

Kicking the Paper Habit

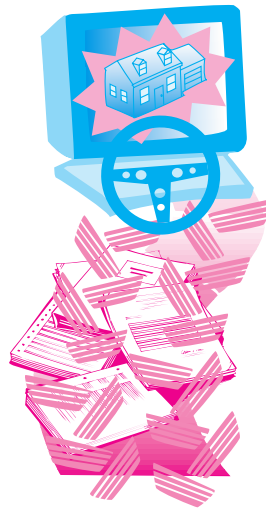
Online Mortgage Business Puts Consumers in Driver's Seat

by *David P. Danford*

AS BEWILDERING EXPERIENCES go, obtaining a mortgage traditionally has ranked right up there with arriving alone in an unfamiliar foreign airport, half asleep from an overnight flight and unable to speak the local language.

Like the bleary-eyed traveler, a prospective borrower attempts to navigate the mortgage-origination process and oftentimes ends up relinquishing control to others with access to vital information. A beleaguered traveler enlists the services of English-speaking tour guides, taxi drivers and hoteliers. Similarly, a mortgage applicant works with a **mortgage broker** or **loan officer** to sort through thousands of loan products, translate the loan offerings into understandable terms and steer clear of unnecessary bottlenecks and costs en route. Ultimately, the loan applicant spends as much as 3 percent of the pending mortgage amount on core origination and closing-related services and products, transaction costs and

David P. Danford is a senior product manager with Microsoft Corp. and is responsible for the online loan-origination portion of the company's HomeAdvisor Web site.



specific loan-program requirements.

Consumers and lenders long have recognized the inadequacies and inefficiencies of the mortgage-origination market. These problems are deeply rooted in the fragmented nature of the mortgage business. No one lender commands a market share sizable enough to generate economies of scale. The process necessary to complete a single mortgage transaction is splintered into innumerable steps that require the efforts of many additional players—title companies, appraisers, credit bureaus and other third-party service providers. Further compounding these inefficiencies are the outdated, stand-alone data systems that make it difficult to

share data among borrowers, lenders and the other service providers. Questions of loan-data accuracy raise doubts about the feasibility of information-sharing attempts. What's more, the incompatibility among the various computer systems could make collective data transfers cumbersome or impossible.

For years, industry professionals have searched for better ways to conduct business, and borrowers have wished for a less confusing process. Now technological advances finally show tremendous potential for smoothing the way. The Internet has emerged as an instant, ubiquitous channel for information exchange. Consequently, the medium is capable of passing product, pricing and application-status information through the entire mortgage-processing pipeline faster and cheaper—to the advantage of both borrowers and lenders. In fact, a significant shift in mortgage-origination business to an online environment will change the very dynamics of the lender-customer relationship, for the first time putting consumers squarely in the driver's seat. In providing highly customized mortgage-product information

on a much more affordable scale, the Internet gives Web-surfing borrowers the necessary tools to navigate the mortgage-lending process on a much more independent basis.

The conversion of the mortgage-origination process to a full-service, Web-based electronic channel stands to drastically lower mortgage closing costs. Most of the 3 percentage points paid in closing costs currently fall into two nearly equal categories—core costs account for 45 percent of the total, and transaction costs contribute another 43 percent. Loan-program design considerations make up a smaller 12-percent component (see “Closing In on Closing Costs,” page 4).

All told, online efficiencies should eliminate nearly two-thirds of the prevailing 3-percent origination fee, according to Microsoft estimates. The savings would be substantial. On a \$100,000 mortgage, for example, a borrower would save \$2,070 of the \$3,000 closing costs (equal to 3 percent of the mortgage amount), paying a more easily digested tab of only \$930.

A full-fledged shift to online mortgage transactions will not take place immediately—or mobilize all customers equally—but the fundamental changes now underway will unfold well into the next decade, redefining the mortgage-origination business along the way.

