

Redefining the image of business leadership.



Companies frequently solicit customer communication through e-mail or Web forms without being prepared for the volume of messages they receive.

receive isn't even specific to the inquiry they made. Or they hear back two or three weeks later when the answer isn't relevant anymore."

With offices in Belfast, London and Boston, IBM Business Partner Amacis, Inc. started up in 1999 to help companies route and respond to electronic communications as accurately, quickly and comprehensively as possible.

Amacis realized it needed to incorporate a robust categorization engine—a core component that could identify the contents of digital documents. After thoroughly evaluating products on the market and considering the idea of building its own categorization engine, Amacis chose IBM Text Analyzer Business Component, part of the WebSphere® Business Components family of software products. WebSphere Business Components support open standards-based technology, such as Java™ and XML, which helps developers create flexible applications that enable smooth responses to business changes, improved productivity and reduced maintenance and support costs. WebSphere Business Components provide reusable, pre-tested sets of application content that work together and can be tailored to build unique e-business solutions.

Hille explains, "We selected Text Analyzer because of its scalability, speed and accuracy, and because it is backed by IBM research. Also the double-byte character sets available in Text Analyzer provide language capabilities in Japanese, Korean and Chinese—critical languages for us since we intend to focus on global clients." And Amacis liked the fact that Text Analyzer is based on Java technology. "We are a 100 percent Java-based product and believe in that as a standard, largely because of the portability that comes with that architecture," says Hille.

The Amacis solution, which is called Visibility, helps companies answer customers promptly and appropriately with responses that take into account the customer's request, utilizing relevant data from back-end systems.

Amacis is projecting growth of more than 300 percent over the next three years and has already announced customer wins for its cross-industry application within the banking, insurance, telecommunications and utilities industries. "We are positioned as the thought leader in the marketplace because of our advanced capabilities, many of

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*— John Rendle, Internet Services Manager,
HSBC Bank Plc*

which are enabled by Text Analyzer,” says Hille. Comments Peter Lawless, IBM EMEA sales manager, CRM software, “By combining IBM Text Analyzer with Amacis Visibility, our customers can now automate in excess of 80 percent of incoming mails, through a combination of artificial intelligence rules and innovative routing technology.”

Intelligent categorization engine is easy to train

When a bank receives an e-mail in Spanish requesting an account balance, the Text Analyzer categorization component recognizes that the customer is both communicating in Spanish and requesting information about a bank balance. Visibility then compares the result of the categorization with the skill sets of the bank’s internal representatives and forwards the request accordingly. For instance, the solution might retrieve the customer’s last ten transactions from legacy systems and present the original request and a recommended response to a Spanish-speaking customer service representative who can confirm it, alter it or escalate it to a manager.

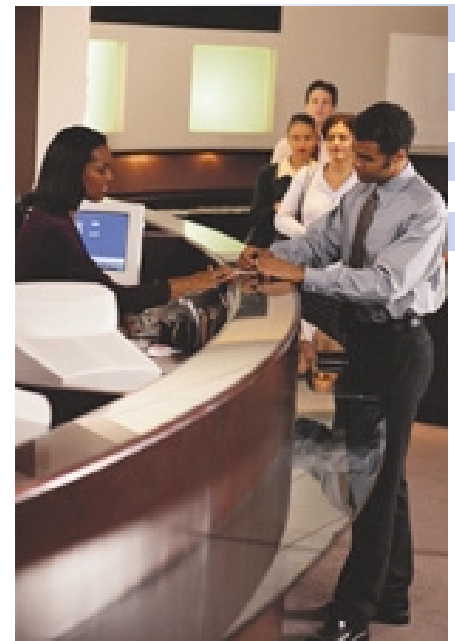
Text Analyzer includes a training unit which develops its own business rules by processing a fixed number of characteristic documents for each category of content. Text Analyzer further fine-tunes itself as it is running with pre-categorized and live documents, and if the results are not satisfactory, the business experts can alter the rules manually using their own intuition and knowledge of their business operations. In accuracy tests using the industry standard Reuters-21578 collection of documents, Text Analyzer ranks highest of all commercially available text-categorization products.

Reducing implementation time

The self-training capability of Text Analyzer and the ability of domain experts to interact with the training unit on an intuitive basis differentiate Text Analyzer from competing products, which are statistically based. The self-training feature reduces implementation time almost 40 percent, compared with software that requires manual set-up, and the fine-tuning feature saves the cost of additional programming, which sometimes can amount to thousands of dollars. Says Hille, “The ability to use artificial intelligence to aid in the initial implementation is a powerful feature that makes Text Analyzer unique.”

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– Erik Hille



Amacis and Text Analyzer helped HSBC Bank Plc respond quickly to customer concerns when the bank moved from dial-up access to Internet banking.

Text Analyzer hands off its categorization results to an Amacis-built distribution service, one of the 18 components built around Text Analyzer, for forwarding to the correct department and returning a correct response. The distribution service uses MQSeries to pass messages back and forth between legacy back-end applications to retrieve the business data relevant to the inquiry. Amacis Visibility works with IBM DB2 Universal Database or Oracle as data management solutions and can run on one server or on multiple servers in a distributed, global environment.

HSBC will handle hundreds of thousands of inquiries monthly

Amacis has begun implementing the Visibility solution at London-based HSBC Bank Plc, which wanted to solicit open-ended e-mail feedback from its customers and determine whether categorization could help it communicate with customers effectively. "In the end it came down to technology," comments John Rendle, Internet services manager at HSBC. "The Amacis solution, including IBM Text Analyzer, was truly scalable and a good fit for our architecture." Even in a non-structured environment, in which the bank was not able to predict what categories of content it would receive, Text Analyzer was able to categorize more than 40 percent of documents and suggest appropriate responses.

In the next phase, as HSBC opens its e-channels to more structured communications based on its new Internet banking facility, the banking firm expects that Amacis Visibility with Text Analyzer will be able to correctly categorize 80 percent of its incoming e-mails and Web-based forms. "We now know that we will be able to handle hundreds of thousands of e-mails per month with a staff of approximately 35 people. In other words, Amacis and Text Analyzer make it feasible for us to open up a customer communication channel for all forms of retail banking," says Rendle.

IBM drives credibility in the marketplace

Amacis believes that its relationship with IBM and the credibility that IBM brings are crucial to its marketing efforts. As Hille remarks, "The IBM focus on research is a critical factor in marketing this type of product. When we say that Amacis Visibility successfully handles one million contacts per day, we know we have credibility because IBM research is behind us."

Another important factor for Amacis is the direction IBM is taking with the WebSphere Business Components family of software products. Hille comments, "We like the idea of components that work with each other or with other companies' products to help us create flexible applications and enable companies to maximize e-business opportunities. We think this initiative will support our efforts to enhance our product and create innovative new CIM solutions."

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