GSE Technology Initiatives

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In recent years, Fannie Mae and Freddie Mac (GSEs) have had significant success in the industry related to their technology products. This paper describes the current state of mortgage technology and the role that the technology initiatives of the GSEs play within the greater mortgage industry.

Desktop Underwriter (DU) from Fannie Mae and Loan Prospector (LP) from Freddie Mac have become the standard automated underwriting systems used by virtually every lender. In addition, DU/LP have been adopted by the customers of the larger lenders, otherwise known as third party originators (TPO). TPOs include mortgage brokers, smaller banks, credit unions, correspondents and smaller mortgage bankers, and they sell their loans to the customers of the GSEs. TPOs originate 60+% of the loan volume in the industry.

The rapid adoption of DU/LP by the industry has been brought about by economic incentives provided by the GSEs. Freddie Mac alone handled 7.3 million loan applications through LP in 2001. Lenders not using DU/LP are subject to higher guarantee fees and they lose loan warranty waivers (which can shield the lender from borrower default risks). If lenders had previously begun to develop their own automated underwriting systems (AUS) like DU/LP, they have since ceased any further development. The incentives provided by the GSEs overrode any potential benefits from funding internal AUS developments or from purchasing a third-party AUS.

Every TPO and lender uses a loan origination system (LOS) to run their back office. These are the mission critical production systems that process every loan the industry originates. The 20 or so LOS vendors that serve the mortgage banking industry routinely develop interfaces to hundreds of vendors that serve the industry. LOS vendors earn fees from the vendors for building and supporting these interfaces. In the case of the GSE interfaces however, the LOS vendors are required to seek permission and then develop the interfaces at their own cost. Most of the LOSs not allowed to have an interface to DU/LP are now out of business and their customers have been forced to undergo the costly and and time consuming switch to a GSE-authorized LOS vendor.

Because DU and LP require significant user training, the majority of TPOs have determined that learning both is too burdensome for their staff. As a result, most TPOs standardize their operations for only one of the two. Loans are then processed under the guidelines of one GSE and are then packaged and sold to the lenders. The lenders are generally unable to price these loans to the GSE with the best pricing because they arrive with an approval by only one GSE. Historically, loans were manually underwritten using standard forms and calculations for both GSEs, which could then be sold to either GSE on any given day. This has caused the GSEs to aggressively promote their AUS products to the TPOs, ensuring the use of their specific AUS. Now that the price competition between the GSEs has subsided, their technology has become a significant competitive tool. This explains why tens of millions of dollars have been spent promoting DU and LP to TPOs and lenders. To return to the historical model and its competitive pricing, the GSEs would need to provide an open standard whereby any AUS developer could duplicate the rules used by LP and DU. From the 1960's to the late 1990's, the GSEs published all guidelines for making a loan approval decision. A return to this policy could allow the industry to adopt many competitive and more efficient options.

Most loan applicants today are put through a single AUS. It would help the industry if each loan received multiple AUS decisions from many companies including the GSEs. For consumers, this would maximize the possibility of a loan approval as opposed to the current system whereby TPOs and lenders generally use just one AUS, minimizing the chances for approval. This is especially important for minority and low-income applicants who often fall through the cracks of the current system. While the technology is readily available, the GSEs have not allowed systems that offer multiple AUS decisions for each loan. For most TPOs, if their chosen AUS doesn't produce an approval, the consumer is likely to be slotted into the sub-prime market at a much higher rate. For a certain percentage of loans, the consumer would qualify under one GSE's AUS and not the other. For example, a consumer who only knows that they didn't qualify for Fannie Mae is likely to believe that they must accept a higher rate. They would not know they might have qualified for a loan from Freddie Mac (the other GSE that wasn't tried). This is also true where an AUS other than the GSE's might qualify the consumer for a GSE loan at the lower rates (such as Countrywide's own AUS). Consumers would be far better served by having access to all potential AUSs in order to obtain the lowest possible interest rate.

With DU and LP well permeated throughout the industry, the GSEs are quickly expanding the breadth of their products to encompass more aspects of the loan origination industry. To quote David Glen in Freddie Mac's own press release, "Now that automated underwriting has become the industry standard for evaluating home loans, it is time to take the next big step – to automate and streamline the rest of the origination process for lenders and brokers." By using DU and LP, the GSEs waive reps and warrants that were a fundamental value that the wholesalers added. Other features of DU and LP are continuing to decrease the tasks performed by lenders under the name of "streamlining the loan process." Product selection, loan pricing and loan locking technologies are close to being released by Freddie Mac, which could then replace similar systems most all lenders have developed or purchased from software vendors. Lenders fear that the relationships developed between the TPO and the GSEs will eventually eliminate the need for lenders in the marketplace. While such streamlining of the loan process could lower costs to consumers, history has shown that it is far more likely to boost profits for the GSEs. Fees charged for use of LP and DU are ultimately passed to the consumer and the GSEs will earn revenue from these newer offerings as well. The advantage to the GSEs in working directly with the TPOs, is that each TPO does an extremely small volume and would be unable to negotiate better loan pricing for the consumer. Today, large lenders aggregate enough loan volume to pressure the GSEs for better pricing. Slowly, the involvement in the loan process by the lenders, and their influence with pricing, is waning. This could increase the consumer costs to the benefit of the GSE profitability.

