Credit Scoring: A Progressive Decade in Small Business Lending

Skepticism has given way to confidence as LaSalle Bank enters its tenth year of scoring small business loans. Success has come through the evolution of credit-scoring within the institution, and the author recounts LaSalle’s four steps of examination, acceptance, production, and integration.

In 1995, the RMA/Fair Isaac Small Business Scoring Service debuted as a new tool to assist lenders in evaluating credit risk. The scorecards brought the promise of an objective rank-ordering of risk that would reduce costs, speed turnaround times, and increase competitiveness in small business lending. At the time the Scoring Service was introduced, small business lending was not receiving the attention and resources that found in the market today. For most commercial banks, small business was wedged somewhere between middle-market and consumer lending, but hadn’t yet carved out a unique identity. Lenders, however, were beginning to realize that a successful small business lending strategy could not be supported structurally or profitably through a traditional commercial lending approach. Credit scoring, and the automated platforms that grew out of the adoption of scoring, quickly revolutionized the state of small business lending. However, as many lenders were quick to point out, credit scoring was unproven.

How has scoring evolved over the past decade? Credit scoring, in the context of small business lending, has been a catalyst for change and a new identity for most commercial banks. LaSalle Bank has had a centralized small business credit-processing group since 1994, has used scoring since 1996, and has worked with an automated platform since 1998. We waded into the scoring waters with caution and, to some degree, skepticism. I suspect that this has been true for many organizations. Over time, we gained more confidence to the point that scoring is the backbone that supports automated decisions and portfolio management processes that didn’t exist just a few years ago.

So how did we reach the point where scoring is so integrated in our environment today? I would suggest that effective scoring evolved through an...
increasingly complex circular continuum in four stages: 1) examination; 2) acceptance; 3) production; and 4) integration.

Examination
During the examination stage, a lender is considering credit scoring as a tool to support other initiatives, such as centralization, more consistent underwriting, or efficiency. Scoring, which is a statistical model, requires the developmental commitment within an organization, similar to any new methodology.

Purchasing the scoring model is the easy part. Understanding how the model aligns with your organization’s credit culture and risk appetite is much more challenging.

Acceptance
After a lender has finished analysis of the scoring model, the next challenge is to gain internal approval. While the empirical analysis completed during the examination stage may be difficult to argue against, it is likely there will be other, more philosophical or conceptual challenges to using a scoring model. To successfully move through the acceptance stage, scoring needs an internal champion. It’s not enough for business-line or central-credit-processing group managers to tout the benefits of scoring. Yes, it’s possible to make reasonable comparisons to the consumer lending and mortgage environments; however, even those operations were not as sophisticated several years ago as they are today. Most of us probably didn’t know our personal FICO score back in 1995.

Commercial banking has always been a relationship-driven business. Senior lenders and risk managers who grew up with traditional commercial loan underwriting are not necessarily quick to accept that a small-business scoring tool will lead to more consistent decisions and better credit quality over the long term. For example, they might ask, How can a credit score replace balance sheet and cash flow analysis? In fact, why aren’t certain financial ratios prominent attributes within the scoring model? Where does collateral fit into the decision process?

These are legitimate questions. It’s the scoring champion’s job to effectively illustrate the power of the scoring model and the anticipated benefits. This can be a significant cultural hurdle within an organization, and I am still occasionally surprised to learn of mid-to large-sized organizations that do not rely more fully on scoring. While most are scoring loans, many continue to use other, more traditional underwriting approaches in addition to the score and have not made the leap to rely more exclusively on the score as an objectively driven credit decision.

How can you convince the traditional underwriting stalwarts? The empirical evidence developed during the validation process has to take a significant role. The parallel decisioning process should illustrate that, in large part, the scoring model is ultimately leading to the same credit decisions. Take time to address the distribution of scores and how the model rank-orders risk. By getting down to these basics, the mystique or simple unfamiliarity of credit scoring will be broken.
down to more understandable concepts. An extension of this exercise is to walk through a few live deals that the bank underwrote and scored. Looking at declines can be just as effective as looking at approvals. This can help reassure skeptics that the deals that would have been reviewed in more detail by an underwriter can successfully go through the scoring process. Also, most scored underwriting approaches leverage at least a handful of other policy or business rules in conjunction with the score, such as:

- Prohibition of certain industry segments deemed to be highly risky.
- Minimum time in business.
- Minimum time under current management.
- No history of bankruptcy.
- No history of tax liens.