*Clicking away
in the relative
anonymity
and flexibility
of the Internet
will give
consumers
a sense of power
rarely experienced
until now.*

Shifting the Balance of Power

Each day, an estimated 52,000 new users join the online community, which, as of June 1998, totaled about 37 million, or 18.5 percent of the U.S. adult population. Scores of these users are borrowers drawn to the Web pages of individual lenders and multi-lender cooperative ventures to shop from a broad selection of mortgage products and rates.

One of the newer **multi-lender platforms**, Microsoft HomeAdvisor (www.homeadvisor.com) has attracted millions of visitors since becoming operational in August. At this site, users can choose from thousands of loan offerings matched to specific borrower

priorities, preferences and needs. In addition, users can take advantage of powerful, easy-to-use analytical tools that can help them to assess when to refinance, the amount of financing for which they qualify and any other considerations critical to the loan-selection process.

Clicking away in the relative anonymity and flexibility of the Internet will give consumers a sense of power rarely experienced until now. At their convenience and without disclosing their names or social security numbers, would-be borrowers can comparison shop, research options and educate themselves on any aspect of the mortgage market. Identities remain secret until the shoppers submit a completed application bearing the person's social security number. Without that nine-digit identifier, a lender cannot order a property appraisal or access an applicant's credit records, payment history or income statements. Within moments of the submission of a completed application, though, a lender is able to quote a **risk-based price** on a particular mortgage for a particular applicant—the interest rate charged is a function of that borrower's demonstrated creditworthiness.

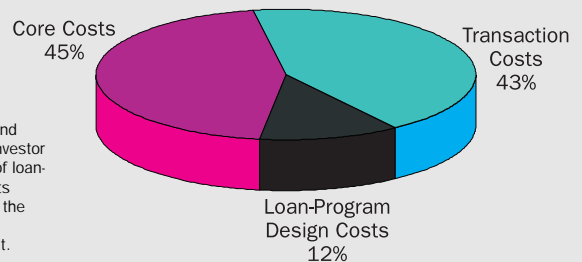
By giving consumers the ability to first shop among thousands of loan offerings anonymously, the online medium also eliminates the potential for real or perceived bias in the loan-

Closing In on Closing Costs

When settling accounts at the closing table, a mortgage borrower typically faces a bill for origination fees equal to about 3 percentage points of the loan amount. These closing costs grow out of three types of expenses:

- **Core Costs.** Compensation paid for the performance of certain core activities—such as legal work and loan-application processing—and fees paid for appraisals, interest-rate hedges and other fundamental products that are essential to the production of a mortgage. The core costs accrue throughout the origination process and eventually account for 45 percent of the closing-cost tab.
- **Transaction Costs.** Money spent to gather, receive, order and file paper documents throughout the origination process explains 43 percent of the overall costs that go into manufacturing a typical loan.
- **Loan-Program Design Costs.** Requirements imposed on the design of loan programs by lenders and investors as a means of protecting their financial stakes in the lending process. The design costs add another 12 percent to overall mortgage closing costs.

Total Economic Costs of a Mortgage



Note: Transaction costs cover gathering, receiving, ordering and filling paper documents. Loan-program design costs involve investor or lender requirements that specify, for example, the nature of loan-to-value ratios, appraisals and mortgage insurance. Core costs cover actual costs of services and products that occur during the process, such as loan officer's work (loan commission), legal advice, appraisal product and interest-rate hedging instrument.

Source: Microsoft Corp.

selection process. Microsoft's market research indicates that many consumers believe that an applicant's sex or race should not—but too often does—influence the loan-granting process.

Lender Opportunities and Challenges

Providing consumers with direct access to mortgage-product and pricing information creates downstream challenges, though, for lenders and other mortgage-service providers. On the one hand, the electronic channel

poses a threat to a lender's existing customer base. On the other hand, this creates opportunities for lenders to reach out to a newly identified market segment of Internet users.

