

Capitalizing on Microsoft Technology

**MortgageFlex
Systems, Jacksonville,
Florida, is one of a
handful of mortgage
technology companies
that have won special
recognition as
Microsoft Gold
Certified Partners.**

BY
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When Bill Gates and Paul Allen co-founded Redmond, Washington-based Microsoft® Corporation back in 1975, it's not likely they could have envisioned the business monument the company would be today—33 years later. ■ Controlling 80 percent of the entire personal computer (PC) software industry, offering hundreds of products to the market and called home by more than 91,000 employees worldwide, Microsoft is one of the largest companies in the world. Its impact can be felt around the globe in nearly every sector that relies upon computing products and services. ■ The mortgage market is no exception, although beyond the basic business services supported by Microsoft products, the company's presence has been somewhat more limited than in other industries. Technology in our industry previously tended to take the form of in-house systems—either homegrown or deeply customized—that would cloak an individual firm's proprietary practices. ■ Such a restrictive model may have worked when mortgage revenue was measured in trillions of dollars, when operating practices were largely obscure and when loan applications flowed in almost faster than they could be processed. But today the landscape has changed; government lending is a growth area, profits are slim, uncertainty permeates the industry and speculative research

and development (R&D) is as popular as a stated-income, pay-option adjustable-rate mortgage (ARM). As a result, everyone is looking for the most value for his or her dollar.

Those are just the right conditions for a platform like the .NET™ technology offered by Microsoft. This .NET technology and component-based scalable logical architecture (CSLA) offer lenders a multitude of advantages they've never had before, because CSLA—a software framework—is designed to provide a standardized way to create objects and business entities using business objects.

In object-oriented programming (OOP), each object or entity has the capability to receive messages and then process and send them to other objects. It is based on a cohesive, interactive premise wherein data form a collection of cooperating objects working together. The traditional approach in applications consists of a group of independent tasks resulting in multiple sub-routines. OOP, in effect, operates somewhat like a human organization: One group (object) develops business requirements and then passes those requirements to the business analysts (another object) who develop specifications for achieving those objectives. In turn, the work item will flow through programming, test, documentation and release management.

Taking advantage of Web services

With the arrival of Microsoft .NET, CSLA was rewritten to take advantage of the Web services and the fully object-oriented language it offers. It is another method of integrating computer technology into business functions to create a more streamlined and efficient product.

In today's tougher market, mortgage lenders are looking for vendor support and turnkey functionality, so those vendors that provide good service and thorough functionality will best accommodate their customer base. It is critical to automate decisioning, provide real-time pricing and products to loan officers, and have credit underwriting technology embedded in a loan origination system (LOS).

The technological enhancements of MortgageFlex System Inc.'s products have been recognized by one of our customers—Jacksonville, Florida-based EverBank Financial Corporation. Jan Wurster, EverBank's senior vice president, product technology, notes that, "In a slow market, vendors try to ride it out rather than moving forward."

Wurster says, "To do a rewrite and open up an application to enable more flexibility is a huge strategic investment, especially in this day and time. The broader, more open base—.NET—by its very nature is considered an open technology in that it allows customers to easily extend the products through their own efforts using industry-standard development tools. .NET is the right direction for this market, and has been needed for a while." EverBank will be able to develop its own functions and then add them to the menu in MortgageFlex's LoanQuest™ lending platform. It will blend in and not appear to be externally developed or deployed.

MortgageFlex has been watching the .NET evolution for

several years in preparation for a significant product conversion and rollout in 2008. Most of our LoanQuest lending platform—including our business-to-business (B2B) product, WebRegistration, and our WebConsumer and Servicing products—were originally developed using .NET technology. But our loan origination system, the Residential Lending System, had yet to be converted into .NET architecture.

When Microsoft released its .NET 2.0 framework a while back, we decided the technology had stabilized enough to begin the transition and we are now in the final stages of the conversion to v3.5.

The Residential Lending System offers lenders a combination of Microsoft Workflow Foundation, service-oriented architecture (SOA) and a business rules engine (BRE) to deliver a level of automation that is only just emerging in the lending market. This latest version also features a re-engineered database and an implementation of the Microsoft workflow engine that is more event-driven and reflects a task-specific workflow. While a rule within the business rules management system (BRMS) decides what to do, the integration of workflow facilitates the means to achieve the process logic.

Workflow is not a procedural process, but an event-driven, cause-and-effect-type approach: An event occurs and the system reacts to it. The event could be the entry of data on a screen, the receipt of a third-party interface response; even the outcome of a workflow activity can trigger another workflow event. It allows for a completely new level of automation. Additionally, because this is a standard Microsoft product, there will be thousands of independent developers creating tools that will work with Workflow Foundation, significantly expanding the capability of LoanQuest .NET.