While the scoring model may in fact address these factors, such rules also help better define the target applicant population. The rules will also reassure the traditional underwriter that the evaluation process isn’t ignoring practical, meaningful risk considerations during the underwriting process.

Senior managers aren’t the only ones who will need convincing. What about the sales channel? Whether it’s branch staff or dedicated relationship managers, there will need to be a lot of dialogue, training, and information sharing.

At the lower end of the exposure spectrum—say, $100,000 and under—the ability to sell scoring to the sales channel will be relatively easy. At this dollar level the benefits of scoring more clearly translate to the customer experience. Have you ever met a small business lender who would prefer to get two years of tax returns, a personal financial statement, an accounts receivable aging, and perhaps more, versus simply asking the customer to complete a two-page loan application? Perhaps I’m being a bit facetious, but at the low end of the market, the use of scoring can have a very tangible impact on the customer’s experience in originating a loan with the bank.

Certainly, one of scoring’s selling points is the ability to deliver a faster decision with less information. That has real benefit on how a lender sells and positions the lower-end products. It also offers a real benefit to the customer, who can now originate a credit request in minutes versus taking several days to compile “the package” of financial information generally needed for a traditionally underwritten loan.

What about those larger loans—say, $250,000, $500,000, or more? Can scoring work there, too? The answer is yes. Several commercial banks are scoring larger exposures. But first, you must determine if this fits within the culture of your organization. Not everyone is the big guy on the block. Just because it’s being done elsewhere, that doesn’t mean it’s the right choice for your bank. For now, let’s assume that the scoring model has been developed and validated on such a population of larger credits. This is where the credit and risk teams have to market scoring to the sales channel, because there will be more resistance as scoring moves up the exposure ladder. The most significant issue will be the concern that the score will begin to strip away the intangible factors that often influence a judgmental decision. How can you measure customer goodwill with a scoring model? To gain acceptance, the goals of implementing scoring need to be clearly defined and communicated to the sales channels. This won’t be easy, as scoring may be seen as a threat to approval rates, a shift in credit appetite, and, worst of all, an attempt to reduce the role of the loan originator in the field or branch.

The primary goal for this stage of implementation should be buy-in. Senior managers and the sales channel alike should know that, fresh out of the gate, you will not begin relying heavily on the score to decision $500,000 deals. Rather, you will begin using scoring at a level where the risk is more contained so the skeptics can feel comfortable that any perceived pitfalls will be limited. You want to become comfortable with how the model is working in the day-to-day environment, and then evaluate logical and practical steps to expand scoring. More on this later.

Production

As you move the scoring model into production, you must...
again bear in mind that getting the credit score is the easy part. A greater challenge is treating the scores with consistency and not allowing underwriters to subjectively interpret why deals were scored in a certain fashion. Also, overrides—both high side and low side—must be controlled before the scorecard, and not judgment, can drive the decision process. It seems too simple to state so plainly, but communication is vital at this stage. Just as the sales channel may feel threatened by implementing a scoring model, so, too, will underwriters. Reality or not, planned or unplanned, the “black box” of scoring will create anxiety about job security and perhaps career progression.

Again, outline the goals of scoring to (at least) take the edge off underwriters’ anxiety and (at best) gain their confidence. Plan ahead for practical discussions about deals that just seem not to make sense. Such a discussion will happen on the first day, and planning for such uncertainties will help allay lack of confidence in the scoring model. Remember not to overanalyze situations and to rely on the scoring model. There will always be deals at the margin that just don’t seem to be logical. But, spread across a portfolio of many accounts, the risk is quite diminished.

**Track overrides.** For certain underwriters, letting go of prior underwriting methodologies can be difficult. They still want to be perceived as adding value in the process. Be prepared to track high-side overrides (those deals that score above the cutoff but were declined) and low-side overrides (those deals that fell below the cutoff, but were approved) and monitor this closely, both collectively across all applications as well as individually for each underwriter. Overrides can indicate who is and who is not readily adapting to the use of the score to make the decision.

