraging the most value from their technology investments.

MicroStrategy consultants, like the applications they create, are required to make the grade—literally. Every consultant is a graduate of a comprehensive six-week "boot camp" training course, deemed the equivalent of a master's level course in ebusiness solutions. "While new employees may enter with particular industry or technical expertise, our technology is evolving so rapidly that it's crucial to have a solid educational system in place," said Sid Banerjee, vice president of Worldwide Services. "Boot camp provides everybody with

understand the customer's business. What is the data that drives the business? What kind of decisions are people going to make with our applications?" explained Banerjee. "Our consultants aren't just working with technology. They're working with people to gain the insight necessary to build a powerful application that produces maximum ROI."

After discovery, each project then proceeds to a strategic planning stage to ensure that the correct resources are being utilized to solve the targeted problems in the required time frame.

"Our consultants aren't just working with technology. They're working with people to gain the insight necessary to build a powerful application that produces maximum ROI."

a firm grounding in MicroStrategy's eCRM, business intelligence and e-business software." Following this rigorous program, graduates proceed into a field-readiness program where they are paired with a mentor to prepare them for work assignments.

With every project, Consulting Services follows the same systematic approach based on an integration methodology known as the Business Solutions Framework: discover, plan, develop and deploy. "We deliver on clients' ideas and give them a few they haven't though of," said District Consulting Manager Donald Maynard.

The first stage of approach involves working closely with an organization to identify its particular challenges. "To understand what to build for a customer, you have to

Consultants begin to construct the technical architecture of an application during the development phase; among the foundational components



are customized reports, broadcast capabilities and acceptance planning.

Finally, to deploy an effective solution, MicroStrategy's methodology emphasizes the need for timely and appropriate knowledge transfer.

continued on page 22

MICROSTRATEGY PARTNERS—ARRIVING AT THE SAME SOLUTION

Strategic partnerships are a business imperative in today's marketplace.
MicroStrategy recognizes the value of high tech alliances and has a team of seasoned consultants and technologists dedicated to fostering these relationships. Channels Consulting, a part of MicroStrategy's Consulting Services, supports partner initiatives by acting as a consistent, single point of contact for all presales and postsales technical support. It also assists partners in developing industry-specific repeatable solutions, applications and methodologies.

Channels Consulting has collected its expertise in a repeatable solutions toolkit. This resource guides engagement teams in the design, development, testing and deployment of a repeatable MicroStrategy solution. Partners can leverage this set of reusable components—methodologies, data models or code—across multiple customers and industries. Channels Consulting is also available to help partners become self-sufficient in deploying these repeatable solutions and applications. The toolkit is composed of:

- · Report requirement definition worksheet
- Vertical-specific data model development template
- · Warehouse optimization check list
- Software configuration and optimization worksheet
- · Packaged baseline reports
- QA check list

If you are a partner who would like to learn more about MicroStrategy repeatable solutions, please call Kiran Dandekar, director of Channels Consulting at (703) 270-2156. ■

Prescription Solutions



Setting up a system that can track \$1.5 billion spent on prescription drugs for 4.5 million patients is no easy task. That's why Prescription Solutions, a leading provider of pharmacy benefits services, called on MicroStrategy's Intelligent E-Business™ experts to make sense of a complex job.

MicroStrategy's Consulting Services brought an easy-to-use tracking system to life with a unique mix of technology skills, on-the-job expertise in the health-care industry and applied innovation. They diagnosed a wide range of business requirements quickly and uncovered hot spots that needed to be addressed in the implementation process.

"This first phase was critical to the project," said Asya Semenovich, district consulting manager at MicroStrategy. "We knew what types of reports users wanted to see and then came up with a comprehensive document that outlined MicroStrategy methodology, project plan, major milestones and risk mitigation."

The team's attention to detail gave Paul Miller, chief financial officer at Prescription Solutions, confidence in its expertise. "MicroStrategy Consulting delivered on its goals, and that earned our trust," stated Miller. "They defined the rules, outlined the deliverables, set the necessary deadlines, and then met them—ahead of schedule and under budget."