Adding on to products directly

When deciding upon incorporating a BRE into LoanQuest .NET, MortgageFlex researched a number of vendors before selecting InRule®, a product of Chicago-based InRule Technology Inc., which gives our customers the convenience and capability of adding on to their loan products directly. InRule contains all the necessary elements to provide decisionmakers with the flexible applications that can be altered to reflect changing business requirements. Our clients will have total control over the rules and logic of their particular product suite, allowing both small and large companies to enjoy the countercyclical benefits available during lean origination periods. InRule Technology encourages users to start "thinking in rules" to better service their business and make products more adaptable for their clients.

Toward that end, we regularly ask our customers (and ourselves) how people actually use an LOS and how new technology ought to work in the real world. We have used those real-life answers to redesign the LOS architecture without losing any system functionality.

One of the features that our customers are very enthusiastic about is the new workflow capabilities, and they have indicated

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that they'll make good use of the intelligent automation it provides. In the past, lenders had to buy a system and then incorporate workflow. We elected to design a fully integrated system with workflow as a basis—not an afterthought. We chose to use the Microsoft Workflow Foundation so other applications—such as accounting and customer service, built using the same technology—can connect easily.

We've been impressed with Microsoft technology for some time, and each year, leaders of our company attend the Microsoft-sponsored Financial Systems Developers Conference to see what the best Seattle minds are working on that might have an application in the mortgage world.

At a meeting this past winter in New York, we spent time with Brian Jackson, Microsoft's technology strategist for banking, worldwide financial services, who was intrigued by the fact that we were the only mortgage LOS vendor in attendance at the show.

Maximizing development efforts

Microsoft has an active interest in spreading the word about what its products are doing for the financial industry and vertical marketing, so we gave Jackson an extended review of our LoanQuest products and discussed how we are capitalizing on Microsoft's years of development efforts. We have integrated Microsoft Office® functionality within LoanQuest products to maximize productivity and increase efficiencies. Custom letters, spreadsheet import and export, Outlook® calendar management—all are available without leaving LoanQuest.

Many LOS vendors already use bits and pieces—primarily Microsoft Word® and e-mail. We will be expanding to use Outlook, Excel® and other products. Outlook integration is particularly key in that it brings a level of personalization to the product; we'll deliver messages to individuals rather than just allowing the user to see the message.

The .NET format extends to our servicing side as well—an area more crucial to an industry revival than ever because of the massive number of defaults and foreclosures occurring. Attempts to forestall evictions and create workout remedies require options and agility in the servicing relationship with borrowers. Those requirements drove us to put ease-of-integration and Web capabilities at the center of this component's functionality. (In fact, the use of .NET technology in our LoanQuest Servicing system earned recognition from *Mortgage Technology* magazine last year, which named us a finalist in the competition for products that helped solve an industry problem.)

Other technical advantages for lenders include:

- n-tier architecture, utilizing services that add value to the overall solution (n-tier allows for greater scalability and thus greater performance for large organizations);

- Flexibility at the user interface and logic layers to allow better and easier modification/customization (this is the open system point mentioned earlier);

- A user-maintained rule-management system, which means greater performance and the power of a third party to focus on this tool;

- Use of Web services that allow for multiple systems to access a common function (service) to obtain consistent results (lenders may also create their own products and have them access LoanQuest services, again providing functions outside of LoanQuest); and

- No loss of functionality in either the solution or tools. (Most rewrites involve some level of compromise, but our transformation didn't. In fact, because of the rules engine, Workflow Foundation, new database and open architecture, lenders will actually gain features through the transformation.)

All of these features and others, such as supporting behavioral object-oriented design, focusing on business functions rather than “plumbing,” and enabling interfaces with Web services, fit our long-standing objective of having all the products a lender needs in one lending technology platform. Supported by process definition and authoring tools, enactment services and transport-handling functionality, LoanQuest delivers superior operational control and productivity.

Customer information file philosophy

An additional benefit is elimination of the pervasive “silo” mentality, since use of Microsoft's .NET framework and a service-oriented architecture allow all our LoanQuest products to work seamlessly within a customer information file (CIF) philosophy. Users of any product can share access to the most current customer account and contact information, eliminating redundant data entries.

The CIF serves as a customer profiler and enables a firm to evaluate its clients' product and service needs. The file contains all relevant information about a firm's customers, including demographic data, response to a firm's decisions and purchase history. A CIF provides lenders with the capabilities to measure and evaluate their customer assets, mining formerly hidden opportunities.

This allows for the seamless sharing of information and creates opportunities for loan originators, servicing personnel and marketing analysts. For example, if a borrower requested loan payoff information from the servicing system, a lead could automatically be passed to a loan originator. That originator would have access to the most current account and customer contact information from the CIF, and could then contact the customer to offer assistance on any potential new transaction related to the payoff request.

