

# LOAN UNDERWRITING PORTAL

## 2005 COMPUTERWORLD HONORS CASE STUDY

### FINANCE, INSURANCE & REAL ESTATE

LOW- AND MODERATE-INCOME CITIZENS GAIN EASIER ACCESS TO A VARIETY OF MORTGAGE PRODUCTS THAT ARE PRICED BELOW MARKET USING A NEW WEB-BASED PORTAL SOLUTION,, WHICH FACILITATES ELECTRONIC TRANSACTIONS BETWEEN STATE HOUSING AUTHORITIES AND THE PRIVATE SECTOR. [20055344]



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## SUMMARY

Buying a home in Massachusetts, that is affordable to low- and moderate-income citizens, has been made easier with eMassHousing.com. Banks and citizens have better access to a variety of mortgage products that are priced below market. A web-based portal solution, eMassHousing.com facilitates electronic transactions between MassHousing and its business partners, enabling MassHousing to achieve its public purpose mission.

## APPLICATION

MassHousing is the affordable housing bank of the Commonwealth of Massachusetts: lending money at rates below the conventional market to support the creation and preservation of rental and for-sale housing for low- and moderate-income residents under-served by conventional housing markets.

A non-profit, quasi-governmental, state agency, MassHousing raises capital by issuing tax-exempt and taxable revenue bonds which finance mortgage loans serving low- and moderate-income people. The Agency relies on private non-profit and for-profit developers to construct and operate the rental housing that it finances and on an extensive network of approved lenders to deliver its home mortgage programs. But because of time-consuming, paper-intensive processes, most lenders had little incentive to "push" MassHousing loans. Citizens who could benefit from MassHousing loans often had no idea that such assistance was available.

With a mission to be the leading provider of affordable housing resources in Massachusetts, MassHousing set out to electronically extend the Agency to its partners and customers through the use of a powerful and intuitive e-business tool called eMassHousing.com.

### Setting the Strategy

The eMassHousing.com project team began by developing a multi-year e-business strategy and a phased roadmap for executing the strategy. Developing a solution for the Agency's home ownership business unit was identified as the first phase. MassHousing's mortgage origination process was slow and cumbersome, putting the Agency at a competitive disadvantage.

The e-business strategy was designed to be self-funding, capitalizing on early cost recovery opportunities and applying those recovered funds to more strategic investments. MassHousing redesigned its fundamental technology architecture, allowing the Agency to standardize across business units, recover maintenance costs and identify redundant assets.

### Implementation

With a customer-centric strategy in place, implementation of the e-business solution began. A portal vendor was selected to implement IT initiatives prioritized in the e-business roadmap. After completing requirements gathering/analysis and Joint Application Development sessions, extranet/portal architecture design, testing and deployment, eMassHousing.com was successfully deployed on April 1, 2003. Since that time, nearly \$400 million in first mortgages have been originated by MassHousing through its business partners, serving more than 2,000 first-time homebuyers, with household incomes averaging \$53,000 and purchasing homes averaging \$210,000.

### Additional Functionality

MassHousing's goals for automation and process efficiency did not stop with the deployment of eMassHousing.com. In the second phase, MassHousing leveraged the portal technology to automate processes within its mortgage insurance business unit.

Using applications built on the existing portal infrastructure, MassHousing's Mortgage Insurance division went live on January 19, 2004. The division now conducts its business almost exclusively online with few manual or paper-based processes. The portal enables lenders to:

- Submit and process mortgage insurance claims
- View invoices, view payments, and check updates on payment of mortgage insurance premiums
- Report defaults on mortgage insurance policies
- Cancel mortgage insurance policies

Similarly, the Home Ownership business unit built applications on the existing portal infrastructure in order to consolidate several databases and automate a number of loan tracking, reporting, and closing processes. Today, when closing a loan using the eMassHousing.com functionality, the portal automatically:

- Determines the loan originator's fees
- Reports the originator's fees to accounting and treasury
- Processes the funds to be wired to the originator
- Tracks the status of closing documents

These efficiencies removed many of the antiquated, manual and paper-based processes previously used by MassHousing.

Fannie Mae Initiative (November 2003 through April 2004)

MassHousing wanted to leverage eMassHousing.com to become an aggregator of Fannie Mae products, allowing loan production to grow beyond its limited ability to issue tax-exempt bonds. eMassHousing.com was integrated on the front end with lenders' loan origination systems, enabling lenders to electronically submit loan applications through the portal. On the back end, eMassHousing.com was integrated with Fannie Mae's Desktop Underwriting System, which automatically underwrites applications and sends responses to eMassHousing. Through this integration, eMassHousing.com serves as an electronic conduit and tracking system through which lenders can do business with Fannie Mae. The Fannie Mae aggregation capability went live on April 24, 2004, and was made available to 100 Massachusetts lenders.

Citizen Access

With enhanced and automated lending processes in place, MassHousing was set to improve the interface it had with its ultimate clients: the low- and moderate-income citizens of Massachusetts interested in home ownership. To that end, MassHousing restructured its public website ([www.masshousing.com](http://www.masshousing.com)), implementing an audience- and intention-based navigational structure. In addition, MassHousing added a new area to the public website to provide prospective home buyers with new information and tools, such as mortgage pre-qualification, to further streamline the process. The redesigned, easier-to-use website went live on April 24, 2004.

