Changing the Personal Loan Game With Alternative Data and Analytics

JULY 2019

Prepared for:

EQUIFAX®
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INTRODUCTION

Lenders making unsecured personal loans can face a challenging landscape, with lots of competitors vying for qualified applicants and with a change in the credit cycle looming. Many of these lenders are using alternative data and alternative credit scores to better inform their marketing and loan decisioning so that they can not only serve borrowers who are good credit risks but may otherwise be declined but also offer borrowers across the credit spectrum more competitive terms. These lenders may also employ advanced analytics and machine learning or other artificial intelligence (AI) techniques to effectively harness the vast array of data at their disposal.

Drawing from the findings of a recent survey of U.S. consumer lenders conducted by Aite Group and sponsored by Equifax, this paper details the extent to which these lenders are using alternative data, whether they are deploying advanced analytical approaches or AI and the factors driving that adoption, and the challenges and market gaps they perceive.

METHODOLOGY

To understand the extent to which consumer lenders use alternative data or employ advanced analytical techniques for the marketing and decisioning of personal loans, Aite Group conducted a survey of 18 leading U.S. consumer lenders. Over half of survey participants represent nonbank lending institutions, such as online lenders, storefront installment lenders, marketplace lenders, and institutions that primarily offer loans at the point of sale. The remaining participants represented banks and credit unions that have significant unsecured personal loan portfolios. The survey was conducted in May and June 2019.

Given the size and structure of the research sample, the data provide a directional indication of market conditions and are qualitative in nature. Executives contributing to this research have extensive responsibilities related to analytics, data science, marketing, and credit risk.
CHALLENGES FACING CONSUMER LENDERS

Consumer lenders expect varying degrees of challenges on a number of fronts over the next year (Figure 1). Chief among these concerns is dealing with external fraud risk, particularly for those lenders that primarily originate loans online. Even though most consumer lenders in the survey note that they use a variety of data sources and techniques to verify an applicant’s identity, they are constantly challenged by fraudsters’ evolving tactics, especially those who apply for loans using synthetic identities.

Other key challenges involve identifying and attracting new qualified borrowers and retaining existing customers. These challenges speak to the strong competitive forces in the unsecured personal loan market, with emerging fintech lenders and a growing number of depository institutions vying for market share and trying to expand their potential borrower pool while managing credit risk. Complying with applicable regulations also continues to be a top concern, since, as one lender notes, “Regulators don’t care how hard you try; mistakes are not an option.”

Challenges related to managing credit risk and loan decisioning are expected to be more manageable. When asked about this view, lenders report they have confidence in the underwriting models. Much of this is because many of these lenders employ a wide range of data—both traditional and alternative—in their loan origination process, as described in more detail in a subsequent section. Respondents note that they use machine learning and other techniques to refine how that data informs underwriting models over time to effectively manage their portfolios.

Figure 1: Relative Anticipated Challenges for Consumer Lenders

Q. How challenging do you expect the following issues to be for your consumer lending business for the next year? (N=18)

<table>
<thead>
<tr>
<th>Issue</th>
<th>Very challenging</th>
<th>Moderately challenging</th>
<th>Little to no challenge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fraud/ID verification</td>
<td>50%</td>
<td>39%</td>
<td>11%</td>
</tr>
<tr>
<td>Retain customers</td>
<td>33%</td>
<td>50%</td>
<td>17%</td>
</tr>
<tr>
<td>Identify/attract applicants</td>
<td>28%</td>
<td>50%</td>
<td>22%</td>
</tr>
<tr>
<td>Regulatory compliance</td>
<td>28%</td>
<td>50%</td>
<td>22%</td>
</tr>
<tr>
<td>Loan decisioning</td>
<td>17%</td>
<td>56%</td>
<td>28%</td>
</tr>
<tr>
<td>Manage credit risk</td>
<td>11%</td>
<td>78%</td>
<td>11%</td>
</tr>
<tr>
<td>Create positive customer experience</td>
<td>11%</td>
<td>72%</td>
<td>17%</td>
</tr>
<tr>
<td>Monitor portfolio</td>
<td>50%</td>
<td>50%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Source: Aite Group consumer lender survey, May to June 2019
POTENTIAL CHANGE IN CREDIT CYCLE

One great unknown on the minds of many consumer lenders is when a change in the credit cycle might occur and the severity of that inevitable downturn. Consumer lenders have enjoyed good economic conditions for many years, bolstered by low unemployment and relatively few defaults. Many of these lenders believe we are overdue for a change in the credit cycle. Seventy-eight percent of survey respondents anticipate such a change in the next two years, with about a quarter of this group believing it will occur within the next 12 months (Figure 2).