The .NET platform is unique in its ability to create a central CIF that can populate a file end-to-end. The traditional mortgage lending approach has been to have separate systems and data silos for each major application. In the aforementioned scenario, a potential sales opportunity would probably be lost due to a lack of access to shared current information and notification. .NET speaks to the heart of the issue. It will alleviate accessibility problems with modernized processing.

Turning on a dime

The agility offered through the use of the Microsoft platform means we can turn on a dime when customers need to make

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changes. This has changed the way technology can be delivered. There is, for example, more interest in the software-as-a-service (SaaS) model in today's market. According to Stamford, Connecticut-based research firm Gartner Inc., the global SaaS market is expected to grow to \$19.3 billion by 2011, tripling in size from the \$6.3 billion it was in 2006.

We hear the repeated lament from many companies that they are trapped in massive information technology (IT) commitments that could not be sustained when the market collapsed. We estimate that there was more than \$1 billion spent on failed LOS projects during the boom years, from about 1998 to 2005.

Technology maturity correlates with client demands for a wider range of product services. The number of Web-based deployment methods has been significantly gaining ground over the last several years in conjunction with an increase in the number of smaller startup mortgage technology vendors. All the more reason during this down time for vendors to think about better lending solutions for the next up cycle and to take the responsibility for helping lenders choose the right option for their specific business requirements.

One of the latest alternatives that can take the risk out of rebuilding oversized IT expenditures is by moving to an SaaS, transactional-based arrangement. SaaS eliminates expensive hardware costs and ongoing software maintenance fees. SaaS allows a client to pay by usage and therefore avoid flat-fee provider charges in addition to the upfront expenses that accompany purchasing and installing on-site software.

SaaS provides lenders with a system that does not have to be maintained in-house, enabling small startups to save on IT equipment and personnel. Startup lenders typically are in search of the most state-of-the-art technology that will provide them with a competitive advantage. There is a demand for systems that are quick, easy to install and operate, and cost-effective.

McKinsey & Company Inc., New York, reports that IT spending on software could increase to 35 percent of a company's total IT budget by 2010, with SaaS being the key driver. The company notes that the majority of activity in the software sector occurs in North America, so having customers on the lookout for innovative offerings provides some assurance that, despite industry consolidation, there's growth potential ahead.

Market drops: A signal to spend

Market swings like the current one signal change to technology vendors; but too often, the signal is in in the direction of contraction, merger or leaving the sector. We take a different approach, regarding market drops as a signal to spend on preparation for the next upswing. Everyone knows the mortgage market runs in cycles, so when it comes back we want to be there with strong product offerings that are ready to meet demand.

In this declining market, we have had the luxury of time to

build for the next cycle. It is in this in-between time, between slow and peak, that lenders are making inquiries. We are already seeing a steady stream of requests for proposals (RFPs) for loan origination systems coming in with the focus on security, compliance capabilities, SaaS and technology.

Our affinity for Microsoft has not gone unrecognized, as evidenced by our achievement again this year of Gold Certified Partner status in the Microsoft Partner Program, with competencies in Custom Development Solutions, Networking Infrastructure Solutions and Data Management Solutions. This recognition is given for expertise and impact in the technology marketplace. There are a few other mortgage technology companies that have this status—including Mortgage Cadence Inc., Greenwood Village, Colorado; GHR Systems, now part of Metavante Lending Solutions, Wayne, Pennsylvania; Avista Solutions Inc., Columbia, South Carolina; and Access Business Technologies, Folsom, California.

One of the requirements for attaining such status under this five-year-old program is to have what's called a Microsoft competency, which is designed to help differentiate a partner's capabilities with specific Microsoft technologies to customers looking for a particular type of solution. Each competency has a unique set of requirements and benefits, formulated to accurately represent the specific skills and services that partners bring to the technology industry.

"Customers are looking for partner companies that can bridge the gap between their business demands and technology capabilities," stated Allison Watson, vice president of Microsoft's Worldwide Partner Sales and Marketing Group, in an April 2008 press release. "They need to trust in a company that can act as an expert adviser for their long-term strategic technology plans."

The Custom Development Solutions competency is designed for technology partners providing custom-built solutions for clients that require value-added capabilities to optimize business opportunities. Specializations within the competency are Application Infrastructure Development, Smart Client Development and Web Development.

"Microsoft Gold Certified Partners, which have certified expertise and direct training and support from Microsoft, can build a positive customer experience with our technologies. Microsoft recognizes MortgageFlex Systems as a new Gold Certified Partner for demonstrating its expertise providing customer satisfaction using Microsoft products and technology," continued Watson in the press release.

Having industry associates like Microsoft, MISMO® and the Mortgage Bankers Association (MBA) allows MortgageFlex and our customers to stay ahead of the curve in meeting the market's technology needs. **MB**

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