

SERVICING MANAGEMENT[®]

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Try Exploiting Qualitative Information

Servicing shops generate enormous amounts of data about borrowers, and there are strategies to take advantage of this.

Until recently, servicers have relied exclusively on numerical data, or structured data, to predict customer behavior. But now they can systematically access information and observations generated by other forms of interaction with borrowers to enhance servicing results.

These new efforts incorporate textual information, referred to as “unstructured data,” allowing servicers to gain much better insights into past customer behavior and to predict future behavior. This new approach, commonly referred to as “mixed-data analytics,” has many areas of application within the mortgage industry and can fundamentally change the way many organizations view the value of their conversations with their customers.

So, what is mixed-data analytics? In simple terms, it involves using all customer-related information available for analysis - including what a customer tells a servicer during any interaction, whether spoken or written.

From a practical standpoint, it requires integrating structured data - such as credit scores, payment histories, loan characteristics, customer de-

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mographics, property record information, etc. - with unstructured text data - such as call center logs, e-mails, attorney notes, and other commentary and observations - into a single view of the customer.

This expanded single view of the customer enables mortgage servicers to better understand and to potentially more accurately predict customer behavior in a wide range of areas, such as servicing, collections, retention, cross-selling and other customer relationship management efforts.

Unsecured industry

A mixed-data approach offers the opportunity of wide application across many industries. The most notable applications to date have been in the credit card area.

In one example, a major credit card issuer projected \$4 million in increased collections revenue from its 60-to-90-day delinquent customers by using a mixed-data model - one that more accurately selects high-

versus low-risk customers and assigns more appropriate collections strategies.

At another credit card company, a mixed-data collection solution identified an additional 3,000 accounts for late-state settlement offers, producing \$5.3 million in annual returns.

The mortgage industry could very likely experience similar, if not superior, results.

Like any new approach, initial efforts tend to focus on a specific application area from which the approach expands into other business functions. The initial area for applying mixed-data analytics for the mortgage industry, like the credit card industry, has been in the loss mitigation field.

Historically, mortgage servicers have identified and prioritized potential problem loans using only structured numeric data. But this incorporates only about 20% of the available loan and borrower information. By exploiting the available unstructured data that makes up the other 80%, mortgage servicers can not only improve their ability to predict customer behavior, but can also have a much better understanding of the key factors differentiating behavior.

Extracting this textual data and incorporating it into predictive loss mitigation models provides servicers with a much more powerful tool to determine which loans will cure themselves and which should be handled using forbearance, short sales, foreclosure or other methods.

A model such as this is fundamentally

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based upon building a mixed-data analytics platform which efficiently processes (i.e., audits, cleans, transforms) text data and generates semantically-rich concepts within the loss mitigation process.

The key benefits of a mixed-data-driven loss mitigation solution are:

- more accurately identifying likely defaulters or at-risk borrowers;
- increasing the understanding of default behavior and trends through key text-based default concepts; and
- treating borrowers more effectively based upon more accurate risk profiles.

Handsome improvement

In one study completed recently with a mortgage servicer, the mixed-data-driven loss mitigation solution produced models that yielded significant improvement in the predictive performance across several key decisioning points.

In this case, performance was measured by the improved accuracy of the model in predicting cures on a sample of accounts where the default outcome was known. This particular mixed-data model's improved performance over traditional structured-only data models can significantly improve loss mitigation efforts through better targeting of accounts that are least likely to cure.

Operationally, a mixed-data analytics solution entails integrating a scoring engine module that is linked with the customer's various struc-

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tured and unstructured databases, so the necessary data elements are readily available for constant scoring and portfolio monitoring. There are a variety of scores generated and updated to allow for prioritization and classification of customers for various loss mitigation-related actions.

While the details of individual servicer models remain proprietary, this kind of solution is generally applicable for all servicers that rely on analytical models to improve their loss mitigation efforts.

Apart from loss mitigation, other application areas for the use of mixed-data analytics include:

- Customer service. Call center notes help build rich profiles of borrowers for reputation risk propensity

and other complaint-management indicators.

- High-risk properties. Broker price opinion and property inspection notes can create models that predict loss due to property preservation issues.

- Fraud. Call center notes combined with origination information can detect unusual cases and suspicious behavior.

- Customer retention and cross-selling. Customer-interaction information can be combined with servicing, demographic, credit and other structured data sources to identify customers who are most likely to pre-pay and categorize cross-selling opportunities.

Mortgage companies are starting to utilize more of their customer information to make better decisions, as well as to improve processes and bolster the bottom line. In many ways, this greatly enhances the value of the large investments institutions have made in developing and expanding large data warehouses of customer information.

customer information.

Finding more efficient ways to leverage this information to improve business process management and customer relationships is a natural step that will likely expand in the future. Mixed-data analytics is an area of opportunity where improvements are being achieved in the mortgage servicing domain. **SM**

