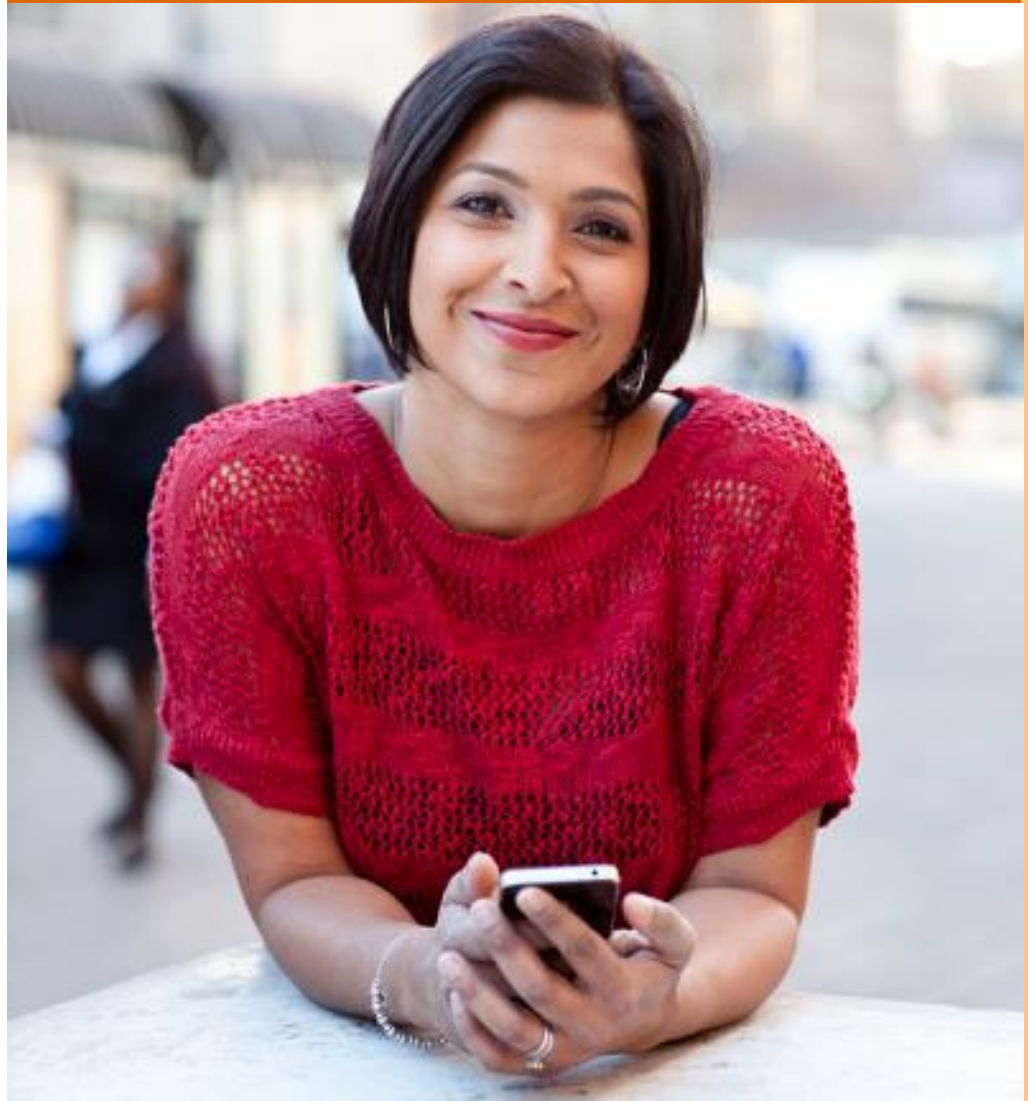# *Is it time for consumer lending to go social?*
How to strengthen underwriting and grow your customer base with social media data

Consumer Finance Group

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pwc

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Why go social?

As credit underwriting evolves, and while credit standards and appetite move with economic cycles, the process largely remains the same. Lenders are using the same basic information they've used for decades to determine creditworthiness – with salary, job history, and credit score serving as the primary data points.

