The Future of AUTOMATED UNDERWRITING

Automated underwriting is here to stay. New research shows how the role it plays is likely to evolve.

BY BILL LEHMAN

As someone who has spent considerable time helping clients with their business and technology strategies, and spent a fair amount of time pondering the industry's current state of affairs, I've recently come to an important conclusion: As the mortgage industry emerges from the current turmoil, automated underwriting (AU) is going to be more important than ever. It will be, in many respects, much improved from what we have been used to—and absolutely vital to conducting business. ■ As I share this prediction with my clients, many I speak with have the same reaction: "Wait, wasn't automated underwriting at least partially to blame for the current crisis? How could it be more important than ever?" To answer this, it helps to take a good look at how AU contributed to our current situation.

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What is automated underwriting?

One thing CC Pace has found to be true is that people can be very passionate about automated underwriting without agreeing on what it is (and is not). This predicament is heightened by confusion around the similarities with other decisioning tools, such as product and pricing engines (PPEs) and prequalification engines.

This lack of common definitions and expectations is a root cause for some of the issues people have with AU.

At its heart, AU is a system that makes a credit decision. This decision-making capability is described as "the box." The box can then be surrounded with an AU platform to add additional functionality to the core function of producing a credit decision.

Many parties may use an AU platform, and each party brings a valid viewpoint to the discussion. For example, the credit department will want to talk about the box, how it makes decisions and how much weight those decisions carry in the process. The sales department will want to talk about the platform that accesses the box and the capabilities it provides for approving more deals. The operations department will want to talk about the platform's workflow and output, as well as how to process the loan in order to be able to close it.

The lesson here is that when discussing AU, it is necessary to discuss specific functionality in granular terms—so it helps to define terms precisely, draw pictures and write use cases. Just make sure everyone involved agrees they are talking about the same thing.

In the end, most people could agree upon the following operational definition of automated underwriting: a system that provides a full credit decision and loan-specific conditions, based on the data provided and a trusted credit report, and which carries the same weight as a human underwriter's decision. The AU system's decision is subject to income, property and other data verification. It answers the questions "Is this deal approved? What do I have to do to close it?"

Lack of common definitions and expectations is a root cause for some of the issues people have with AU.

The complaints

A lot of the blame for the current market state has been placed on the widespread use of AU in subprime lending. Some of this is valid, but some less so. Some of the specific complaints waged against AU are:

1. AU let all those stated-income deals through.
2. The AUs approved loans that shouldn't have been closed.
3. The conduit bought it. Why didn't its AU catch it?
4. AUs could be gamed. They were used to push borrowers beyond their limits.
5. Concentrated subprime lending represents a systemic risk that goes beyond the individual loan.

Let's look at each of these complaints individually.

1) AU let all those stated-income deals through.

Almost everyone's definition of AU for mortgage is a "subject-to" definition—subject to income and appraisal verification. Some organizations seem to have forgotten that. An underwriter is supposed to ask, "Is it reasonable for a maid to state an income of $16,500 per month?" Although the answer is obviously "no," deals like this were done.

For an AU to prevent a loan such as this, it would need to have an automated income-verification function. This would be a very inclusive platform definition, beyond where the industry is today. We predict, however, that in the future, the industry will evolve to such a platform for all loans, not just stated-income loans.

2) The AUs approved loans that shouldn't have been closed.

Many companies had a rule that if the AU approved it, the loan was "good to go." At CC Pace we strongly believe if an AU gives an approval, then it should not be easy for the underwriter to overturn it (which places a tremendous burden on the ability to test). However, this is *not* true if the input into the AU is incorrect. In one of CC Pace's standard AU presentations, we always get a laugh when I ask, "And who here believes that loan officers, brokers and account executives always calculate income correctly?"

This part of the issue is different from the first issue, because it is an attitude and organizational issue. The AU approval was used as a club with which to bully the approver. The problem was exacerbated when that approver was within the same chain of command as the salesperson and often had a financial incentive to approve the loan.