MicroStrategy Consulting Services went beyond Prescription Solutions' expectations and made a number of recommendations that were crucial to the project's success. "We helped Prescription Solutions evaluate the pros and cons of various database platforms," added Semenovich. "After Prescription Solutions selected the database hardware, we assisted them with regard to sizing it."

The team also made sure that complex technical issues were handled by the most experienced consultant. "When Prescription Solutions raised a security customization issue," added Semenovich, "we tapped MicroStrategy's Solution Factory and sent in our most experienced consultant to handle the task."

Working with Prescription Solutions' personnel, MicroStrategy's consultants participated in the project from initial



As projects unfold in stages, MicroStrategy's Education Services ensures that end users are using the finished application confidently.

Recognizing that organizations are investing more in technology to achieve business success, Consulting Services is

"The main thing customers should understand is that at the end of the day, MicroStrategy is purely vested in the customer being successful."

analysis, through planning and development, to implementation. "Because the same team stayed together throughout the entire process, we didn't encounter any turnover problems like we did with a previous IT project," continued Miller. "Their reliability was integral in turning this project around and making it a strategic advantage for us." ■

diversifying its offerings to include more specialized services to customers. Strategic Consulting, for example, helps organizations assess opportunities within the new Internet economy. "If I'm a bricks and mortar bank that would like to transition to an online bank, I need to decide how to differentiate myself," explained Eric Driscoll, vice president of Americas Consulting. "The strategy team brings a fresh perspective of what's happening in the industry and pinpoints how Intelligent E-BusinessTM can enable the

bank to make a successful transition to the Internet." In addition, consultants often coordinate with MicroStrategy's strategic partners to create enhanced product offerings.

Consulting Services' efforts have resulted in some of the most innovative and technically sophisticated applications ever built. Prescription Solutions, a leading provider of pharmacy benefits services, believes that MicroStrategy's consultants played a key role in deploying a successful system. Consultants have also helped the Ohio Department of Education access aggregated data that can provide teachers,



administrators and parents with valuable insight on district performances to see that every school is meeting expectations (see case studies for complete stories).

"The main thing customers should understand is that at the end of the day, MicroStrategy is purely vested in the customer being successful," stated Driscoll. "There's a high level of accountability in our service. Consultants can leverage the insight, expertise and best practices of the entire MicroStrategy organization and bring these talents to bear on the service we provide to the customer."

Whether the job is building an eCRM application on top of a multiple-terabyte customer-centric data warehouse, or deploying MicroStrategy Broadcaster™ to deliver critical information via Web, wireless and voice, MicroStrategy's consultants have demonstrated their ability to execute an action plan for e-business success that outscores the competition. ■

Ohio Department of Education

MicroStrategy's
Intelligent
E-Business™ solutions have also
received high scores
in the halls of learning.
The Ohio Department of

Education (ODE) has given parents, teachers, administrators, legislators and journalists one-click access to primary and secondary school performance data. Powered by MicroStrategy's Intelligent E-Business technology, the Interactive Local Report Card (iLRC) application pulls together school district performance data and presents it in a simple manner so anyone can view reports and information online at anytime.

MicroStrategy's Consulting Services was instrumental in building this user-friendly application. Based on their extensive knowledge of MicroStrategy's Intelligent E-Business Platform™ and the department's needs, MicroStrategy consultants provided expert assistance in translating complex technical and user requirements into a world-class application. This helped the department set the right IT infrastructure in place to communicate school and district performance to Ohio's citizens.

"We wanted to develop a flexible e-business solution for our information reporting needs and sought out MicroStrategy as a strategic business partner," said Rob Luikart, the ODE's chief information officer. "Improving how we provide information to the public is one way that Ohio Department of Education is making Ohio's one of the best educational systems in the nation."