To address overrides, I think back to a portfolio that we took over following an acquisition. Both LaSalle Bank and the acquired institution had historically been using the RMA/FI scoring model. After gaining experience with the newly acquired portfolio, the performance was notably weaker. Cutoff scores had been nearly identical, yet delinquency rates were somewhat higher and the loss rates were materially higher. The reason? Low-side overrides. By looking back at the original scores and credit decisions, we found that the acquired portfolio had experienced a higher percentage of low-side overrides compared to the existing in-house portfolio. The predictive nature of the model was clearly evidenced as the override portfolios began reaching the 18-to-24-month horizon, which is where most of the delinquencies and losses begin to surface. This experience helped validate the predictive power of the model and served as very tangible evidence of the danger that may lie in not controlling the level of overrides, particularly on the low side.

**Integration.** Finally, you arrive at a maturity phase when scoring has generally been readily adopted within the organization. This is where integration enters the picture. In this context, integration means leveraging more fully the capability of existing or new scoring applications to assist the business in improving the origination process and potentially extending scoring into portfolio management. At this point, scoring has probably been in use for two to four years, and the historical results of using the scorecard can be measured in real-world results, not a parallel validation process that anticipated outcomes. By now, scoring has become part of the daily routine for underwriters. But once the organization begins to mature with scoring, how can scoring be further leveraged?

**Overlays.** Many lenders have created additional score overlays to support their origination process. In this approach, two different scorecards are mapped to a grid—one on the y-axis and another on the x-axis.

- **One approach that has been used** is to plot the Scoring Service score on the x-axis and the personal FICO bureau score for the weakest business principal on the y-axis. The best (or lowest) risk class would appear in the upper-right quadrant. The worst (or highest) risk class would appear in the lower-left quadrant. This approach may help identify certain deals at the margin that perhaps may not be approvable. However, I would suggest that such an approach may be flawed, since both scores are in fact predictors of future delinquency. Furthermore, the personal FICO score of the business principals is already a signifi-
A MORE EFFECTIVE SCORE OVERLAY APPROACH MAY BE TO IDENTIFY A SECOND SCORING MODEL THAT PREDICTS SOMETHING OTHER THAN FUTURE DELINQUENCY—FOR EXAMPLE, A BANKRUPTCY SCORE.

cant part of the scoring model. So, overlaying two scores that were designed to assess the likelihood of future delinquency may not be the most effective approach. Perhaps establishing a business rule for a minimum personal bureau score for the business principals would be more practical. This, in essence, potentially helps address the small population of deals that may be above the established score, but the business principals appear to have weaker personal credit histories.

- A more effective score overlay approach may be to identify a second scoring model that predicts something other than future delinquency—for example, a bankruptcy score. This approach may actually provide lift to the Scoring Service score, since the factors and intention of the score itself are very different. A personal bankruptcy score, for example, takes total debt burden into consideration more than a standard delinquency-based score. Thus, an individual business owner could have a relatively high personal FICO score because repayment patterns have been very satisfactory, but that same owner could have a high bankruptcy score (meaning higher risk of bankruptcy) simply because of high levels of debt outstanding or high utilization of revolving accounts. Again, the models are attempting to quantify different risks. Studying charged-off accounts that were decisioned primarily with a delinquency-based scorecard may reveal trends in the risk profile of the credit loss population. Overlaying another scoring model, like a bankruptcy score, may help identify potentially riskier applicants that would otherwise pass the regular, single-score model approach. The benefit, of course, is that the second overlaid model would help identify weaker deals at the time of application, when they can still be declined or perhaps moved into a review process prior to approval.

Further integration with loan origination typically also means the adoption of an auto-decisioning strategy. This is where the promises of decision power and cost efficiency really come together in reducing turnaround times and overhead.

Proactive portfolio management. How can scoring be further integrated into the risk management of a small business portfolio? Thus far, our focus has been on originations. Scoring also can play an important role in portfolio management—more importantly, proactive portfolio management.