This was true not only at subprime and alternative-A lenders, but also at prime lenders. A surprising number of people opined that decision-certified processors were a mistake; the final approval should have remained within the underwriting chain of command.

Many lenders used AU to run roughshod over separation of duties. As an industry, we cannot let this happen again. Lenders may need to reorganize and change their incentive programs back toward loan quality.

3) The conduit bought it. Why didn't its AU catch it?

This is the defense used by the owner of one of the large alt-A originators. It overlooks two issues: who had underwriting responsibility and how did lenders implement AUs in alt-A?

Under the conduit model, the mortgage banker—not the conduit—has underwriting responsibility. The pair have a contract that specifies the types of loans the conduit will purchase. These are guidelines that look like eligibility criteria. But the performance of the loans falls on the mortgage banker, which is why it had to buy back early payment defaults (EPDs).

Because alt-A lenders tended to sell the loans servicing-released, they began to believe that they were a broker to the conduit, not a lender. Conduits, however, were counting on the originator to underwrite the loan because that was the agreement. (There were other issues, but those are for New York Governor Eliot Spitzer and New York State Attorney

General Andrew Cuomo to take up, and fall outside the scope of this article.)

Because these contracts specified criteria that looked like eligibility rules, many alt-A lenders implemented eligibility rules and called them AUs. Most alt-A lenders did not employ the type of scorecard that is used by the agencies or that had been implemented at some subprime lenders. Those charged with implementing the AU were often unable to focus management's attention on this issue.

Many lenders had a simplistic model in place that they called an AU, but was not, by CC Pace's definition, an AU. In fact, some were only prequalification systems, while others were simply advanced PPEs. They did not evaluate credit in a manner that should have carried the same weight as a human underwriter's judgment.

Going forward, more focus must be placed on the use of scorecards as a vital part of the credit-decision process. A scorecard evaluates and quantifies risk, including tradeoffs, better than rules. This does not have to be a massive research effort; the industry knows which data elements are most predictive. It has to perform as a governor to keep the AU from being gamed.

4) AUs could be gamed. They were used to push borrowers beyond their limits.

Unfortunately, this is true, and it was seen in all spectrums of lending. AU does make it much easier to get alternative approvals than going back to a human underwriter many times, and often these approvals were "right at the edge."

Salespeople, whose incentive is tied to the loan amount, in some cases would upsell borrowers to the max. If a high-FICO® borrower asked for a $350,000 loan, he or she would often get not only an approval for that amount, but also an approval for $417,000—and perhaps other approvals as well.

There are two issues with this. First, the loan performance data used to develop predictive factors were collected at a time when there was not as much upselling. Therefore, data were collected about average distributions, not at the margin.

Second, the loans at the margin represent a higher level of risk, and this was not caught by the simple business rules employed by many AUs.

Using a scorecard would have stopped some of the marginal deals—but this, in fact, is itself an incomplete answer. Even the agencies' AU systems struggled with loans at the margin. Aside from halting the practice of upselling borrowers toward their limits, this is not an easy issue to solve.

5) Concentrated subprime lending represents a systemic risk that goes beyond the individual loan.

Subprime grew from 8 percent to 20 percent of the marketplace between 2003 and 2005. Alt-A grew from 2 percent to 13 percent. Given today's default rates, the case could be made that it makes sense to combine them for evaluating their impact on the market. Combined, they grew from 10 percent to 33 percent, a more than tripling of market share. In addition, these loans had a tendency to be concentrated in certain neighborhoods. So overall, they were one out of three loans; yet in many neighborhoods, they were at least one out of two loans.

Statistics support that a single foreclosure lowers housing values within one-eighth of a mile of that property by 1 percent. The second foreclosure has a similar effect. As housing prices fall, however, that can trigger foreclosures and cause a ripple effect.