MicroStrategy consultants wasted no time developing a wide range of reports using MicroStrategy Agent™, a business intelligence tool that brings integrated query, reporting and analysis functions

to end users. They relied on MicroStrategy Web™, MicroStrategy's user-friendly information analysis and reporting tool, to display the reports on the Internet.

"After performing advanced Web programming and creating HTML reports, we made sure the information could be downloaded into Microsoft Excel or Access, and Lotus 1-2-3," said Michael Suarez, project manager at MicroStrategy Incorporated. "With employees at the Ohio Department of Education beta-testing the system and providing constructive feedback, MicroStrategy consultants were able to improve running time, make formatting adjustments and tweak the system in general."

Their efforts paid off. Today anyone can use the information pulled up from the MicroStrategy-built iLRC application to answer questions regarding educational issues and use that information to take action. Parents can view the percentage of Ohio students who passed proficiency tests to see if their particular district meets the minimum state performance standards. Administrators can use the system to identify trends and to head off potential problems and formulate a long-term strategy—a strategy that everyone can win with.

"MicroStrategy provided a hard-working, dedicated team to meet our project requirements," said Luikart. "They were able to effectively develop a system to meet our needs for quick and easy access to educational information. We continue to see benefits for our citizens from our partnership with MicroStrategy."

23



Finance





Goes One-to-One With Customers

Leading Media Company Delivers Personalized News via Web, E-Mail and Wireless Devices

o how does one of the largest media companies in the United States extend its reach to even greater lengths? Ask the folks at Belo and they'll tell you all roads lead to Strategy.com™. Belo is one of the most successful media companies in the nation, owning and operating a diversified group of television broadcasting, newspaper publishing, cable news and interactive

media assets in 22 markets throughout the country. In fact, Belo companies reach an amazing 14 percent of the United States population with world-class news and information.

By joining the Strategy.com

Personal Intelligence NetworkTM, Belo now can automatically send its customers the information they need instead of requiring them to search for it themselves. Information is delivered via Web, wireless and voice so that users get the information they want, when, where and how they want it.

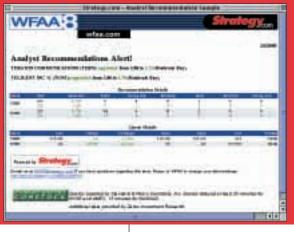
Dallasnews.com, the Web site for *The Dallas Morning News*, and wfaa.com, an ABC affiliate in Dallas/Forth Worth, are the first two Belo-owned and operated entities to offer Strategy.com personal intelligence services to consumers. The cobranded service, called MyFinance, enables users to sign up to receive up-to-

the-minute stock alerts and portfolio updates. In addition, 21 other Belo companies are or will be rolling out finance services on their sites.

"Our viewers depend on us to provide them with the news and information they need, when they need it," said Johna Baker, site manager of wfaa.com. "Strategy.com is the perfect delivery mechanism to reach our viewing audience

"Strategy.com is the perfect delivery mechanism to reach our viewing audience when important news and events occur."

Johna Baker, site manager, wfaa.com.



when important news and events occur."

Currently, these Belo companies are offering cobranded Strategy.com Weather™ services on their sites, including severe weather alerts, beach and boating reports and weekend weather updates. Eventually, Belo will incorporate its world-class news feeds into the Network so that its millions of customers will be able to sign up for a variety of local news services, including high school football updates and human interest stories.

After launching the Strategy.com Network with a bang, both groups now have plans to aggressively market cobranded services to consumers. Belo has already run several full-page color ads in the business section of *The Dallas Morning News* and will continue to promote the Strategy.com Network over the course of a 75-day ad campaign. Other marketing activities include banner advertisements, e-mails to readers and press activities.