While these valuable pieces of information will likely remain at the core of credit decisions, a wider array of data with the potential to provide more accurate risk scoring and better decisioning is now available. This alternative data is driven largely by the explosion of social media which provides unprecedented amounts of information that can support decisions about an applicant's creditworthiness. A few innovative lenders are already incorporating social media data into their credit underwriting process – now is the time to examine this growing trend to see how it might benefit your organization.

Lenders that take advantage of the data generated by social media may be able to differentiate themselves with enhanced underwriting and customized service offerings.

Consider the following scenario:

Problem: A lender has been experiencing high denial rates for applicants younger than 30-years old, and is at risk of losing market share as its borrower population ages. The lender assesses its current underwriting practices and finds the majority of these denied borrowers are applying for low dollar personal loans and don't have the credit histories needed to qualify.

Objective: The lender is interested in finding a way to expand its borrower pool and identify a subset of these potential customers who may not be as risky as their traditional credit profiles indicate.

Approach: To gather additional information for underwriting, the lender initiates a targeted marketing campaign that requests applicants temporarily connect to the lender on a personal social network. The lender uses the connection to confirm that posts contain information consistent with the stated loan purposes. Personal social network check-ins and posts from other popular social media applications may also provide insight into spending habits. The lender may also request that applicants join the company's online financial responsibility group, which lets the lender see the applicants' profiles and confirm education and work history. The number of connections on the networks can be used both to validate the profiles themselves and to assess the strength of applicants' professional networks.

Outcome: This information supports the loan decision process by providing additional validation of applicants' perceived risk. With this information, the lender can offer loans to more qualified borrowers at reasonable rates, while also increasing the likelihood of stronger brand loyalty.
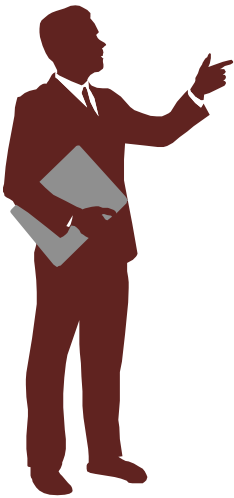
Leveraging data from applicants' social media presence may bring tangible opportunities and benefits to lenders:

Capture new customer segments – Alternate underwriting data may help lenders assess the creditworthiness of applicants with "thin" credit files. This, in turn, may help expand their customer base to include demographics that are difficult to underwrite – including the unbanked, underbanked, and millennials.

Provide a differentiated customer experience – Applicants are more than a credit score, and the inclusion of other factors in the underwriting process can demonstrate this understanding. Customers will appreciate being treated like more than just a number, which could strengthen brand loyalty.

Strengthen existing underwriting processes – With more data points, the validity of credit decisions may be enhanced thereby helping to limit losses.

Prevent fraud – Information found through social media sites may help supplement fraud-prevention efforts and flag potential fraudulent activity during the application process – *before* a loan is approved.

Develop a competitive edge – The 24x7 availability of comparable loan rates, as well as product and fee information has made lending a more commoditized business. As a result, lenders may need to increase their competitive edge in order to reach strategic goals and improve the bottom line.

Regulatory considerations

Lenders utilizing social media still must comply with all regulatory requirements – there is no social media exception to compliance. Recent regulatory guidance on the use of social media from the Federal Financial Institution Examination Council (FFIEC) acknowledges that financial institutions are increasingly using social media, and emphasizes that they must comply with all regulatory requirements regardless of the form of communication, including Equal Credit Opportunity Act (ECOA), the Fair Housing Act and Gramm Leach Bliley privacy protections.

For example, that means that, to comply with the ECOA and Regulation B, lenders relying on social media information for credit underwriting will need to conduct fair lending reviews and take other steps to ensure that their reliance on social media information to make credit decisions does not discriminate against consumers on a prohibited basis. The guidance highlighted that lenders relying on social media information to make credit decisions will need to take steps to ensure that they do not request or otherwise use in a prohibited manner information about an applicant's race, color, religion, national origin, or sex, all of which may be apparent or available from third-party social media sources.

Another key consideration highlighted in the guidance is ensuring that a notice of credit denial that is based on social media information clearly indicates the social media information relied upon. This will be necessary both to comply with ECOA and to reduce the risk of committing prohibited "unfair, deceptive or abusive acts or practices" (UDAAP). The reliability of social media information varies broadly, so it will be important, both for compliance and to avoid turning away creditworthy borrowers, to provide consumers with an opportunity to correct erroneous or misleading social media information the lender has relied upon.