Suppose a neighborhood has 100 homes in it. A single subprime loan that is surrounded by 99 prime loans poses a different risk than 50 subprime loans intermingled with 50 prime loans.

If the default rate on a subprime/alt-A loan is 7 percent, that means one out of 14 loans will default. This means that in a 50/50 neighborhood, loans will default, and when they do, housing prices will drop, which may have a cascading effect that will actually cause other loans to default.

The industry had never seen subprime/alt-A market shares like these, so it was unequipped to deal with this situation when it started to unfold.

AU has some culpability in this, in that all the AUs we have seen make a decision about a single loan. Unlike planned unit developments (PUDs), with investor loans there are no guidelines or, at the speed things were moving, even a way to tell the concentration.

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So how can we say that AU will be more important than ever?

Although it has flaws, implemented with the correct procedures and controls, AU is the best way to balance sales and efficiency with quality control over the credit decision. This is not only CC Pace's opinion; it is also the opinion of the industry leaders we surveyed.

CC Pace recently spoke with a broad cross-section of the industry regarding AU and what the future might hold, and published a white paper, *The Future of Automated Underwriting: More Important Than Ever,* outlining our findings.

Research methodology

The objective of our research was to better understand the industry's beliefs about the current AU marketplace and its future direction. CC Pace interviewed a cross-section of the industry to gather data and insights (see Figure 1).

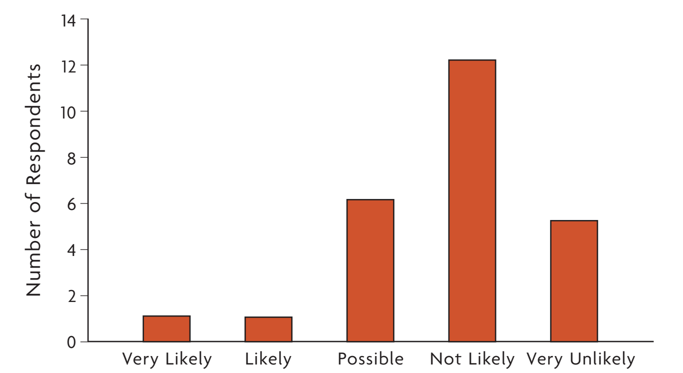
Our focus was on lenders, but we also included a number of mortgage insurance companies and vendors in our process. In all, we interviewed 40 people from 32 companies across four industry segments (top-10 lenders, other leading lenders, third-party service providers and technology vendors), spending some 30 to 60 minutes with each of them.

Participants responded candidly, providing their own personal view (not necessarily that of their employers), and were promised anonymity. We asked 10 questions, ranging from

Figure **1**	**Summary of CC Pace Interviews for its AU Research by Segment and Responsibilities**			
	Top-10 Lenders	**Leading Lenders**	**Third-Party Service Providers**	**Technology Vendors**
Number of Interviews (40 total)	9	13	9	9
Job Responsibilities of Interviewees	Sales, Operations and Due Diligence	Lending Executive, Secondary Marketing, Product Development, Underwriting, Operations and Sales	Senior Executive, Credit-Risk Management, Contract Underwriting, Product Development, Sales and Technology	Senior Executive, Sales and Operations

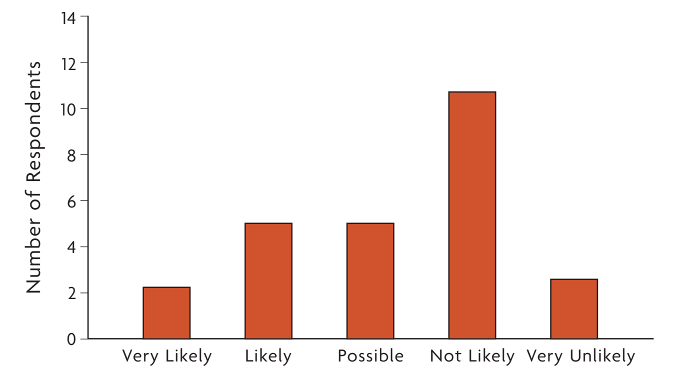
Source: CC Pace

Figure **2** **Finding: Manual Underwriting for Non-Agency Is Unlikely to Continue**