## **BENEFITS**

eMassHousing.com automates the entire mortgage process from the initial application to the close of the mortgage, including the application, underwriting, and activation of mortgage insurance. Through this automation, lenders are able to process applications for low- and moderate-income first-time homebuyers much more efficiently. Paper forms and redundant information collection have been replaced with a streamlined, automated application process.

eMassHousing's portal has far exceeded expectations in terms of accommodating the needs of the low- and moderate-income families it was designed to help. The portal has had countless tangible benefits, including:

- Lower transaction costs.

Three months after eMassHousing's implementation, MassHousing's transaction costs decreased 30% in its Home Ownership area and by 58% in the Mortgage Insurance area.

- Lower transaction costs for MassHousing's lenders.

MassHousing lenders using eMassHousing lowered their loan transaction costs with MassHousing from an

average of \$1800 to \$600 per loan.

- Lower administrative costs.

eMassHousing.com eliminated the need for 2 FTEs, and enabled the redeployment of other staff to higher value-added activities.

- Lower system maintenance costs.

eMassHousing.com's platform is replacing several back-end legacy systems.

- Shorter processing times.

Use of eMassHousing has decreased the loan approval process from an average of one day to 10 minutes during peak times, reduced mortgage insurance underwriting time from two days to 15 minutes, reduced mortgage insurance billing response time from 45 days to 30 minutes, and shortened invoicing time for mortgage insurance premiums from about 2 days to about 2 minutes.

- Faster rollout of new mortgage insurance products.

MassHousing can now roll out new mortgage insurance products in a matter of weeks rather than months.

- Improved business agility and adaptability.

By enabling MassHousing to aggregate Fannie Mae products, eMassHousing helped MassHousing enter new markets and offer new products in the marketplace.

## **IMPORTANCE**

Information technology is the core of eMassHousing.com and the loan underwriting portal. MassHousing's business partners can complete the entire mortgage process, from the initial application to the close of the mortgage, including the application, underwriting and activation of mortgage insurance, electronically through eMassHousing.com.

The portal, which is powered by extranet technology from Plumtree Software, is simple to use and designed to accommodate the way partner banks work. MassHousing-approved lenders that sell or service MassHousing mortgages and mortgage insurance products can now:

- Reserve funds for a MassHousing mortgage
- Apply for MassHousing mortgage insurance
- Get instantaneous mortgage insurance underwriting decision
- Manage and view the loan application and reservation pipeline
- Withdraw a loan reservation
- Request funding for a reserved loan
- Activate a MassHousing mortgage insurance policy
- Cancel a MassHousing mortgage insurance policy
- Report a default on a MassHousing mortgage insurance policy

Each approved lender who uses eMassHousing.com has a unique home page with personalized views to make the system simpler to use. The Web interface is modeled on the familiar Fannie Mae Form 1003, which has made it easy for both new and experienced MassHousing business partners to use. Each lender is also able to manage access to the Web portal by its staff by assigning different authorization levels.

The web also acts as a central source for lenders to obtain the latest MassHousing mortgage rates and mortgage insurance premiums; view and download all MassHousing publications, manuals, and marketing materials; and find information on all available MassHousing products.

## **ORIGINALITY**

The e-business strategy and implementation completed by MassHousing over the past two years is now being recognized by the state housing finance sector and leading technology analysts as an industry breakthrough. The project highlights the ability of public sector organizations to take advantage of the internet to streamline operating models and form partnerships that previously were available only to large organizations.

Since implementation, MassHousing has generated more than 500 new applicants through a mortgage prequalification service placed on its website. Before the prequalification service, the Agency relied solely on lending institutions to refer their customers to MassHousing. With its new applicant-generating channel, MassHousing anticipates substantial growth in loan volume and greater "brand" recognition.

## **SUCCESS**

After its initial rollout on April 1, 2003, eMassHousing had a 98.7% six-month adoption rate among the 155 Massachusetts-based lenders that transact with MassHousing.

In the words of one user, the portal is “so intuitive I’m not sure you need to give us training on it.”

eMassHousing.com was recognized at the annual meeting of the National Council of State Housing Agencies in Chicago in October 2004 as a tremendous advance in the way state housing finance agencies do business over the internet. Tom Gleason, MassHousing’s Executive Director, was awarded the 2003 Top 10 Business Innovation Award by the New England Business and Technology Association. Sharing the stage with executives from Gillette, Partner’s Health Care, and MIT Labs, MassHousing is the first public sector organization to win this award. Last August, CIO Magazine awarded the agency the Top 100 Enterprise and Technology Leadership and Innovation Award for 2004.

## **DIFFICULTY**

As a quasi-governmental agency, MassHousing has never been an early adopter of technology and had to overcome significant challenges. However, the Agency realized that its supply chain and customers were increasingly migrating to new ways of doing business.

In early 2002, MassHousing recognized the need to cut costs and reduce processing times due to pressures from increased competition, changing markets, higher customer expectations, and economic challenges. Additionally, MassHousing wanted to reduce inefficiencies caused by data silos and other communication barriers between its Home Ownership and Mortgage Insurance divisions.

Recognizing that the Agency did not have the resources to undertake this major project in-house, MassHousing sought assistance in developing its e-business strategy, defining the portal’s functional and technological requirements, implementing the portal, and extending the portal’s capabilities.

As a result of collaboration, the organization created the business-to-business portal to streamline processes and provide instantaneous loan application decisions and feedback to MassHousing’s lenders.