

# Managing Current Credit Score Technology

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Managing loan risk was historically about the relationship between the lender and the borrower. With the advent of empirical technological solutions, a third party, the credit score was added into the equation. Credit scoring is supposed to make life easier for the lender but is it resulting in more confusion? With the introduction of the Vantage score further adding yet another lender option it is worthwhile to see where we are today. This article is a snapshot of today's scoring environment and will visit four key issues important to retail lenders:

1. What are today's marketplace choices for credit score sets?
2. Why are lenders increasingly turning their backs on the marketplace choices?
3. Four key fundamentals to a better understanding of scoring
4. The six steps necessary to make credit scoring a full partner in the lending process

## The Market Today

When it comes to scoring models for credit approval today's lenders have a confusing array of choices. There are 16 score models with 340 subsets or sub-populations to choose from.

**Figure 1 Credit Score Choices Available to Lenders**

| Company           | Score Set Name                               | Score Designer | Sub-set Models |
|-------------------|--|----------------|----------------|
| <b>Equifax</b>    | Equifax Risk Score                           | Equifax        | N/A            |
|                   | Beacon 5.0                                   | Fair Isaac     | 30             |
|                   | Pinnacle 1.0 (Next Gen)                      | Fair Isaac     | 29             |
|                   | Pinnacle 2.0 (Next Gen V 2)                  | Fair Isaac     | 30             |
| <b>TransUnion</b> | Trans Risk                                   | Trans Union    | N/A            |
|                   | Empirica                                     | Fair Isaac     | 24             |
|                   | Precision (Next Gen)                         | Fair Isaac     | 24             |
|                   | Precision 2003 (Next Gen V 2)                | Fair Isaac     | 26             |
|                   | Next Gen FICO Scores                         | Fair Isaac     | 26             |
|                   | FICO Risk Score Classic                      | Fair Isaac     | 26             |
|                   |  |                |                |
| <b>Experian</b>   | Scorex Plus                                  | Experian       | N/A            |
|                   | Fair Isaac Risk Model (FICO)                 | Fair Isaac     | 30             |
|                   | Advanced Risk Score (Next Gen)               | Fair Isaac     | 30             |
|                   | Fair Isaac Risk Model V3 (FICO V3)           | Fair Isaac     | 30             |
|                   | Fair Isaac Advanced Risk Score (Next Gen V2) | Fair Isaac     | 29             |
| <b>Fair Isaac</b> | Expansion Set                                | Fair Isaac     | 4              |

The credit score models offered by the three Consumer Reporting Companies (CRCs) and Fair Issac are shown in the table above. Fair Issac is included because of their Expansion model that is used to grant credit for potential borrowers with little or no credit. For the most part the designer of the score set is Fair Issac although each CRC does have its own self designed model. The recently introduced Vantage score model is not included in this comparison.

Each model also has from 24 to 30 segments or sub-sets such as sub-prime, auto, bankcard, retail revolving and bank installment. These are used for product or industry specific lending.

### **The Reality of the Marketplace**

It is no wonder lenders, when faced with this confusing array of options, turn their back on them and are reluctant to budge from their historic model of choice. The actual offering of scoring models has been pared down by lender demand to those shown in figure 2.

**Figure 2 Lender Choices**

| <b>CRC</b>        | <b>Classic</b> | <b>Next Gen V. 2</b>    |
|-------------------|----------------|-------------------------|
| <b>Equifax</b>    | Beacon         | Pinnacle 2.0            |
| <b>TransUnion</b> | Empirica       | Precision 2003          |
| <b>Experian</b>   | FICO           | Advanced Risk Score 2.0 |

For the most part lenders have stayed with the classic line of credit score models and few have migrated to the Next Generation versions. In a number of cases lenders were even reluctant to upgrade to the newer versions of the classic models and only did so when the CRC stopped providing support for the older version.

**Figure 3 Score Set Typical Usage**

| <b>Lender Size</b> | <b>Score Set</b>        | <b>Sub-set Used</b> | <b>Importance of Score in Loan Decision</b> |
|--------------------|-------------------------|---------------------|---|
| <b>Small</b>       | Classic                 | No                  | 25%   |
| <b>Medium</b>      | Classic                 | No                  | 50%   |
| <b>Large</b>       | Classic/Next Gen        | Limited             | 80%   |
| <b>Very Large</b>  | Custom/Classic/Next Gen | Yes                 | 99%   |