"Dallasnews.com and wfaa.com have achieved much success by aggressively marketing the Strategy.com Network to their respective audiences," said Nick Weir, president and chief operating

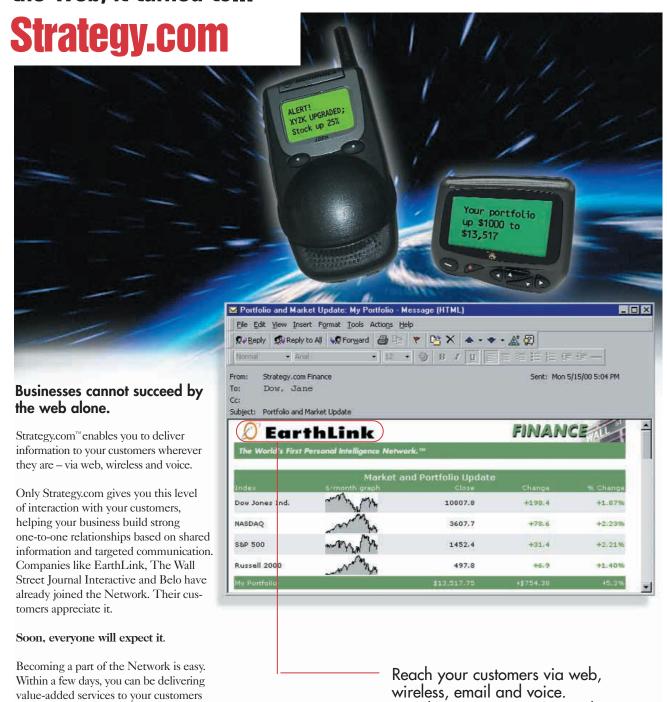
officer of Strategy.com. "Now, instead of broadcasting general news and information a few times a day, each of these companies has the power to deliver highly personalized information anytime, day or night."

Wfaa.com has been promoting the Network through the use of live endorse-

ments. Local anchors have been mentioning the Strategy.com partnership during newscasts to generate excitement among its viewers. Additionally, a commercial has been created featuring wfaa.com's partnership with Strategy.com and the benefits that go along with it.

"The ability to deliver targeted and personalized information to our readers is key to our success," said Gerry Barker, site manager of Dallasnews.com. "Strategy.com is a great tool that provides that functionality."

When **EarthLink** wanted to reach its customers beyond the web, it turned to...





everyday.

For more information about joining the Strategy.com Network, contact us at www.strategy.com or call 877-674-7253.

Join the Strategy.com Network

Just What the Doctor Ordered

Ingenix Enjoys Healthy Benefits With Intelligent E-Business by Christian Munson

Full-time employees expect comprehensive health benefits at affordable costs, and it is up to benefits managers to find the happy medium between "quality" and "cost-effective."

any of them turn to the Employer Group division of Ingenix for help. For more than 18 years, Ingenix, a division of UnitedHealth Group formerly known as CHS, has helped the benefits administration departments of companies like Honeywell, 3M and Procter & Gamble monitor, evaluate and make changes to their benefits programs where necessary.

"What we'll see with
MicroStrategy Web
is a lot more
flexibility in
personalizing and
customizing the way our
customers
interact with us."

Bob Jahreis, vice president of Technology and Infrastructure

Ingenix does this by building secure databases for each of its customers where it stores data on medical, behavioral health and prescription drug claims. It also keeps information about productivity, disability, workers' compensation, family leave and other health benefits its



customers administer across their enterprises.

"The healthcare industry is changing fast, and our customers need to change with it to provide the best benefits possible," said Bob Jahreis, vice president of Technology and Infrastructure at Ingenix. "They need fast access to current data about their programs in order to run high-quality and efficient programs."

Increasing Access and Speed to Information

Ingenix selected MicroStrategy to replace its homegrown legacy analysis and reporting system with a customizable, scalable and expandable Intelligent E-BusinessTM solution. Ingenix expects MicroStrategy's Intelligent E-Business PlatformTM to improve the way it serves customers and to create a competitive edge that attracts new ones.

Anchoring the new solution is MicroStrategy Web™, an Intelligent E-Business product that transforms a desktop computer into a data analysis and enterprise-reporting interface via the World Wide Web. With MicroStrategy

Web, Ingenix customers will be able to access their health benefits information stored in Ingenix databases at any time. With the click of a mouse, they will run reports that compare monthly prescription costs, track utilization of particular benefit plans or project future expenditures. MicroStrategy Web also will enable users to set their own criteria for specialized reports.