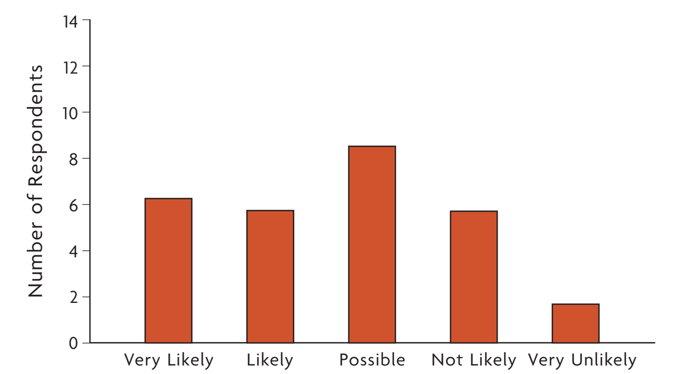
Source: CC Pace

Figure **3** **Finding: Each Investor Having its Own AUS Is Possible, But Not Likely**



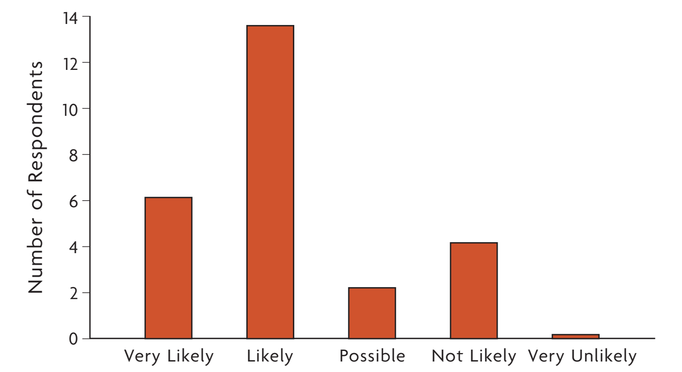
Source: CC Pace

Figure **4** **Finding: It Is Possible That an Industry Utility Will Emerge**



Source: CC Pace

Figure **5** **Finding: It Is Likely That the Top-10 Will Have Their Own AUS**



Source: CC Pace

"What is an AUS [automated underwriting system]?," to having participants rate the likelihood of different scenarios.

We tested four hypotheses with our respondents regarding how the AUS market might develop going forward:

- The top-10 lenders will all have proprietary AU systems.
- There will be multiple AUSes by investors.
- Freddie Mac's Loan Prospector® and Fannie Mae's Desktop Underwriter® will dominate for agency products; manual underwriting will be preferred for non-agency products.
- An industry utility will develop, providing access to multiple AUSes.

Respondents were asked to rate each scenario as very likely, likely, possible, not likely or very unlikely.

Not all participants provided an answer for each of the four hypotheses. And where we had multiple participants from the same company, the responses were averaged for reporting and analysis.

There is no consensus view for the future of AU, but some scenarios are more likely than others. As we tested our future-state hypotheses with our participants, there was no runaway winner, but some scenarios were given more credence than others. There was, however, a clear loser as a very high number reacted against the likelihood of manual underwriting remaining prevalent for non-agency loans.

In rejecting this scenario, our participants expressed remarkably consistent rationales for why the status quo wouldn't last:

■ Because of the liquidity crisis, lenders will manually underwrite non-agency loans over the next six to 12 months, but this was viewed as a short-term response to guidelines changing faster than systems can be updated (see Figure 2).

"Manual underwriting will not be the norm for non-agency product—human underwriters are not necessarily better, and they cost more," responded one secondary marketing manager for a credit union.