On the downside, for example, mortgage shoppers who become quite adept at scouring the Internet probably will wind up identifying the best loan product for their needs. By doing their own legwork, these customers are usurping some of the traditional roles played by mortgage brokers and loan officers. What's more,

these borrowers may find it difficult to justify paying a full loan commission—traditionally, about 1 percentage point of the mortgage amount. Even in an online setting, however, mortgage brokers and loan officers will continue to add to core costs in the compensation received for coordinating the loan application and verification work.

What lenders lose in compensation to new online efficiencies, they can make up through expanded business volume. To do so, lenders simply

must revise customer-acquisition and marketing strategies to attract potential borrowers to their Web sites. For instance, lenders can utilize search engines from portal sites—such as Microsoft Network (MSN), America Online (AOL), Yahoo or multi-lender platforms—that often serve as a user’s point of entry into the Internet. Lenders also can attract a wider clientele by securing co-marketing relationships created by linking one Web site to another. This provides a way to capture the attention of consumers focused on complementary products and services.

By analyzing profile, account and transaction data of online consumers, lenders can create highly customized service offerings. They then could promote related products such as home-equity loans and cross-sell **affinity programs** that perhaps might award frequent-flyer points for credit-card purchases. Eventually, as refinancing transactions become extremely price competitive, lenders could work to secure ongoing relationships with their existing mortgage customers during periods of falling interest rates by aggressively soliciting their refinancing business.

Lenders also can differentiate themselves from their competition by tailoring new programs and opportunities to the expectations of online customers. For example, future releases of the HomeAdvisor site

What lenders lose in compensation to new online efficiencies, they can make up through expanded business volume.

will include an area where consumers can review objective information about each participating lender’s customer-satisfaction rating, average application-to-closing time and loan-status reporting capabilities.

None of this, of course, will happen overnight. The online mortgage-lending community simply cannot deliver everything consumers may want right away. Over time, though, improvements will come. Consumers will dictate the exact timing and content of each change, voting electronically as they visit and transact their business on those sites that offer the greatest value in the least amount of time.

Converting Clicks to Closings

Today, millions of Web surfers have figured out how to mine the abundance of loan choices presented by the Internet while skipping the commitment step. First, they visit a variety of mortgage Web sites to educate themselves about the loan-origination process and to weigh the relative merits of lenders, products and pricing. Then, many of these consumers use the online information and pricing as leverage to negotiate a better deal off-line with a mortgage broker or lender.

Persuading potential borrowers to stay online to mortgage their futures by sums that amount to hundreds of thousands of dollars will not be easy. Before they commit, loan applicants must feel confident they have shopped from a comprehensive menu of loan products and prices. They also will need proof that the online-transaction experience provides greater convenience than visiting a local mortgage broker. Before taking any binding action, many online shoppers probably will want to communicate first via telephone or e-mail with a mortgage specialist. They also will want the access to track the status of their applications.

In the months ahead, online lenders will re-engineer the staging of the mortgage-origination process to fit more closely with the needs of consumers. Specifically, online lenders will make changes to

approve or reject loan applications that go beyond the pre-approval of an individual for a specific loan amount. Under this scenario, lenders will agree to fund actual deals well ahead of verifying all the facts and documentation supporting the loan application unless that information later proves incorrect. An immediate approval (based on a credit check and conditional underwriting decisions) that expires if not accepted by the borrower shortly thereafter hopefully will encourage more consumers to commit to their mortgages online.

Punching Through Loan-Processing Bottlenecks

Much work lies ahead before lenders can take full advantage of the Internet's power.

The same kinds of computer literacy insecurities that prevent consumers from purchasing groceries online, for instance, also will keep borrowers from completing loan transactions electronically. Consequently, lenders will need to pay as much attention to designing the tools necessary to draw consumers into electronic transactions as they do to creating online mortgage products and services. Extensive Web-site testing to obtain user feedback on software compatibility and ease of use can help lenders improve sites that consumers find confusing or of little help to them. For example,

Taking the actual automation of the mortgage process beyond today's shopping stage calls for some fairly substantial changes in the status quo.

information gathered from new-car shoppers visiting Microsoft's CarPoint site led to design and content improvements that, in turn, generated a 43-percent increase in car-purchase referrals to CarPoint automobile dealerships.