Lenders will need to consider the specific regulatory requirements for individual asset classes when determining which social media data elements can be incorporated into those products' respective credit models. Additionally, lenders will need to evaluate investor guidelines to determine whether the use of alternative data elements is permitted. A one-size-fits-all approach may not be appropriate, and lenders should ensure that their incorporation of social media data is tailored not only to their operational goals but also to their regulatory and investor expectations.

In addition to addressing compliance risk, lenders considering using social media information in connection with their lending must address the risks inherent in the use of social media. For example, social media information may or may not be true or, even if true, may be misleading in its social media context. As such, it does not automatically have the same credibility as W-2 forms, pay stubs or banking statements.

As a result, any lender intending to rely on that information in connection with a credit decision must take that risk into account as they determine, for example, which social media information to rely on, how much reliance to place on it, the decisions to which it will apply, and the level of controls it will to apply to social media information that is considered as part of the underwriting process. A failure to do so could result in regulatory compliance risk discussed above as well as financial and reputational risk.

A closer look

Why now?
Data – everywhere

Recent trends in the consumer finance market have created opportunities for innovative solutions. Shifting demographics, credit trends, and new competitors are forcing banks to re-think their credit underwriting strategies, and to consider the use of social media to enhance underwriting.

Going social can attract more customers

Millennials

$1.3 trillion
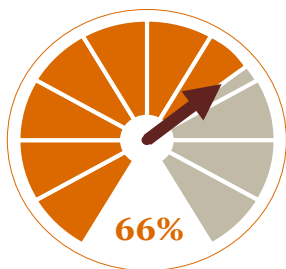*The purchasing power of millennials*

66%

Millennials pose unique challenges for banks. They're tech savvy and connected – and they're super users of social media. Although they haven't yet amassed wealth on the same scale as older consumers, they have a combined purchasing power of $1.3 trillion. [1] But according to a recent study, more than half of millennials don't think their bank offers anything different than other banks. And many expect more innovation and banking solutions from the technology sector than the banking sector.[2] Moving away from strictly traditional processes and embracing social media fits in with millennials' expectations.

Millennials typically have less established credit histories, increasing the potential usefulness of alternative data sources. And the continuing effects of the great recession – such as the tough job market – often delay major purchases and prolong the amount of time it takes millennials to establish a credit history. Nearly two-thirds of millennials have used co-signers in the past, another indication of the struggles millennials have faced in establishing individual credit histories.[3] Using social media data in the underwriting process could help banks appeal to this segment, and strategically add valuable customers to their portfolios.

66% of millennials are classified as sub-prime. But that doesn't mean that 66% are truly high credit risk. A lack of data combined with student loans creating high debt-to-income ratios simply make their risk look elevated when using traditional credit scoring.[4]

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[1] The Millennial Generation is Changing the Face of Consumer Marketing. Market Wire. January 15, 2014. Avention, viewed February 19, 2015.
[2] "The Battle to Bank Millennials." The Financial Brand. January 20, 2015. Avention, viewed February 19, 2015.
[3] Schutte, Arjan. "Disrupting Auto Finance." Bank Innovation, October 30, 2014.
[4] Ibid.

Borrowers without credit scores

According to Experian, at least 64 million consumers don't have a credit score. Many lenders have traditionally steered clear of this demographic – which largely consists of recent college graduates and immigrants – due to the perceived risk and the difficulty of evaluating creditworthiness. But 40% of these so-called "unscoreable" consumers are homeowners, and large numbers hold professional jobs or are retired. Income distribution was also found to be in line with consumers who do have credit scores.[5]

64 million
consumers have no credit score

The three major credit bureaus have developed a new credit scoring model, known as VantageScore, which is designed to facilitate credit assessment among consumers with little to no credit history. The model looks at 24 months of credit history rather than just six months, and adds alternative "big data" such as rental history as well as utility and phone bill payment history. The VantageScore model assessments determined that 10 million of the 64 million consumers without a credit history were not high risk, but were near-prime or prime consumers.[6]

Credit trends require a fresh approach
Temporarily impaired credit histories

In addition to unbanked or under banked consumers, many borrowers also have temporarily impaired credit. For instance, some people with otherwise pristine credit histories experienced hardship associated with the economic downturn. But this can be difficult to identify using traditional credit scoring. Alternative data points can be more effective in identifying one-time versus recurring credit issues, and can provide more insight into consumer behavior.