■ Non-agency investors will learn from the 2007 crisis and recalibrate their models, especially with respect to layering of risk.

Deemed more plausible, but still unlikely, was the notion of investors creating multiple AUS offerings (see Figure 3). This hypothesis met with the widest variability of response, related directly to differing expectations for the future of the alt-A and/or subprime market.

■ Many do not expect new AUS development due to the investment and data/analytics required. Furthermore, respondents expressed belief that the agencies will expand to alt-A, negating the need for non-agency AUSes.

■ Many agreed that portfolio lenders and niche product lenders will want to have their own proprietary AUS.

While still far from a sure bet, the emergence of an industry utility providing access to multiple AUSes was widely held to be distinctly possible (see Figure 4).

■ Many felt that an AU utility might arise, although it was unclear how. Respondents thought it was a good idea, but questioned the viability—people have tried and failed in the past. Some questioned who the driver would be.

■ Respondents believe that a third party would provide it, but that mortgage insurance (MI) companies, Wall Street and rating agencies could be the driving force. Agencies will stay on the sidelines, but will not resist this development. However, agency involvement would create success.

Very few respondents thought the marketplace would adopt a single view of credit.

The notion of the largest lenders—particularly those in the top 10 of originators—developing their own proprietary AUSes was considered likely by most of the participants.

■ There was strong agreement that the top-10 lenders are investing in—and will probably succeed in—establishing their brand at the point of sale (see Figure 5).

■ Respondents were consistent in thinking that every top-10 lender has or expects to have its own AUS. Lenders want a single decision point for the full credit spectrum, for either their own product or for best execution between the agencies. Each has or will have its own read of mortgage credit, and expects to have an integrated decision engine for cross-selling other consumer lending products.

■ The common wisdom was that vertically integrated Wall Street firms will have their own AUS, but other Wall Street firms will not.

In CC Pace's opinion, it is critical that every company has an AU strategy, a position on when and how it will use AU, and whose AU it will leverage.

What does this mean for you?

In CC Pace's opinion, it is critical that every company has an AU strategy, a position on when and how it will use AU, and a plan for whose AU it will leverage.

It has been wisely said that, "the absence of a strategy is still a strategy"—the importance being that if you choose not to have a distinct strategy of your own, at least arrive at that point through a deliberate consideration and not as a result of not thinking through the implications. The default strategy for many is to be an agency lender and leverage their technology.

In developing our white paper, we found that the top-10 lenders, as a group, all appear to be following a very similar strategy—to use their AU as a branding tool. Their strategy appears to be to have their own, single brand for the full credit spectrum in which they lend. The AU strategy is to provide a single decision point for their own products and for the agency product they produce.

By exposing only their own brand to their brokers and correspondents, they are striving to make the decision non-fungible and thereby gain greater certainty of retaining the loan. In this way, their AU strategy is an important contributor to their business strategy.

It is important that all lenders—not just the largest—take a fresh look at their AU strategy and determine if it is still valid and in line with their business strategy. A clear case can be made for portfolio lenders with niche products having their own AU.

Large regional prime lenders probably don't need to develop their own AU, but they do need to consider if the default strategy, using one or both agency AUs, is the right strategy for them. It should be a conscious decision, not simply the result of inaction.

And if having your own AU is the right strategy, make sure you don't stop at eligibility and call it a day. Carefully think through what AU means to you. Consider the "box" versus the "platform." Determine how to best achieve a layered-risk scorecard in the context of your decision engine of choice. When it comes to AU, our recent past shows that we simply can't afford to cut corners. MB

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NOTE: CC Pace's white paper referenced in this article can be found at www.ccpace.com/resources/documents/automatedunderwriting.pdf. CC Pace is a boutique mortgage banking consulting firm specializing in strategy, process improvement, and technology selection and implementation, with a focus on measurable bottom-line results for clients.