Originally, DU and LP were designed to underwrite only those loans desired by the GSEs. However, in the past couple of years, DU and LP have been expanded to handle many different types of loan products that would not be purchased by the GSEs, including FHA and subprime loans. Since TPOs primarily use just one AUS, the GSEs are finding new revenue opportunities by expanding into many other loan types. This generates new revenues for the GSEs while competing AUSs are virtually prevented from selling their products to the TPO marketplace.

The other major area of expansion is providing GSE-approved vendors for the various products required during loan production. Freddie Mac began offering an automated valuation model (AVM) in mid-2000, which is a substitute for traditional appraisals. Only the Freddie Mac AVM may be used with LP and LP determines how often this product is used. The fee earned by Freddie Mac is $50-$200, while competing products are offered for as low as $3. Competing products are not allowed to vie for this business as LP only allows use of Freddie Mac's proprietary AVM. This method of offering proprietary products that compete with traditional vendors is being expanded into credit reports, title insurance, flood certification and mortgage insurance. These are multi-billion dollar markets. In each case, GSEs can obtain fees by promoting a specific required product while simultaneously allowing no competitive offerings. In brief, obtaining a loan from a GSE can require use of specific settlement services that result in new profits to the GSEs. Settlement services not allowed access within DU and LP could see their market disappear. One could wonder if vendors are selected to maximize the profits for the GSEs. If a lender or TPO was to do something similar, it would be considered a RESPA violation. There is no streamlining advantage to having these products ordered electronically as most lenders use existing solutions, widely available from private enterprises. These attempts to own the delivery channel for the products used by the industry are not new. Previously, Fannie Mae's MORNETPlus and Freddie Mac's GoldWorks both attempted to offer similar solutions in the late 1990's. However, they lacked widespread adoption, most likely due to their use of Value Added Network technology rather than the Internet.

Both GSEs have made investments into some of the leading technology firms that serve the mortgage industry. To date, these investments have not yielded profits but could in the future. The purposes of these investments are likely threefold:

1) To promote the streamlining of the industry as their investments could help bring faster change in an otherwise slow moving technology environment.
2) With board seats or similar access, the GSEs remain knowledgeable of virtually every technology development in the industry.
3) The GSEs ability to influence the industry remains very strong. Most every technology firm that serves the mortgage industry needs the support of the GSEs. When the GSEs hold ownership positions, their influence can help ensure future support of other GSE technology initiatives.

The technology vendors that serve the industry and the industry suppliers spend a great deal of effort to ensure that their products will be supported by the GSEs. Both GSEs remain well positioned to properly interpret coming industry technological changes and to influence or sometimes even direct such changes.

The standard loan application contains the richest data set on a consumer that has ever existed. Historically, this information was collected on paper. Later, this data was collected only on the systems of the TPOs. Because DU and LP are now used by TPOs, this information is being consolidated for the first time by the GSEs. The resulting repository is far richer than that of the well known credit repositories and the GSEs have already processed millions of such records through DU and LP. Because the GSEs are exempt from consumer privacy laws and data transfer restrictions, they have the ability to market a large number of products and services to the consumer. These include home moving services, Realtor services, home improvement goods, insurance products, financial services, banking products, etc. GSEs are not required to provide consumers with the ability to opt-out of any such marketing campaigns. To date, the GSEs have not used this tremendous asset for anything other than their own internal use. Any plans for other use have not been made public.

Industry technology initiatives that come from the GSEs have several common characteristics:

- Similar solutions had existed in the marketplace prior to the introduction of the GSE solution.
- The technology was introduced with complimentary changes to the GSE's own underwriting and business rules.
- The products are proprietary in nature and competing offerings have been largely driven out of the marketplace.
- Competitive technology products that existed were less costly, but were not viable to lenders and TPOs for GSE loan types.

- Where 3rd party vendors/services are involved, only approved vendors were allowed to participate and only at significant cost to the vendor.
- While consumer costs are often lower, but not as low as they would be if the free market had been allowed to build competitive solutions.
- There have been no technology initiatives that reduced the cost for the consumer that didn't create new revenues for the GSE.
- Migration of more of the mortgage loan process into the technology solutions owned by the GSEs.
- Increased profits and revenues for the GSEs.

One solution would be to match the HUD model for FHA/VA loans where all requirements and underwriting rules are published and the free market is allowed to develop technological solutions that are most efficient for the marketplace and the consumer. For example, private AUSs that underwrite FHA/VA loans do so for pennies per loan as compared to the $10-$20 that the GSEs charge for DU and LP. The GSEs existing technology initiatives could then be sold off to private enterprise, creating a level playing field for all technology firms.

The consumer can see lower costs of home ownership through a continued review of the GSE's policies and procedures, which have been changing to streamline the industry and increase their own profitability. The use of technology to lower costs has been a strong benefit, but still more can be done through a more open and competitive environment. GSE technology initiatives on one level have helped lower loan costs, but the lack of competition is keeping those costs higher than they need to be. GSE successes with technology initiatives are rapidly changing the greater mortgage industry, to the benefit primarily of Fannie Mae and Freddie Mac.