White Paper

# Evaluating the Credit Risk of Non-Traditional Borrowers

Non-traditional borrowers require a non-traditional approach. Open new paths to profitable prospects.

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## Introduction

Lenders today must evaluate the creditworthiness of individuals and businesses as quickly and accurately as possible. Traditionally, they have relied on evaluations that use a person's credit history, as maintained by one of the major credit reporting agencies, to create a score that indicates how likely the person would be to default on their loan. But the standard method sometimes falls short of doing the job because not everyone has a robust history of using credit or alternatively may have a credit history that is not reflective of their true creditworthiness. Consequently, more and more lenders are turning to non-traditional sources, such as public records, to substitute for or enhance traditional credit bureau histories—especially for applicants who have rarely used credit in the past (in other words, those having "thin" or non-existent files). Non-traditional credit scoring relies on the detailed analysis of positive and derogatory life events, evidence of assets and address stability, presence of criminal convictions, liens, judgments or bankruptcies, positive identify verification and high-risk pattern recognition.

While non-traditional credit scoring helps lenders weed out higher-risk credit applicants from pools of credit seekers, it also lets them find untapped pools of creditworthy consumers who may be rejected by credit-bureau based scoring methods. For these reasons, six of the top ten bankcard issuers, three of the top four wireless providers and many other lenders have added non-traditional credit scoring to their new account evaluation process. They are finding that, much like the scoring tools derived from traditional credit bureau data, it is an effective tool for predicting future consumer behavior.

#### Market environment

Finding new creditworthy applicants is vital in order for a lender to achieve growth, but it is increasingly difficult to do in today's competitive lending environment. The average credit user carries about nine cards in his or her wallet; nevertheless, each cardholder's household receives approximately 30 additional solicitations for credit cards annually.<sup>2</sup> Students are becoming credit users at an early age: 83 percent of undergraduates have at least one credit card, with 32 percent having four or more. By the time they graduate, they've tripled the number of cards in their wallets and doubled their average credit card balance.<sup>3</sup>

Of course, card balances represent only a fraction of total indebtedness: there is also debt for cars, homes and education. Figures from 2004 reveal that nearly 75 percent of Americans carry credit cards, with about half maintaining a balance on their cards. The median number of bank cards per person is two, and the median credit limit is \$13,500.4



## Total debt, including mortgage debt, reaches nearly 100 percent of post-tax annual income<sup>5</sup>

The pool of traditional creditworthy consumers is nearing a total saturation point, leaving little to no room for borrowing. Therefore, credit issuers are looking for underserved or untapped markets: people who traditionally have relied on cash. New immigrants, young people new to credit and others with a cultural bias against credit offer the most potential for lenders seeking growth. However, many of these applicants have "thin" or "no-files," making scoring methods based upon traditional credit bureau data inadequate to determine their "true" creditworthiness.

Lenders hope these emerging populations, or even subprime segments with poor traditional credit scores, will hold the key to profitable portfolio growth if properly analyzed using non-traditional credit scoring. They want these scores to limit exposure to risk by identifying profitable customers often missed by standard analysis that relies on credit bureau history. The rewards for tapping into these markets, estimated to be about 50 million creditworthy individuals, 6 can be very high providing above market returns.

## Traditional credit scoring

Traditionally, managing credit risk has relied on the maxim that how a person has used credit in the past is the best predictor of how they will use credit in the future. In other words, if a person or business has paid its bills on time in the past, they are likely to pay their bills on time in the future. The more data one has about a consumer's credit history and the longer their experience using credit, the more likely it is that a creditor can predict future bill-paying behavior.

The scores that determine a consumer's creditworthiness derive from the consideration of many things: whether bills are paid on time, the amount of debt carried, the amount of credit available, the frequency of seeking credit, debt-to-income ratios and the existence of any delinquent bills. What they can't take into account in a timely fashion is that circumstances change: a person can move or lose his or her job, a family can be destabilized by illness or divorce, a wage earner can be imprisoned or die, and priorities can change with new responsibilities, such as children or aging parents. While not sensitive to all of these conditions, public records and other non-traditional data sources can reveal aspects about a person or a business that can balance or enhance standard credit histories, and can provide relevant information when credit bureaus know nothing about a given consumer.

