

Automated Valuation Models - They're not just for origination anymore!

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A VM 101

- RFC began looking at A VMs late in 1997 as a way to improve underwriting efficiency and effectiveness.
- A VMs would be used in conjunction with Automated Underwriting (AU) models and Automated Verification of Income and Employment (VOI/VOE).
- RFC could quickly validate Credit, Income, Employment, and Collateral for a majority of loans, before funding.

A VM 101

- Price Waterhouse Coopers Study - November 1997
 - Phase I
 - Interviews and Meetings with Internal RFC Staff
 - Four potential applications resulted
 - Target Diligence
 - As an alternative to full appraisals
 - Servicing and REO Management
 - Marking the Portfolio to Market (for pre-payment modeling)

AVM 101

- Price Waterhouse Coopers Study - November 1997
 - Phase II
 - Identification of Vendors
 - Solicitation of Information
 - Matching Vendors/Models Strengths and Weaknesses to RFC's needs.
 - Phase III
 - Validation of Vendor Results
 - Experian (now First American), Case Shiller Weiss, HNC (now First American), MRAC, and DataQuick

AVM 101

- Price Waterhouse Coopers Study - November 1997
 - Phase III (Continued)
 - Final Study Results (August 1998)
 - AVMs could properly evaluate collateral as long as certain criteria were established
 - The valuation alternatives were fast and inexpensive
 - Many of the needs that RFC identified could be met
 - When there were multiple hits on a property, the AVMs were close in value, but often different from the appraised value
 - There were large differences in hit rates, depending on the type of model that was run
 - AVMs were not a 100% solution to valuation

Implementation of AVM Technology

- April 1998 - Signed AVM contract with MRAC for Home Price Indices and HPA2000 Model
- October 1998 - Our Homecomings subsidiary began using MRAC values to identify whether prices had risen or remained stable when an existing customer presented a loan for refinance, and the appraisal was over 2 years old
 - Original appraised value was used
 - No credit was given for the new value

Implementation of AVM Technology

- January 1999 - RFC first began using MRAC indices to determine how home prices would trend over the next two years.
- February 1999 - RFC began using MRAC data and an ARIMA model to forecast home price movements in the 41 MSAs that constituted 75% of our cumulative loan volume.
 - The 2000 report covered 58 MSAs
 - The 2001 report is expected to cover 65 MSAs

Implementation of AVM Technology

- March 1999 - MRAC values were used to verify that values had not fallen since then original appraisal on a group of loans identified by RFC Asset Management for potential modification.
- April 1999 - Signed two-year contract with MRAC.

Implementation of AVM Technology

- February 2000 - AVMs were added to our target diligence process, comparing the AVM value to the value delivered by the client, and flagging loans for review, if the variance was above a certain threshold. Previously, loans were selected for appraisal and credit diligence because of their risk (High LTV or DTI, Risky Property or Product Type). Now the appraisal and credit diligence processes are separate.

Implementation of AVM Technology

- June 2000 - RFC began accepting the use of AVMs on HELOCs and 125s, in lieu of stated values. Rating agencies were uncomfortable with stated value programs, and consumers needed a lower cost valuation tool, given the smaller loan amounts. Home Equity Loans were added in October of 2000. Given the severity assumption was already 100%, accuracy of the values was less of a concern. We currently have approved 12 models from 15 vendors for second mortgages.

Implementation of AVM Technology

- November 2000 - RFC began using AVMs in the Quality Audit and Investigation process, in lieu of review appraisals and Broker Price Opinions. If the retro value AVM validated the value delivered by the Client, no additional value research would be done. Monthly expenditures dropped from \$200,000 per month to \$50,000 per month.
- January 2001 - RFC signed a contract with Basis100 corporation for their Solimar AVM technology

Implementation of AVM Technology

- February 2001 - Pilot of first mortgage loans with AVMs (High FICO, Purchase Only, 80% LTV or less). Similar to Freddie's program, except it's for Jumbo loans. Rolled out to selected Clients and our Homecomings subsidiary.
- Also during the first half of 2001, we are testing AVMs versus other appraisal tools (e.g., BPOs, Drive-bys, Review Appraisals, and Default Appraisals) in any of our departments that use these valuation tools.

Implementation of AVM Technology

- June 2001 (scheduled) - We will be running an AVM on every loan that comes through our AssetWise decision support engine. This benefits us in two ways:
 - A select population of loans will be funded with no additional appraisal work, saving borrowers money
 - We will begin to develop a large data base by which we can report on AVM accuracy by many different property and loan types, geographic areas, and credit grades to our investors and the rating agencies

Next Steps

- Valuation of our entire portfolio
 - Useful for reporting collateral value of existing pools, as they age, to our investors.
 - Identifying Price trends for our loans, not just the geographic areas they are in (loan-level)
 - Useful in pre-payment modeling and recapture/retention strategies
- Broader use in Servicing and REO departments
 - Receive values faster and cheaper
 - Develop better strategies for work-outs and REO disposal

Next Steps

- Broader roll-out on first mortgages to save more borrowers money (compressing the value chain).
 - Rate and Term Refinances (using the AVM value)
 - Lower Credit Grades (Sub-prime?)
- Add additional AVM vendors to broaden our coverage. Ultimately, developing a multi-vendor or preferred vendor strategy
- Identify, and validate innovative AVM hybrids to serve markets that may be under-served by AVMs, but over-served by a full appraisal (1004 or 2055)

Next Steps

- Examples of this are:
 - Insured Value AVMs
 - AVMs with an inspection and/or photos
 - Appraiser Assisted AVMs
- Different appraisal products for loans that represent different points on a risk spectrum, where our AssetWise engine can either select, or recommend, an appraisal choice that corresponds to the risk the loan represents. Thus, saving borrowers' money.

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