## *New competitors are pushing the social media envelope*

The tight credit market that followed the financial crisis provided plenty of opportunity for both new and niche lenders to gain traction with displaced customers. With few available options, people with frozen or reduced personal and business lines were willing to consider a broader and alternative range of lenders, such as peer-to-peer lenders, marketplace lenders, or non-bank online originators. These nimble market entrants have now had sufficient time to refine their creative business and delivery models, and they pose a greater competitive threat. Consider the following examples: one lender uses location data from a personal social network and eCommerce sites to validate occupancy and stability of residency, checking if the IP addresses are located where the borrower said they lived or worked. Another social media-savvy lender which offers cash advances for small businesses asks borrowers to grant them access to their eCommerce site and other online payment accounts, letting the lender assess the business' performance based on real-time sales and delivery information.

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[5] Ellis, Blake. "Millions without credit scores not so risky after all," http://money.cnn.com/2013/08/14/pf/credit-scores/, viewed February 1, 2015.
[6] Ibid

The impact of new competitors and alternative lending models on traditional banking is already being recognized in the marketplace. A recent article by the Federal Reserve Bank of Cleveland contrasted a decline in the total amount of money lent through bank-originated consumer-finance loans with rapid growth in the peer-to-peer lending market (see graph below). [7] Though it may be difficult to isolate the impact of the recent financial recession from other factors impacting the decline in bank-originated lending, the accelerated growth and potential impact of new competitors is being closely monitored.

Billions of dollars
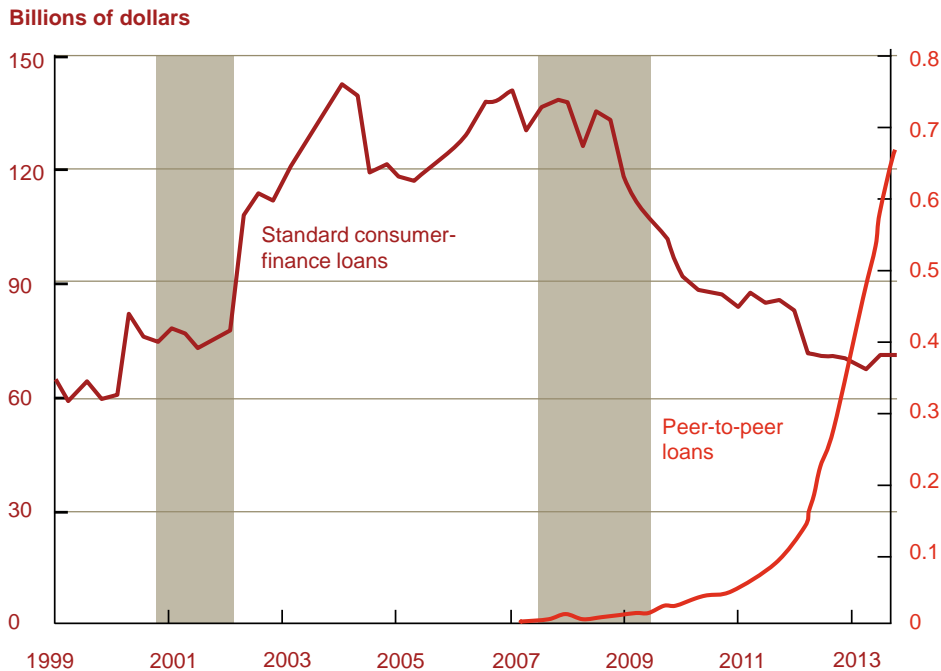
Source: Clevelandfed.org

How social media can enhance underwriting

Lenders have several options for incorporating social media into the credit decision making processes, depending on their underwriting strategies and their risk appetite. Social media data can be a tool that allows them to expand their population of eligible borrowers, by providing alternative data points that mitigate risk and allow an increased acceptance rate for borrowers with thin files. Alignment to the organizational risk profile may require the use of different data elements or different approaches for integrating the data.