For example, non-traditional credit data can tell a lender about asset ownership, presence of derogatory filings, address stability and tenure, utility listings and other factors that differentiate the credit worthiness of otherwise indistinguishable credit bureau no hits.

A score that relies on credit-bureau history is effective for most credit users, but it falls short of clearly evaluating a few important groups: young consumers who have not yet had access to credit and consumers who do not have positive credit history. Although these consumers may have sufficient income to be considered highly creditworthy, the traditional method of predicting their likelihood to default may deny them access to credit. The data demonstrating this potential creditworthiness reside in public records, and non-traditional credit scoring makes this analysis possible.



But what is public record and non-traditional credit data, and what does it reveal that credit bureau data might not? Public records constitute all the documentation that reflects on an applicant's life (or the life of a business) and is provided by a government entity that is open to public scrutiny. They usually are recorded by a government agency for purposes of identification, taxation and, when applicable, prosecution. They include home addresses and phone numbers; birth certificates and death certificates; marriage and divorce records; immigration or citizenship records; real property deeds, mortgages and liens; personal property titles and tax records; military records, criminal records and more. Privacy and safety concerns have recently reduced public access to vehicle registration data, driver's license data and Social Security numbers, but they constitute public data, as well. This data resides in the public domain and can round out information about individuals and businesses missing from credit bureau data.

Public records and non-traditional data sources have always been available, but they have not always been easily accessible. Reviewing them required travel and footwork, manual research and a tremendous amount of patience. Although electronic documentation and the Internet have made these data records more accessible, it is LexisNexis® that compiled, integrated, digitized and indexed them for precise, comprehensive searching.

## Enhancing credit scoring with LexisNexis non-traditional credit data

As a global leader in comprehensive and authoritative legal, news and business information, LexisNexis is also the industry leader in compiling and searching public record data. Using this data, LexisNexis developed scoring products to predict the creditworthiness of individuals and businesses, especially those without strong credit histories. The databases contain more than 4.8 billion searchable documents, with 7 million searchable documents added weekly. Its credit scoring solutions are empirically derived from more than 35,000 nationwide data sources, which document judicial, county courthouse, real and personal property ownership and Social Security issuance and deceased information.

LexisNexis gained additional data sources and an advanced supercomputing platform when Reed Elsevier acquired Seisint, of Boca Raton, Florida, and became a part of the LexisNexis Group of companies, along with its preeminent database of public records, LexisNexis® Accurint®. Now, the LexisNexis arsenal includes electronic directory assistance (updated daily); property, deed, mortgage and tax assessment data; criminal records, liens and judgments, professional licenses, driver's license and voter registration (for certain permissible purposes); and business data, such as Secretary of State, UCC filings and Yellow Pages Listings.

## Logic behind non-traditional Risk Assessment

The single most important factor in the success of any predictive score is the underlying power of the data used to build it. LexisNexis has access to a wealth of dynamically updated public record and non-traditional data that contribute to its predictive scores, making them exceptionally effective either as an alternative in the case of thin or no-file applicants or as an enhancement to traditional credit bureau-based credit scoring.

These non-credit data sources record historical information about an individual that is analogous to traditional credit history. Just as credit reports record derogatory credit events (delinquencies and charge-offs), public records chronicle certain life events that often are correlated with poor credit worthiness. Liens (especially unreleased liens), judgments, criminal convictions and bankruptcy filings are useful in differentiating higher risk applicants. Similarly, evidence of property ownership, property value and evidence of vehicles and other licensed assets provide relevant information about the economic lifestyle of an individual.



LexisNexis also documents the address history of an individual, as well as the phone listings for those addresses. Having a history of stable addresses with phone listings is evidence of responsible housing and utility payment—phone service will be disconnected if unpaid, and unpaid housing results in eviction or foreclosure. Credit bureaus do not typically record rent and utility payments, but non-traditional data sources do record when phone service is disconnected. Address stability is also evidence that a credit applicant pays their rent or mortgage responsibly.

Alternatively, residence in transient commercial addresses, such as hotels, motels or campgrounds, is often an indication of higher risk. Similarly, residence in an institution or correctional facility also raises red flags for risk, as would an indication that a person applying for credit is actually showing up as deceased in public records.