Figure 2: Change in Credit Cycle Expected Within Two Years

When asked what they thought the extent of a future downturn might be and what effect it would have on their unsecured personal loan portfolios, all expect either a slight or modest impact (Figure 3). None of the lenders surveyed believes that such a downturn will have widespread impacts across their portfolio or be anywhere near as severe as the Great Recession in 2008. Lenders mention, however, that the repayment of outstanding personal loans will likely be less of a priority than other obligations, such as the payment of utility bills and mortgage or auto loans, if a consumer's debt exceeds his or her income. As a result, unsecured personal loans will likely experience higher levels of delinquency and default than other loan portfolios.

Source: Aite Group consumer lender survey, May to June 2019

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Many lenders are already proactively taking steps to monitor for the first signs of changes in the health of their portfolios and are learning how best to tweak underwriting models to deal with various economic conditions. Several lenders specifically mention that they are developing “playbooks” that could be quickly deployed for different scenarios and could allow for a consistent response that avoids over- or under-reaction to whatever severity of downturn occurs. Others spoke of constructing automated scorecards or other monitoring tools fueled by their own analytics as well as broader economic indicators.

Those lenders that primarily cater to nonprime borrowers have somewhat different perspectives than other respondents, since their business often grows in a countercyclical fashion. A downturn would likely bring these lenders new prospects, and they believe a downturn would not necessarily bring additional hardship to their existing customers, since those borrowers “live in a perpetual recession” regardless of overall market conditions. Nonprime lenders note, however, the danger that the credit facilities on which they rely to fund loans may be impacted by a downturn, and they are looking at ways to ensure continuity of operations and their ability to meet either stable or growing demand.
ALTERNATIVE DATA AND SCORES

The majority of consumer lenders (13 of 18 lenders surveyed) report that their institutions use alternative data or scores for their unsecured personal loan businesses. However, the types of alternative data sources used by these lenders vary by purpose.

For marketing and prescreening, consumer lenders are most likely to use trended credit data, specialty bureau data, and alternative credit scores (Figure 4). Trended credit data allows institutions to see who is on the upswing that they might want to offer credit to before competitors do so. Specialty bureau data can give lenders insight into nonprime or thin/no-file consumers with successful repayment history of payday and other alternative types of loans that are not incorporated into traditional credit files, and alternative scores provide marketers with additional creditworthy prospects they may not find by looking at traditional sources alone. Other common types of alternative data used for marketing or prescreening purposes include identity-verification data and social-media data. Identity-verification and social-media data are typically used in this context to anticipate who might be looking for credit and to confirm that an offer is going to the right person, especially when such offers are made through digital channels.

Figure 4: Types of Alternative Data Used for Marketing or Prescreen Purposes

Results look somewhat different for the types of alternative data most commonly used for loan-decisioning purposes. The most common alternative data for respondents is transaction or account data, which lenders can obtain on a consumer-permissioned basis. Consumer lenders can use such data to understand cash flow, verify income and assets, and check for signs of financial distress, such as low or declining balances and overdrafts. Many lenders also use alternative data as part of their identity verification process to help in their efforts to protect against fraudsters. The use of alternative data for identity verification is especially common for those lenders that originate all or most of their loans online. Finally, a third or more lenders
report using an alternative credit score, specialty credit bureau data, and utility or other bill payment data in their decisioning process (Figure 5).

**Figure 5: Types of Alternative Data Used for Loan Decisioning**

Q. What types of alternative data or scores does your company use for loan decisioning?

(Select all that apply; N=18)

<table>
<thead>
<tr>
<th>Type of Data</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transaction/account data</td>
<td>61%</td>
</tr>
<tr>
<td>Identity-verification data</td>
<td>50%</td>
</tr>
<tr>
<td>Alternative credit score</td>
<td>44%</td>
</tr>
<tr>
<td>Specialty credit bureau</td>
<td>33%</td>
</tr>
<tr>
<td>Utility/bill payment</td>
<td>33%</td>
</tr>
<tr>
<td>Trended credit data</td>
<td>28%</td>
</tr>
<tr>
<td>Employment</td>
<td>22%</td>
</tr>
<tr>
<td>Social media</td>
<td>11%</td>
</tr>
<tr>
<td>Other</td>
<td>6%</td>
</tr>
<tr>
<td>Education</td>
<td>0%</td>
</tr>
<tr>
<td>Don’t use</td>
<td>28%</td>
</tr>
</tbody>
</table>

*Source: Aite Group consumer lender survey, May to June 2019*

Eight of the 13 lenders that report using alternative data or scores for loan decisioning do so as part of every loan origination. The remainder only do so for a subset of loans when applicants do not qualify under traditional criteria in order to assess whether they can be approved on a “second chance” basis. One nonbank lender describes its underwriting as a waterfall in which highly qualified applicants have a quick, frictionless journey and more marginal applicants must take additional steps. For example, if that lender wants to use applicants’ account transaction data as part of the loan decisioning process, those applicants must agree to connect their bank account using a third-party service. That lender does not want to ask all applicants to take this extra step, as it suspects that doing so would lead to higher abandonment rates among those applicants who have their choice of lenders.