Online lending pioneers also must contend with a maze of regulatory barriers geared toward an off-line world (see "Policy Thicket Complicates Efforts to Take Lending Online," page 9).

Taking the actual automation of the mortgage process beyond today's shopping stage calls for some fairly substantial changes in the status quo. For instance, even the smattering of mortgages

already originated online largely relied on old paper processes to verify loan application information. Several innovations necessary to clear the path for fully automated lending include:

- Adoption of risk-based pricing to deliver online loan approvals at competitive rates before the verification phase, thereby revolutionizing the traditional order of origination events;
- Creation of data warehouses for borrower credit, deposit, loan-servicing and tax-return information to enable instant verification of application data;
- Construction of tracer systems—similar to those used by courier companies—to track every detail in the loan file; and
- Development of online-mortgage specialists trained to assume the combined duties of loan officer, loan processor and mortgage underwriter to centralize responsibility for the entire electronic loan-approval process and provide borrowers with one knowledgeable contact person.

Pinning Down Cost Savings

To unlock the savings possible once the entire mortgage-origination process is automated requires tackling closing costs where they occur at each of the five loan-processing stages, as diagrammed in *Exhibit 1*.

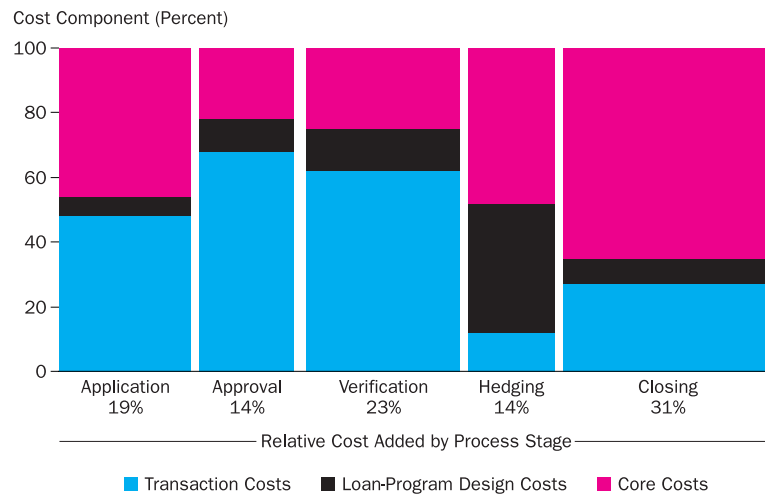
Over the course of the mortgage deal, each category of expense—core, transaction or

program design—will offer potential savings relative to the importance each loan-processing stage plays in the origination process. For example, a vertical reading of Exhibit 1 indicates that transaction costs account for 46 percent of the origination costs at the application stage. However, a horizontal reading of the chart shows that only 19 percent of origination costs occur at the application stage. Therefore, eliminating all of the transaction costs at that point in the process would make a dent of about only 10 percent (46 percent x 19 percent) in total origination costs.

The changes necessary to transform the current mortgage-origination structure are likely to follow a certain progression. Lenders and service providers will start by attacking the paper-shuffling transaction costs bound up in the application, approval and verification stages of a mortgage.

First, the process participants will agree upon data specifications and electronic business standards so they can share transaction data via computer. Simultaneously, these data exchanges will move to the Internet, thus facilitating the rapid settlement of transactions. Electronic access to data on borrower credit, payment history and income will enable sophisticated, risk-based pricing decisions that will lower mortgage pricing for

EXHIBIT 1
Cost Components of the Mortgage-Origination Process



Note: Transaction costs cover gathering, receiving, ordering and filling paper documents. Loan-program design costs involve investor or lender requirements that specify, for example, the nature of loan-to-value ratios, appraisals and mortgage insurance. Core costs cover actual costs of services and products that occur during the process, such as loan officer's work (loan commission), legal advice, appraisal product and interest-rate hedging instrument.