Lenders may choose to incorporate social media data directly into the initial underwriting model. Some lenders may choose to leverage social media underwriting as a "second look," offering borrowers the option for an additional review if their application was initially denied. This can help manage potential customer concerns by only using social media for borrowers who consent to it.

Other lenders may choose to implement a broader "second look" for all denied loans in their pipeline to expand their pool of potential customers and maximize their customer base. In short, having an understanding of your organizational goals and the level of social media savvy among your customer base should guide where social media data fits into your underwriting program.

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[7] Demyanyk, Yuliya, "Peer-to-Peer Lending is Poised to Grow," https://clevelandfed.org/Newsroom%20and%20Events/Publications/Economic%20Trends/2014/Peer-to-Peer%20Lending%20is%20Poised%20to%20Grow, viewed February 1, 2015.

As we described above, it will be critical for lenders using social media information as part of their underwriting to have a robust risk management structure in place to help ensure that the use of social media does not violate regulatory requirements, such as the Equal Credit Opportunity Act, the Fair Housing Act, and Gramm-Leach Bliley Act privacy requirements. For example, as the joint regulatory agency guidance on social media highlights, lenders should consider the potential impact of the use of social media information on their adverse action notification requirements, ensuring that a notice of credit denial that is based on social media information clearly indicates the social media information relied upon.

A market view: consumer lending and small business lending

We've explored how social media data can enhance underwriting on a broad scale. In this section, we take a more in-depth look at how some participants in the consumer lending and small business lending markets are incorporating social media in their decision frameworks. As stated above, utilizing the methods below are not without risk, may draw additional scrutiny, and should be incorporated in accordance with the lender's risk profile and only after ensuring compliance with fair lending, privacy and other applicable laws and regulations.

Consumer lending

Basic personal and professional data – Some lenders are incorporating information such as borrowers' job histories from personal and professional social networks into their underwriting. This may be used not only to capture these data points but also as a supplemental fraud prevention tool to verify data elements such as occupation, employment history, phone number, and other key data points.

Personal network – Some lenders consider the social media contacts that are in an applicant's network, and look at these associations in compliance with regulatory guidelines as an indicator of an individual's lending risk, for example, for applicants who don't have a credit score or have thin credit. If an applicant's associations are responsible borrowers with stable employment and good credit histories, it may strengthen the probability that the applicant is also a responsible borrower.

Here's how it works: One company looks at an applicant's social media contacts to determine if any are also their customers. If these friends rarely have late or missed payments, it could count in favor of the applicant – especially if the applicant interacts with these friends often.[8] *Additionally, the age of their social media accounts and the volume of activity within them can indicate an applicant's interconnectedness and stability with their network.*

Professional network – Some lenders apply similar concepts to an applicant's professional networks. The individual's job and the jobs their connections hold may provide insights into the strength of the applicant's job stability.

Here's how it works: Applicants who have a network of people with high-income jobs, the potential for high-income jobs, or stable employment may supplement other data for a lender to conclude the applicant has job stability.

Customer-provided data – To establish an estimated earning potential for borrowers with brief job histories, some lenders look at information such as the college a loan applicant attended and what their major was.

Behavioral "character" data – Some lenders offer financial education modules. By allowing borrowers to demonstrate their willingness to take proactive steps to improve their credit profile, a lender may identify which applicants the lender believes may be more likely to take other steps to preserve their credit history. This concept – that financially educated borrowers are more responsible – isn't new for the industry, but social media offers a new platform for its use.

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[8] Lobosco, Katie. "Facebook friends could change your credit score," http://money.cnn.com/2013/08/26/technology/social/facebook-credit-score, viewed February 1, 2015.