The LexisNexis scoring methodology resembles credit-scoring methods in that the prospective borrower provides identifying information during the credit application process. The creditor then cross-checks this data against known data about the borrower. Instead of checking credit information, however, LexisNexis reviews public record and other non-credit data, including driver's license and motor vehicle data and property information, looking for confirmation or inconsistencies in records that include name, address, phone number and Social Security numbers (SSN).

Other scrutinized data points include mortgage data, real property, tax assessments, the purchase or sale of real property (including dollar amounts), and vehicle registration (limited data). This scoring approach also utilizes evidence of positive and negative life choices—such as frequent moves, disconnected utilities or a criminal record—that might suggest a person's level of stability and responsibility.

The LexisNexis methodology produces a three-digit score indicating the level of the applicant's credit risk. Scoring can be done machine-to-machine in real time, interactive over a web-based application or in batch runs and can be completed in milliseconds. The creditworthiness predicted by non-traditional data and analytics correlates well with results returned by traditional credit scoring, so that a credit issuer can identify creditworthiness with these scores similar to how they would with traditional credit bureau scores.

## Overview of LexisNexis® risk scoring solutions

Our solution for scoring non-traditional populations is LexisNexis® RiskView<sup>TM</sup>, which provides a three-digit credit risk score to predict an applicant's likelihood of default over the first two years of an account's life cycle. RiskView can predict creditworthiness for applicants that have little or no credit history, as well as those with extensive credit history. It can serve both these groups of applicants because it does not use traditional credit history data to assess risk. Instead, it relies on the detailed analysis of positive and derogatory life events, evidence of assets and address stability, presence of criminal convictions, liens, judgments or bankruptcies, positive identity verification and high-risk pattern recognition derived from non-traditional data.



## Case studies

LexisNexis works closely with many lenders and financial institutions to implement non-traditional scoring solutions. LexisNexis has a suite of credit scoring tools that effectively evaluates the creditworthiness of applicants by inputting only standard identity elements (Name, Address, Phone, SSN and Date of Birth). These scoring tools can be used in almost any environment such as retail card, credit card, telecom and automotive finance, as the following case studies demonstrate.

The retail credit card market is traditionally known as high risk and high reward. Creditors must weigh their losses against their opportunities for gain, factoring in the profit they make on the goods they sell. This allows retail creditors to accept a much higher level of risk than non-retail issuers of credit, such as most commercial bank lending. But how can the retail creditor determine which group to continue offering credit, and which group to deny credit? The LexisNexis scoring solutions provide clear-cut insights into the decision (see Table 1).

| Table 1: Retail Card |         |                          |          |      |  |  |
|----------------------|---------|--------------------------|----------|------|--|--|
| RiskView<br>Score    | Accts   | Cumulative<br>% of Accts | Bad Rate | K-S  |  |  |
| < 653                | 9,331   | 9.3%                     | 20.6%    | 16.2 |  |  |
| 653-659              | 8,866   | 18.2%                    | 16.0%    | 25.9 |  |  |
| 660-665              | 10,244  | 28.4%                    | 12.1%    | 31.8 |  |  |
| 666-670              | 10,265  | 38.7%                    | 8.7%     | 32.9 |  |  |
| 671-674              | 8,509   | 47.2%                    | 7.1%     | 31.8 |  |  |
| 675-680              | 11,480  | 58.7%                    | 5.7%     | 28.3 |  |  |
| 681-686              | 9,762   | 68.5%                    | 4.1%     | 23.2 |  |  |
| 687-695              | 10,597  | 79.1%                    | 3.2%     | 16.3 |  |  |
| 696-708              | 10,119  | 89.2%                    | 2.8%     | 9.2  |  |  |
| 709+                 | 10,827  | 100.0%                   | 1.7%     | 0.0  |  |  |
| Total                | 100,000 |                          | 8.0%     | 32.9 |  |  |

The K-S statistic shown on the tables is a measure of the statistical power of the scores to predict credit loss rates. Traditional credit-based risk scores typically have K-S values that are comparable to these non-traditional credit scores.