MicroStrategy Web retrieves reports and displays them in a format that customers can easily download into Excel or other spreadsheet programs for easy offline analysis, and information can be depicted in either chart or graph form.

The anytime access will keep the employer customers of Ingenix up to speed with the performance of their health benefits administration and enable them to make timely decisions to optimize quality and maximize efficiency. It will also eliminate the need for customers to install specific software on their machines.

"What we'll see with MicroStrategy Web is a lot more flexibility in personalizing and customizing the way our customers interact with us," Jahreis said. "Instead of having to weed through lots of information to try to find opportunities to reduce costs, our customers will get the answers they need when they need them to immediately identify and execute cost-saving opportunities."

MicroStrategy Broadcaster Proactively Identifies Cost-Saving Opportunities

Faster, better access to information via the Web, however, is only part of the solution. Ingenix intends to enhance its Intelligent E-Business offering with MicroStrategy BroadcasterTM, which will turn its databases into proactive lookouts on "round-the-clock" watch for money-saving possibilities for its customers.

MicroStrategy Broadcaster constantly monitors changes in databases. When it recognizes predefined conditions, like a certain percentage decrease in the use of a particular benefits plan, MicroStrategy

CUSTOMER SUCCESS INGENIX

Broadcaster automatically generates and delivers an alert to a specified user or users. Alerts can be sent via Web, wireless or voice, and will give benefits managers a good idea of where in their benefits programs to look for cost-cutting opportunities.

"Broadcaster will give us a nice way to deliver information to the users and give them a starting point from which to explore cost-saving potential," said Jahreis. "Our customers are benefits managers dealing with healthcare issues, and the more we can give them guidance in terms of what to look at, the better. Broadcaster will hopefully enable us to do that to an unprecedented degree and attract new customers to our services."

A Strategic Partnership, Not a Vendor Relationship

Ingenix customers will not be the only beneficiaries of MicroStrategy's Intelligent E-Business technology. The company will deploy an internal solution to manage data quality efforts better, as well as to test new services for customers. The application should enable the company to be more responsive to customer needs, as well as to cut costs by managing data more efficiently.

But overhaul-

ing 18 years of IT infrastructure with state-of-the-art Intelligent E-Business technology is not an easy undertaking. To help make the transition as smooth as possible, a team of five MicroStrategy consultants is working diligently on the project to make sure the system is tested and up and running on time.

MicroStrategy Consulting Services was founded to facilitate the development and deployment of Intelligent E-Business

"Our customers will get the answers they need when they need them to immediately identify and execute cost-saving opportunities."

solutions. The team has more than a decade of experience helping clients construct efficient data warehouses and the most sophisticated data analysis and enterprise reporting tools in the industry.

"MicroStrategy has dispatched a great team of professionals able to answer tough questions quickly," said Jahreis.

"This has really given people here confidence that this project will not just be a vendor relationship, but more of a strategic partnership."

For the Employer Group Ingenix, the alliance with MicroStrategy promises to yield even stronger relationships with its customers by ultimately helping them reduce their health benefits administration costs while running quality programs.

MARK YOUR CALENDAR

July

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NCDM Las Vegas, Nev.
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www.ncdm planner.com