For instance, one US startup is using behavioral data related to financial responsibility as a predictor of creditworthiness for borrowers with thin credit profiles. The company partners with lenders during the credit card application process and offers applicants training in financial responsibility. If the applicant elects to participate in the training, they're deemed a less risky borrower.
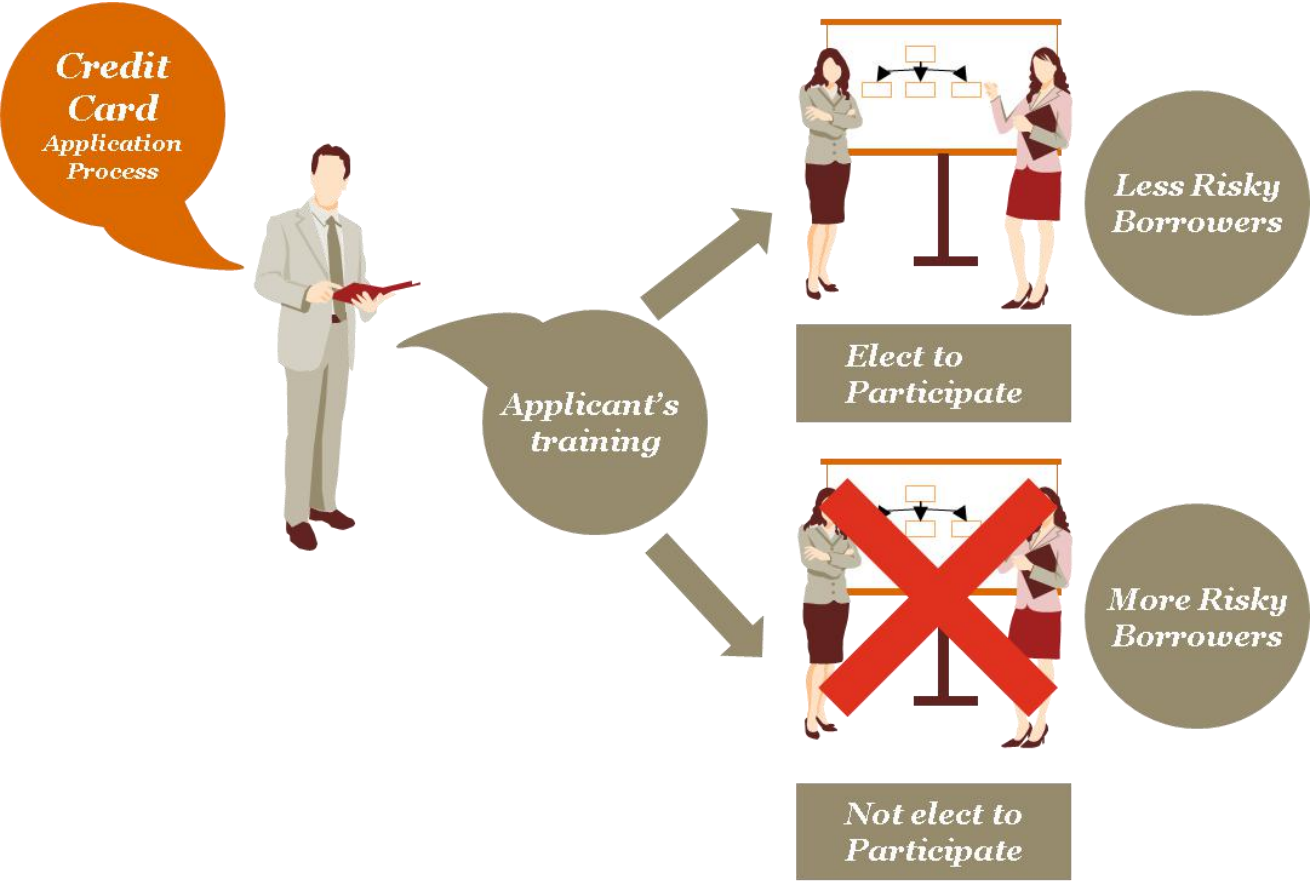
Small business lending
Social media and small businesses

Customers often express their opinions of, and experiences with, a small business through social media platforms, and this can be an invaluable view into a business' creditworthiness. Consider the following example: A company wants to borrow money for new machinery to grow its business. Using social media, lenders can view the company's internet presence to understand the health of the business. They could analyze, for instance, customer reviews to evaluate its popularity. If the business consistently received positive reviews and referrals, this can be a sign of potential future growth. On the other hand, negative reviews may signal a mismanaged business.

One small business lender asks applicants to provide access to their online payment accounts so they can see the company's sales volume. The company can also choose to link its personal social network or social news/networking site accounts to the lender's site. Why? The lender has found that these companies are 20% less likely to be late on their loan payments. The rationale: Companies that focus on customer service through these social media channels are more likely to also have tight controls over other aspects of their business.[9]

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[9] Ibid.