Based on a population of 100,000 retail credit card users, 7,950 or 8 percent were considered "bad" credit risks based on serious delinquency or write-off after eighteen months of experience. The RiskView score indicates the predicted credit worthiness of an account. High (good) scores are associated with lots of positive public records and predict good credit performance. Low scores are associated with derogatory public records and predict poor credit performance. The table shows the very different actual credit performance between those individuals with a good score and those with a poor score. Good scoring accounts, above score 708, have a 1.7 percent credit default rate, compared with the 20.6 percent default rate of poor scoring accounts below 653.



The premium bankcard market (see Table 2) is more risk averse, so it targets a population having higher credit scores. Only 2.1 percent from an initial population of 100,000 consumers were considered bad risks following eighteen months of use. After reviewing the data segmented by score, the credit card issuer can significantly reduce the risk of loss to 1.6 percent just by raising the approval score for consumers to above 672.

| Table 2: Credit Card |         |                          |          |      |  |  |
|----------------------|---------|--------------------------|----------|------|--|--|
| RiskView<br>Score    | Accts   | Cumulative<br>% of Accts | Bad Rate | K-S  |  |  |
| < 672                | 9,937   | 9.9%                     | 6.4%     | 21.0 |  |  |
| 672-679              | 9,959   | 19.9%                    | 3.9%     | 29.6 |  |  |
| 680-685              | 8,368   | 28.3%                    | 2.5%     | 31.4 |  |  |
| 686-690              | 10,209  | 38.5%                    | 2.4%     | 32.7 |  |  |
| 691-695              | 11,192  | 49.7%                    | 1.7%     | 30.6 |  |  |
| 696-699              | 9,571   | 59.2%                    | 1.6%     | 28.1 |  |  |
| 700-704              | 8,811   | 68.0%                    | 0.9%     | 22.8 |  |  |
| 705-710              | 11,076  | 79.1%                    | 0.7%     | 15.3 |  |  |
| 711-717              | 10,406  | 89.5%                    | 0.6%     | 7.7  |  |  |
| 718+                 | 10,471  | 100.0%                   | 0.6%     | 0.0  |  |  |
| Total                | 100,000 |                          | 2.1%     | 32.7 |  |  |

The wireless phone industry experiences higher-than-usual delinquencies and risk due to issues unique to its business, such as leftover contract terms recorded as uncollected debt. Telecom analyzes and segments the creditworthiness of its customer base according to scores that reach 1,000 instead of the more traditional 800 or 900 (see Table 3).

| Table 3: Telecom  |         |                          |          |      |  |  |
|-------------------|---------|--------------------------|----------|------|--|--|
| RiskView<br>Score | Accts   | Cumulative<br>% of Accts | Bad Rate | K-S  |  |  |
| < 750             | 10,004  | 10.0%                    | 38.9%    | 13.0 |  |  |
| 750-807           | 10,027  | 20.0%                    | 31.7%    | 21.3 |  |  |
| 808-841           | 10,057  | 30.1%                    | 25.0%    | 25.3 |  |  |
| 842-869           | 9,987   | 40.1%                    | 24.6%    | 28.9 |  |  |
| 870-901           | 10,136  | 50.2%                    | 20.2%    | 29.7 |  |  |
| 902-929           | 10,031  | 60.2%                    | 14.9%    | 27.1 |  |  |
| 930-952           | 10,393  | 70.6%                    | 13.5%    | 23.4 |  |  |
| 953-962           | 9,442   | 80.1%                    | 9.7%     | 17.7 |  |  |
| 963-971           | 10,092  | 90.2%                    | 5.6%     | 8.9  |  |  |
| 972+              | 9,831   | 100.0%                   | 5.0%     | 0.0  |  |  |
| Total             | 100,000 |                          | 19.0%    | 29.7 |  |  |



After following 100,000 new telecom customers for approximately eighteen months, a total of 18,951 accounts, or 19 percent, were considered "bad" based on delinquency or write-off. This loss rate could have been substantially reduced if the poor RiskView scoring customers had been required to pay an upfront deposit (as is done for poor credit scoring new customers). Those customers who scored below 808 had credit losses of over 31 percent. Eliminating them from the portfolio would have dropped the overall loss rate to less than 15 percent.

#### Sources

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#### For more information:

Call 866.858.7246 or visit lexisnexis.com/risk/credit-risk-management.

#### About LexisNexis Risk Solutions

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