August 28-31

AFITC Exhibit, Montgomery,

Maxwell Air Force Base Booth: TBD

August 30-31

Customer Relationship
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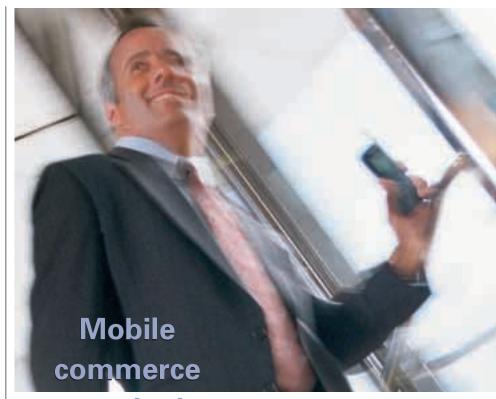
MicroStrategy Launches Mobile Commerce Platform

by Leena Mukhey

the way we conduct business. With a point and click, we can schedule shipments, transfer funds and even surf the Net for the most economical vendor. From corporate giants to mom-and-pop establishments, we're all able to save time, money and resources. Now, e-commerce has gone mobile and delivers the ability to interact with customers, suppliers and remote workers wherever they are via Web, wireless and voice—and it has profound implications force the future of e-business.

Simply stated, mobile commerce is furthering the business evolution from bricks and mortar, to clicks and mortar, to a device-independent storefront. A retailer can accept or reject manufacturer bids from her WAP-enabled phone while she travels between store locations, just as a consumer can order the latest bestseller from a pager alert while he's at the beach on vacation. With MicroStrategy's Intelligent E-Business $Platform^{TM}$ enhanced for mobile commerce, business no longer stops once the shop's doors are closed or the e-tailers have logged off of their desktops; individuals can conduct business whenever, however and most importantly, wherever they want to using voice, pager-based and Web-enabled wireless technologies.

MicroStrategy introduces a new set of functionality with MicroStrategy BroadcasterTM, MicroStrategy InfoCenterTM and MicroStrategy TelecasterTM that will enable an out-of-the-box Mobile Commerce Platform. It extends the analytical, broadcasting and personalization



extends the idea of an e-commerce Web site into a device-independent storefront

technologies of the MicroStrategy Intelligent E-Business Platform to deliver pertinent information at the right time and place, via the preferred device. It will also allow transaction capabilities so that organizations can build closed-loop customer relationships via Web, wireless and voice.

Want to know how it works? Consider a music retailer that invites consumers to subscribe online to product offerings and information services, as well as indicate personal preferences. As a result, a pop music lover might receive a voice message and sound clip sent from the retailer, promoting the latest chart-top-

MICROSTRATEGY'S MOBILE COMMERCE PLATFORM

ping album. The customer could then opt to purchase the new release by pressing "1", and specify whether he/she would like to pick up the CD at a MicroStrategy's Mobile Commerce Platform, however, is able to leverage existing and emerging networks and







nearby store or have it delivered to his/her home address.

Why is this mobile commerce strategy so revolutionary? Because the Mobile Commerce Platform accommodates many possible technology adop-

As organizations move aggressively into the mobile commerce space, the ability to disseminate personalized content across

Web, wireless and voice becomes a key differentiator.

tion scenarios. Before, as new wireless technologies matured and gained acceptance, it appeared that no integration paths existed that were capable of linking the various protocols and devices (i.e., the Palm VII or the short message service in Europe). Consequently, these technologies remained in isolation, incapable of interacting with each other. Businesses were unsure whether they should build an application that supported existing technologies that may be superseded in a matter of months or support state-of-the-art wireless technologies that have not yet proved themselves to be much more than the latest executive gadget.

devices, and also supports the seamless conversion from one media to the next.

Its versatility enables it not only to

Its versatility enables it not only to communicate with numerous devices, but also to acknowledge the type of device to which it's sending information and to act accordingly. As organizations move aggressively into the mobile commerce space, the ability to disseminate personalized content across Web, wireless and voice becomes a key differentiator. The MicroStrategy platform offers consistency, flexibility and rapid time to market for businesses that want to com-



bine dynamic voicegenerated telephony with newer Wireless Internet technologies, or create a wireless portal from the same content and functionality as its Web site. More important than ever, context is user spe-

cific and content is deeply personalized so that individuals receive, interact and transact with information in a way that is perfectly suitable to them.