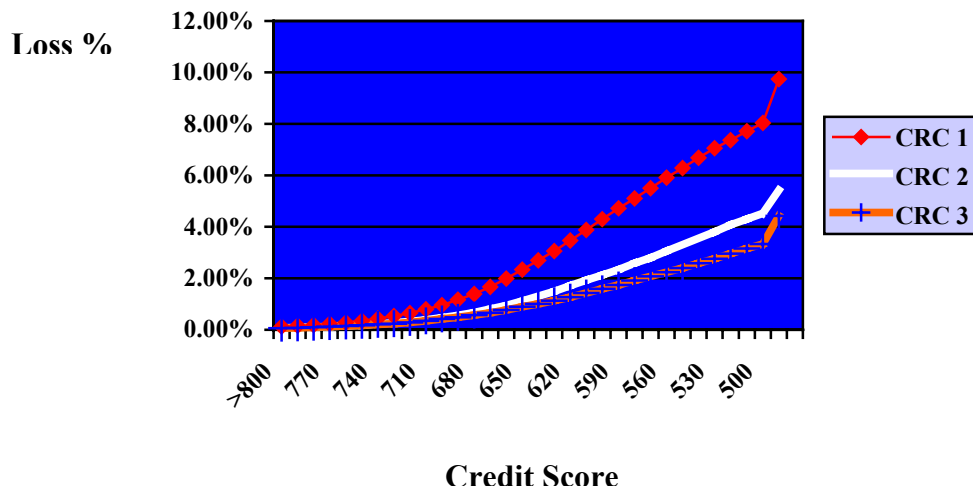
The reality of score set usage is also driven by the asset size of the institution as shown in figure 3. This is a dilemma for both the score providers and the lenders they serve. The CRCs would like to see greater usage of the newer models that represent a significant investment for them. Lenders are reluctant to changes in the process since any change affects the dynamics of risk management. The entire lending process is a tender balance of saying yes to the greatest number of borrowers while keeping losses at a minimum. This inherently places both groups, who are business partners, at odds when it comes to score set upgrades.

### **Key Fundamentals to a Better Understanding of Scoring**

There are four basic facts lenders need to take to heart concerning empirical technology.

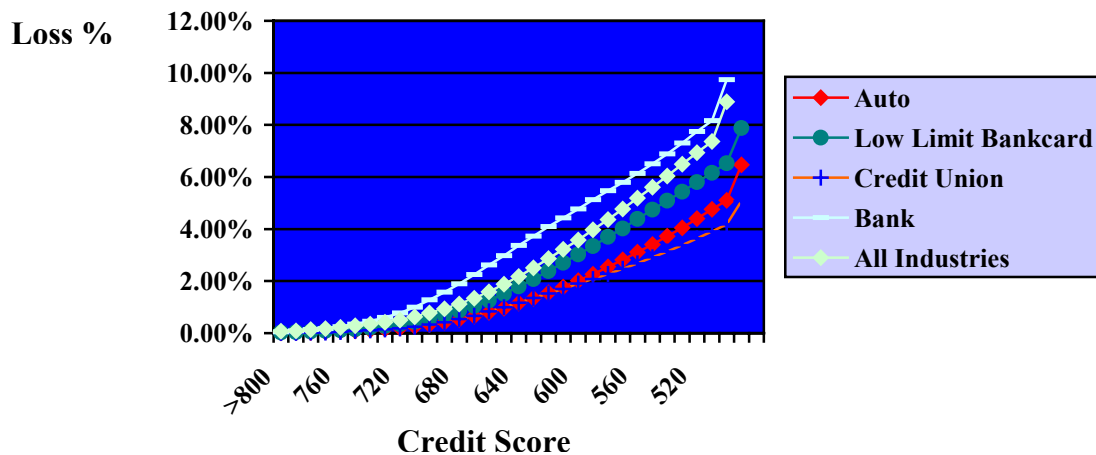
1. Credit scoring is a technology and like other technologies it evolves over time. Some of the CRC's classic models are based on 1995 to 1997 data. Do you use a 9-year-old computer?
2. Precision, precision, precision. The more precise a score set the better it is at doing its job, predicting loss. Newer score sets and their sub-sets provide higher levels of precision when properly applied to the underwriting process.
3. The level of risk for a given point score will be different between the three CRCs. Figure 4 below shows the point score to loss ratio for the same model offered by the three CRCs. In the critical mid to lower 600s the loss difference can be + or - 100 bp. This does not mean one model is less effective for use than another, it only means the lender must revisit cut-off score assessment if the CRC is changed.

**Figure 4 Same Model Different Consumer Reporting Company**



The level of risk for a given point score will also be different within a single CRC using the same model but using different sub-sets. Figure 5 shows this relationship. Again, this is not a flaw in model design but recognizes the differing risk parameters within the subsets. It actually shows the sub-sets can be more precise.

**Figure 5 Same Model Same Consumer Reporting Company Different Sub-sets**



### **What can a Lender do?**

Lenders are not without options for navigating the enhanced scoring environment.

1. The greater the precision the greater the reliability resulting in more approvals, lower losses and less processing costs. It is worth the effort to upgrade to the newer models.
2. Newer models are more precise. If you are using one of the classic models it is time to upgrade.
3. Subset models are more precise. See if your volumes justify the effort to adopt multiple sub-set models into your process.
4. Consider elevating the weight of a credit score in the overall decision process. This will pay dividends in reduced costs and with higher precision levels there is no increase in risk.

5. Understand there can be point differences between models and revisit risk level cut-offs and rate assessment tiers.
6. Internally track your own results by point score. The best validation is an internal one.

The fact most lenders are not taking full advantage of what the technological advances in credit scoring can do for them is good news. This means the migration from last century's technology offers a significant opportunity to enhance risk management, reduce expense and increase the bottom line.

Ken Williams is the President of KW Financial Solutions, a risk management and credit score consulting firm, and has held executive positions with Household International, Citibank and was President of Moebs Services, Inc.

As a national expert on credit scores his background dates back to 1972 where he managed and designed the credit process and criteria for retail lending, indirect lending and credit cards. Ken has worked with all three consumer-reporting agencies and was hired by Equifax to conduct loan training.

He is well known in financial services having taught hundreds of seminars on the state, national and international level including the Graduate School of Banking in Madison and state association lending schools. Ken also teaches finance at Robert Morris College.