How lenders use traditional and alternative credit scores varies by the type of borrower they typically serve. Lenders are evenly distributed among those that use both traditional and alternative scores for every loan origination, those that use traditional scores for every loan origination and alternative scores for a subset of marginal applicants, and those that solely use alternative scores. The latter category of lenders that use alternative scores to the exclusion of traditional ones serve an exclusively nonprime population of borrowers for whom traditional scores are not particularly useful.

Of the 13 lenders that report using alternative data for loan decisioning, all but one believes it is either critical or useful to use alternative data to underwrite applicants regardless of where they
fall on the credit spectrum. As one lender notes, “Even consumers with credit scores of 780 or higher aren’t created equal; everyone is either moving north or south and at different speeds. We need [alternative] data to truly understand what’s happening.” Several lenders report that the use of alternative data helps them refine the terms on personal loans and streamline the origination process, both of which can help differentiate them from their peers.

**THE ALTERNATIVE DATA DECISION**

When lenders decide to incorporate alternative data or scores into their marketing or loan decisioning process, they weigh a variety of factors (Figure 6). The consumer lenders in our survey report the most important factors that led to their use of alternative data are the need to better assess the risk and the ability to approve more applicants or offer better terms. Other factors that led to their adoption of alternative data are technology investments that enable them to access and utilize the data for marketing and decisioning, and the need to get better marketing results than they can using traditional data alone.

**Figure 6: Important Factors in Decision to Use Alternative Data and Scores**

<table>
<thead>
<tr>
<th>Key factors</th>
<th>Secondary factors</th>
<th>Less-important considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Need to better assess applicant risk</td>
<td>• Technology investments that enable access and utilization</td>
<td>• Competitive pressures from peer adoption of alternative data or scores</td>
</tr>
<tr>
<td>• Ability to approve more applicants or offer better terms</td>
<td>• Difficulty generating good marketing results from traditional data or scores</td>
<td>• Regulatory environment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Greater availability of alternative data or scores</td>
</tr>
</tbody>
</table>

*Source: Aite Group consumer lender survey, May to June 2019*

In terms of which type of alternative data or score to select and which vendor to engage with, consumer lenders note that accuracy and reliability are paramount, along with confidence that they can use the data or score in a compliant manner. The ability to use the data or score with existing internal resources and the recency of the data or score rank slightly lower. While lenders are always cognizant of cost, this is a less-important consideration provided the others are met (Figure 7).

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1. The remaining lender notes that alternative data is most useful for providing borrowers who would otherwise be deemed too risky with a second chance to qualify for a loan.
ALTERNATIVE DATA CHALLENGES

Consumer lenders cite many challenges in using alternative data. Some of those challenges are internal, such as getting the institution to understand the value of alternative data or scores, demonstrating their impact, and getting compliance officers comfortable with the use of such data. Several lenders note that regulators often send mixed messages on their views of alternative data or have not made their views on certain use cases known. Once an institution decides to use a certain type of alternative data or score, there are also integration challenges in terms of technical capability, time, and resources.

Challenges also exist with the data itself. For example, multiple lenders note that the underlying methodology used to construct an alternative credit score may change or that the underlying sampling or other inputs can evolve over time. Lenders may not receive timely notice of these changes, and significant impacts to their underwriting may occur.

One element of alternative data or scores that is not challenging for the lenders participating in the survey is budget: Of the 13 lenders using alternative data or scores, eight characterize their budget as robust, and the remaining five note their budget for alternative data or scores is adequate for their needs. The lenders participating in the survey find that the use of alternative data generates significant ROI because it allows them to more effectively compete and grow their borrower pool. As long as alternative data produces such results, their institutions are willing to provide the resources to support it.
USE OF ADVANCED ANALYTICS AND ARTIFICIAL INTELLIGENCE

Consumer lenders are increasingly incorporating advanced analytical approaches and AI techniques such as machine learning to better harness the large amount of in-house and third-party data that is available for use for marketing and loan decisioning. The majority of consumer lenders in our survey report using these techniques for both purposes, and additional lenders are planning to incorporate such use in the near future.

All but three of the lenders in the survey use advanced analytics or machine learning to some degree (Figure 8). Most of these lenders use these techniques for both marketing and loan decisioning functions. The three lenders whose institutions do not use advanced analytics or AI techniques plan to do so within the next two years.