MicroStrategy Mobile Commerce Platform Features

Media Independence

- Transparency between data and voice communication
- · Interaction through any communication channel
- · Content generated for optimal consumption via any device

Maximized Reach

- Introduce the capacity to interact and transact with consumers for 100 percent of the time that is desirable
- · Accelerate the speed to transaction with solid relationship building

Personalized Touch

- Near real-time personalization provides deep, rich analysis to speed real-time interactions
- Combines permissioned data with transaction history
- · Avoids pitfalls of "bucketing" customers

Actionable Information

- Wireless Internet graduates from information delivery stage to mobile commerce
- Allows customers to interact and securely transact
- Timeliness and relevance of information encourage transactions
- Transactions provide "write-back" to build more complete customer profiles

ANALYST REPORT

Enabling an Information Culture

Analyst John McKean Discusses the Principles of CRM



John McKean, executive director of the Center for Information Based Competition and author of the international best-seller Information Masters—Secrets of the Customer Race, has devoted 20 years to researching the relationship between information and customer-focused business. Here, he tells MicroStrategy Magazine exactly what steps can lead to success—or failure—in Customer Relationship Management.

MicroStrategy Magazine: In your book, you stated that only five percent of the largest companies in the world who attempted Customer Relationship Management (CRM) actually achieved the full potential of their initiative. Why was the result so low?

John McKean: My research has shown that most firms are not balancing their investments between the technological and nontechnological enablers of CRM. These enablers fall into seven areas which together determine the success and failure of most CRM initiatives. They are as follows: people, processes, organizational structure, culture, information, leadership and technology. These CRM enablers need to be part of an orchestrated investment for true customer-focused competencies.

MM: Are all of these principles in equilibrium, or is one more important than another for a firm to invest in?

JM: Technology, as a determinant, is a smaller but one of the most important pieces. Technology doesn't create greatness in a CRM/eCRM environment. Instead, it enables greatness, or rather determines the degree of greatness, much like a high bar on a high jump. The better technology you have, the higher degree of CRM success you can achieve, but you will never achieve that level of success unless you balance your investments.

MM: In the past, you've talked about "fatal assumptions" that companies make in terms of their approach. Can you expand on that idea?

JM: A fatal assumption is made when a company thinks it has the underlying information competency to support an increasingly sophisticated customer relationship. In the old economy, 10 percent of business success was determined by its ability to apply its customer information. But in the new economy, 90 percent of what determines a function's customer relationship success is its customer information competency. So, any organization that exists in any part of a firm is 90 percent dependent on information. That is a cultural shift that people are struggling with in even the most sophisticated firms.

MM: Can you elaborate on why it's difficult to make that shift?

JM: It's difficult because information is still not viewed as the essence of what a firm does. I've talked about the concept of a firm's "information" culture. The first stage of evolution is an information culture that processes data to keep the organization moving forward. The next stage is creating value from the information for both the customers and the shareholders. The third stage occurs when the firm actually realizes that its business is the information business. In this phase, almost everything a firm does

focuses on how to better utilize its information, with the end goal of driving customer and shareholder value simultaneously.

MM: How fast do you see companies adopting that culture today?

JM: Companies are moving fairly well, although I still see technology being underutilized. Firms may put in an extremely powerful analytical engine, database or data warehouse, yet they won't spend the time to give employees the skills needed to use this powerful new system. Or, they are implementing powerful technology, but they don't have the leadership to drive the culture forward to actually utilize the technology. I see good progress, but I also see a bit of a lopsided investment approach. Not that organizations should spend less on technology—they should probably spend more—but they must be aware that there has to be some kind of balance between the technological and nontechnological elements of information competency to receive the most value out of their technology investments.

MM: What types of technology do you see as the most critical to eCRM?

JM: Data warehousing, data mining and data analysis are the most critical. Such technology assists you in understanding your customers and their profitability. One of the most important and often missed issues is that anything a firm does must create perceived customer value. You need the information processes and information competencies to deliver this value with every step of your customer interaction. The businesses that have not mastered how their customer information is best used to deliver customer value, will be mastered by those who have.



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