At a basic level, the major consumer credit bureaus all offer monitoring tools that may help small business lenders identify events or trends in the business owner’s credit history that may have a negative impact on the repayment of the loan that the business owner likely guarantees. Certainly at the lower end of the exposure spectrum, there is a high correlation with the business owner’s personal credit history and that of the business. These monitoring tools are basic in nature, but are effective in identifying key events such as bankruptcy, lien or judgment filings, and more. Additionally, personal scores can be run as often as desired, which allows the lender to identify trends or significant shifts in an individual’s risk profile potentially before a significant event such as bankruptcy occurs.

Such early identification of deteriorating situations may allow the lender to have dialogue with the business owner and may be at a stage where the lender still has options for existing the credit or at least controlling future exposure to the borrower. The major business credit bureaus offer similar services that can shed light on the business directly—like vendor payment history, lien or judgment filings, management changes, bankruptcy, etc.

Behavior scoring. To have scoring integrate with portfolio management, you must move beyond monitoring and incorporate behavior scoring. Over the last few years, this has been an area of significant development for small business lenders. Similar to origination scores, there are pooled data (generic) and custom models being used today. Generally, portfolios or product classes are rescored periodically—
quarterly, monthly, or, if running a custom model, even daily.

The most robust behavior scoring tools incorporate internal data, such as deposit account information, loan payment history, line of credit utilization rates, and so forth, with external data from both the business and consumer bureaus.

By its very name, a behavior score is designed to reflect the risk of a particular borrower based on the way he or she behaves—that is, how accounts are handled, how loans and trade obligations are paid, etc. The behavior score really picks up where an origination score stops. So, once a deal is on the books, the behavior score helps the lender monitor the borrower over the life of the credit. Periodic shifts in a particular borrower’s behavior score can be tracked to identify accounts that are materially deteriorating. Again, the intent is to be able to do this in a proactive fashion so that action can be taken to protect collateral or limit exposure.

However, behavior scores shouldn’t be used solely to identify risky or weakening credits. They also may be used to offer strategic increases to low-risk borrowers, adjust pricing, or assist in tactical marketing strategies. The integration of behavior scoring can become its own operating strategy that can affect portfolio growth as much as it can assist in controlling credit losses.

Perhaps just as important, though, is the powerful use of the behavior score across an entire portfolio, product group, or origination channel. Shifting from a detailed account-level perspective to a broader portfolio perspective, behavior scoring can identify risk shifts from period to period. In a very timely snapshot, behavior scores give powerful insight to the ever-changing state of a portfolio. The impact of various origination tactics, changes in the origination cutoff score, or the incidence of higher low-side overrides will likely be clear in trends observed from the review of behavior scores from one period to the next.

Scoring and fraud. If you’ve never experienced any fraud event, you’re very lucky. But don’t rest too easily, because those of us who have had experience with fraud know that origination scores generally can’t prevent it. Certainly, the most obvious cases will be caught—for example, a deceased person’s identity being used in a credit application. But origination scores don’t insulate a lender from fraud, and fraudsters are continually changing their tactics and sophistication. The attributes of a strong score from more commonly used scoring tools are no secret, so fraudsters can manipulate application information to strengthen their scores. Other due diligence and information verification steps need to be in place to address fraud risk. Perhaps ironically, new tools in the market take a scoring approach in an attempt to identify and quantify potential fraud risk. These tools are becoming more sophisticated, but fraudsters will likely stay a shady step ahead of lenders and information providers seeking to identify their tactics.

Evolution Doesn’t End

This article began by suggesting that the evolution of scoring is a circular continuum that starts with examination, moves to acceptance and production, and finally takes firm hold at the integration stage. Yet it appears to be rather linear in progression. This is true. However, scoring models change, are refreshed, or may simply become outdated, perhaps even ineffective, over time. Also, applicant populations change, and selling strategies may tap into new types of applicants. Thus, the process must begin anew every year or so.

Certainly, we become progressively smarter with scoring as we continue to gain more experience with different models and different applications for how scoring can be used. The good news, then, is that the second, third, and further times around the circle become progressively easier. Even if a model isn’t being updated or replaced, it needs periodic validation to demonstrate its continued predictive power in the context of its use.

Ten years from now, it will be interesting to look back and assess how scoring has been further integrated into small business lending and how it supports our daily risk activities. That’s the thing about a continuum: It doesn’t end.

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