Source: Microsoft Corp.

Taking the mortgage-origination process online can achieve the largest savings only by tackling the dead weight as it occurs throughout the five processing stages and re-engineering each stage in turn.

creditworthy borrowers. The data sharing also will make possible online loan approvals and mortgage interest-rate locks.

Huge shifts will ripple throughout the market as lenders compete to offer faster and cheaper programs. In due course, a profound reduction—if not a complete elimination—of transaction costs will occur. That will lead to a 27-percent dent in actual origination costs (*Exhibit 2*, page 8) based on a 19-percent efficiency gain in the three preliminary stages of origination—application, approval and verification—and another 8 percent unwound from

the hedging and closing steps necessary to finalize the loan process.

Second, investors like Freddie Mac and Fannie Mae will redesign their loan-program requirements to take advantage of electronic shortcuts. Just as importantly, these companies will create secondary market programs to accommodate online transactions. For example, an online appraisal may provide an investor with risk protection equal to a more expensive and time-consuming on-site appraisal of a home. As the barriers to automation of appraisals and income-tax information fall away,

EXHIBIT 2
Internet-Origination Savings Relative to Actual Mortgage Closing Costs

	Preliminary Phase	Finalizing Phase	TOTAL
Transaction Costs	19%	8%	27%
Design Costs	3	10	13
Core Costs	10	20	30
TOTAL	32	38	69

Note: Assumes total mortgage costs equal 3 percentage points of the loan amount. Preliminary origination phase consists of application, approval and verification steps. Finalizing phase consists of hedging and closing steps. Due to rounding, values do not always add to category total.
 Source: Microsoft Corp.

lenders and multi-lender sites will move to much richer online data-sharing relationships. Expect a sizable chunk of the program-design costs—currently contributing 12 percent of the actual 3-percent points paid in origination costs—to disappear.

Finally, the core activities and products essential to the production of a mortgage—legal advice, loan officer time, the appraisal proper, interest-rate hedges—will undergo a sharp reduction. These costs currently are responsible for 30 percent of the total closing costs.

Cumulatively, all of the component cost savings, when adjusted by their relative impact at each stage in the origination process, will roll back closing costs by 69 percent. It is that magnitude of savings, thanks to impending automation, that will pare down the \$3,000 closing-cost tab to only \$930 in the hypothetical mortgage situation mentioned earlier.

Besides cost reductions, these changes also will translate into significant time savings. Electronic processing, for instance, will reduce sharply the time from application to closing. That, in turn, will lower the secondary marketing costs of hedging fluctuating interest rates, leading to further reductions in loan rates. All in all, a mortgage that now takes six weeks to close may soon require only a week's worth of preparation and processing. An even more exciting prospect is that the same

turnaround time to refinance an existing mortgage from start to finish could shrink to four hours.

Traveler's Aid for the Road-Weary Borrower

Just as travelers manage to adapt to unfamiliar surroundings, mortgage borrowers will become increasingly comfortable with the online medium, drawn by promises of convenience and savings. As borrower confidence grows in Internet-transacted business, the ranks of mortgage lenders will remake the mortgage business for the next century. The mix of established lenders and start-up operations that master the online environment will be those that are first to harness technological advances and retool processes (see "Internet Business Is Booming," page 11).

Prospective mortgage borrowers will discover they can count on their own resourcefulness once Internet accommodations advance beyond mortgage-product comparisons. Instead of relying on—and paying—others to shepherd their applications through the origination and closing processes, mortgage borrowers will do it for themselves. When that day arrives, mortgage shoppers who once traveled around dazed and confused will sally forth confidently to arrange their own home-loan financing affairs in the hospitable environs of cyberspace. SMM