Comparing traditional and social media-assisted underwriting

To better demonstrate how lenders can leverage social media data in their underwriting, we've compared the factors lenders would typically use for traditional underwriting with those used in social media-assisted underwriting:

Borrower A: Thin File With Strong "Social Media Credentials"

Borrower A recently graduated from a prestigious law school, and is looking for a personal loan to consolidate credit card debt to reduce interest rates before starting her full-time job.

Traditional lender

- Borrower A has a limited credit history, with outstanding student debt that has not yet hit the repayment period, and short-term credit cards that have been opened within the last two years.
- The traditional lender sees a risky borrower without an established credit history and thus may miss out on a potential opportunity to establish business with a creditworthy individual.

Alternative lender

- Despite Borrower A's limited credit history, the alternative lender's assessment of social media indicates connections with a number of executives at prestigious law firms as well as professors from her law school program. Additionally, many of her social media contacts are successful lawyers.
- The alternative lender might conclude that this additional information helps solidify this borrower as less risky according to its internal risk metrics.

Borrower B: Small Business With Acceptable Credit, But Hidden Risks

Borrower B owns a small restaurant and has requested a loan for operating capital. The restaurant has performed well enough over the past three years, but has recently lost its chef and hired an inexperienced replacement.

Traditional lender

- Borrower B appears to be relatively established. The restaurant is able to provide books for the two prior years indicating a small but profitable operation. Additionally, the owner has an adequate credit score.
- The traditional lender may rely on potentially outdated performance data, and may end up making a risky loan, and doing so without fully pricing for the risk.

Alternative lender

- The alternative lender examines online customer reviews and notices a decrease in both the frequency and average star ranking over the past three months. Upon further review, it appears that customers aren't happy with the new chef, but management hasn't responded to the concerns. The lender also notices deep discount coupons on a deal-of-the-day site; the restaurant is paying for 1,000 point spots through an online reservation service.
- When taken in totality, these social data points may raise questions about the credit risk of the small business seeking the loan.

The table below demonstrates how lenders can utilize social media to supplement traditional underwriting factors, which can strengthen the final underwriting decision.

	Character	Capacity	Collateral	Capital	Conditions
Traditional underwriting factors	• FICO score • Credit history • Time at address • Time at job • Time in business • Industry • Business cash flows • Educational background • Experience of employees • References	• Debt-to-income ratio • Debt-to-equity ratio • Past income • Employment history • Type of income	• Net worth • Liquid assets • Equipment, buildings, and inventory • Accounts receivable	• Assets pledged as collateral • Retained earnings • Personal guarantee • Co-signer guarantee	• Local economic trends • Industry trends • Competition • Loan's purpose
Social media underwriting factors that supplement traditional underwriting	• Strength of social network • Content on photo- and location-sharing services infer spending habits • Social media-influenced metrics gauge level of social activity and connectedness; Friends frequency of defaults with lender • Confirm stated purpose of loan with posts • Identity verification • Consumer elects to participate in financial training	• Validate employment status on professional social media sites • Applicant's job history to infer employment stability • Quality of professional social network connections to infer future earning capacity • Friends who appear to have well-paying jobs • Size of personal and professional social media networks • Company ratings online	• Request sales and delivery information from online payment companies or marketplaces	• Social media funding campaign sites	• Posts on personal and professional social media sites could provide additional insight to local trends directly impacting applicants

What we can learn from first movers

There are a growing number of credit companies that use personal data found on social media sites to supplement assessments of a consumer's credit risk. These start-up credit companies see gaps in traditional loan underwriting. The ways that these companies are addressing those perceived gaps may provide insights into the direction that future lending is headed.
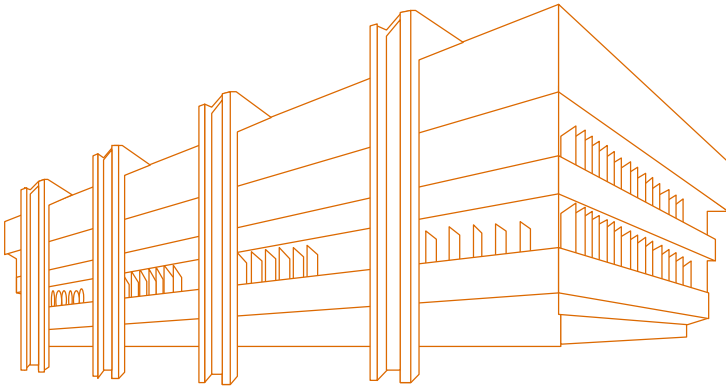
- **Company A** is using social media data to help score the creditworthiness of middle-class borrowers in emerging markets for small loans. It requires an applicant to join the company's online community, and then sets up links to the applicant's profile on social networking sites. It also requires a reference from another member. The company recently issued a new credit card that includes an application process that gathers social media data to help determine the creditworthiness of individuals with little or no credit history. The card is intended primarily for online use by consumers to buy items such as music, helping to build their credit files.