Figure 8: The Majority of Consumer Lenders Use Advanced Analytics or AI/Machine Learning

Source: Aite Group consumer lender survey, May to June 2019

MARKETING AND DECISIONING USE CASES

Lenders often report using machine learning to identify which consumers—whether they are prospective or existing customers—should receive offers. One lender feels more comfortable using machine learning for marketing since “a lender does not have to worry about explaining why someone did not make the list for a marketing campaign in the same way they would have to explain what data led to an adverse loan decision.” In addition to more precise targeting of loan offers, two respondents that rely on lead-generation sites for at least a portion of their applicants note that machine learning helps determine which leads to pursue.

For loan decisioning, lenders most commonly mention using machine learning to identify which attributes should be incorporated into underwriting models. Generally, these institutions’
underwriting models rely on logistic regression; however, one lender reports that it has recently transitioned to incorporating machine learning directly into its underwriting model after significant investment and a commitment from leadership to make this happen, and another lender reports it will get there within the next two years. One additional lender reports that its institution employs advanced analytics in the development of its custom credit score, which is used for decisioning of all loans.

**ANALYTICS AND AI CHALLENGES**

The biggest challenge lenders face when using AI such as machine learning, particularly for loan decisioning, is explaining model results. Many lenders note that their inability to explain adverse actions is a key barrier to using machine learning techniques directly in their underwriting models. As one lender remarks, “If I can’t explain it, I can’t build underwriting infrastructure around it.” Another lender concurs, saying, “We’d use machine learning a lot more for loan decisioning if we didn’t have to worry about explainability.”

Other challenges are related to the understanding of these techniques among less-technical staff, how to measure their return on investment, and identification and execution of insights that are derived from the use of these techniques. Less challenging to the lenders in our survey are securing resources and internal talent for these purposes (Figure 9).

**Figure 9: Challenges in Using Advanced Analytics and AI/Machine Learning**

- **Top challenge**
  - Inability to explain model results (explainable AI/reason codes)

- **Other challenges**
  - Difficulty measuring return on investment
  - Lack of understanding internally
  - Difficulty identifying valuable insights
  - Difficulty executing on valuable insights

- **Not challenging**
  - Company is risk averse/slow to adopt new ideas
  - Limited analytic tools or tech capabilities
  - Insufficient resources
  - Lack of analytics/data science skill set in-house

*Source: Aite Group consumer lender survey, May to June 2019*

All of the lenders that incorporate some degree of advanced analytics or machine learning into their marketing or decisioning functions are seeing the benefit of these approaches. Our respondents are evenly split between whether incorporating these techniques is critical or important; none of these lenders thinks advanced analytics or machine learning is merely nice to have or unimportant. Finally, these lenders feel that their institutions sufficiently invest in advanced analytics and machine learning—they all report robust or adequate budget for these purposes.
CONCLUSION

Consumer lenders with extensive unsecured personal loan portfolios anticipate a variety of challenges, in addition to potentially contending with an economic downturn. Most—but not all—of these lenders use a variety of alternative data or scores to better target marketing or prescreening offers and to determine whether and how to extend credit to applicants. Lenders using alternative data are somewhat split between using such data in evaluating each loan application, and whether they believe such data is best used to evaluate only borrowers who would otherwise be deemed too risky or to evaluate applicants across the credit spectrum. Alternative data and scores are assessed based on lenders’ views of their accuracy, compliance, and recency, and the ability of their institution to integrate and easily utilize them; cost factors are secondary considerations if these basic needs are met.

Most of the consumer lenders surveyed already use advanced analytics or AI techniques, and those that do not plan to do so in the next two years. The most common approach these lenders are taking is to use machine learning to ingest a broad variety of data to determine which attributes are most useful in their underwriting models. While most lenders are still using logistic regression for these models, one lender is using machine learning for underwriting, and another hopes to make the transition within a couple of years. The ability to adequately explain adverse actions is a key challenge in this transformation.
ABOUT EQUIFAX

Equifax is a global data, analytics, and technology company and believes knowledge drives progress. The Company blends unique data, analytics, and technology with a passion for serving customers globally, to create insights that power decisions to move people forward. Headquartered in Atlanta, Equifax operates or has investments in 24 countries in North America, Central and South America, Europe, and the Asia-Pacific region. It is a member of Standard & Poor's (S&P) 500 Index, and its common stock is traded on the New York Stock Exchange (NYSE) under the symbol EFX. Equifax employs approximately 11,000 employees worldwide. For more information, visit Equifax.com and follow the company’s news on Twitter and LinkedIn.
ABOUT AITE GROUP

Aite Group is a global research and advisory firm delivering comprehensive, actionable advice on business, technology, and regulatory issues and their impact on the financial services industry. With expertise in banking, payments, insurance, wealth management, and the capital markets, we guide financial institutions, technology providers, and consulting firms worldwide. We partner with our clients, revealing their blind spots and delivering insights to make their businesses smarter and stronger. Visit us on the web and connect with us on Twitter and LinkedIn.

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