- **Company B** targets auto loan borrowers with short credit histories who tend to only qualify for a high interest rate loan from a conventional lender. It offers lower interest rate loans after gathering and using social media data such as an applicant's job history and the quality of connections on his or her professional social network profile to gauge their future earning potential and employment stability. It does use the applicant's FICO score but only to look for what it considers red flags and not to necessarily calculate risk. Its proprietary credit risk assessment technology analyzes default risk of an individual based on their real-time social media data as a leading indicator of their creditworthiness.

- **Company C** originates small online loans. Applicants are asked to provide access for a limited time to a personal or professional social network account. Applicants' depth and breadth of professional connections may provide insights into employment stability and future earning potential.

The many benefits of going social

Using social media for credit underwriting offers many potential benefits to lenders, including:

1.   *Reaching new customers*

Twenty-eight percent of US households are classified as unbanked or under-banked,[10] and although these borrowers don't have much historical credit data to go by, many could be a good credit risk. The challenge of marketing both retail and consumer finance services to the population of unbanked and under-banked individuals has been contemplated for some time; however the traditional financial services industry has yet to identify a solution for this potential client base. For this group, limited traceability to cash flows in a retail relationship and lack of credit histories hinder lenders' ability to approve larger credit purchases such as mortgages, which are highly dependent on credit scores. Social media data could enable lenders to segment this population and identify opportunities for a "second chance" credit decision.

Millennials are another challenge for banks – this segment has an incredibly high purchasing power of $1.3 trillion, but they're slipping away from traditional lenders' grasps for reasons ranging from thin credit histories to their growing preference for non-traditional lending institutions.[11] Alternate underwriting data may help lenders assess these applicants' creditworthiness and may potentially begin new customer relationships by establishing a product offering that could be marketed to a broader demographic of clients.

2.   *Differentiated customer experience*

By leveraging social media "big data" in underwriting processes, non-traditional lenders have been able to differentiate themselves. Lenders that gather and analyze social media data can establish a framework of analytical client knowledge to distinguish their businesses from other traditional bank lenders, and position themselves to compete against emerging non-traditional lenders.

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[10] FDIC, *National Survey of Unbanked and Underbanked Households*, September 2012
[11] Ibid.

And leveraging social media data may enable lenders to differentiate themselves in ways that are both transparent to customers, such as requesting connections through social media sites, and behind the scenes through more tailored product offerings.

3. Stronger underwriting

The metrics lenders traditionally use to determine creditworthiness are limited. Social media provides an opportunity to supplement traditional underwriting data with information available online to possibly enhance the quality of credit decisions. These better-informed lending decisions can result in loans to creditworthy applicants, and can also help mitigate risk.

As outlined above, some lenders are using social media data to provide insights into borrowers' character, capacity, and collateral. This can be as simple as reading online reviews for small business loans or as complex as using social medial as part of modeling income stability. Additionally, social media data doesn't have to be viewed in a bubble – this data can be linked with existing internal or third-party data sources. Lenders have many opportunities to test different data sources for correlation with loan performance and develop new use cases for the wide variety of information that is available across multiple social media platforms.

4. Fraud prevention

Publicly available information on social media channels can also be used to cross-check information provided in loan applications. This could help identify fraudulent activity early, and help prevent it from occurring. While companies can access only public information or what people choose to share, a considerable amount of information is readily accessible online. Many young people allow the public to see part or all of their profiles and content on social, professional, and news-sharing social media sites. Consumers also post publicly available information on blog posts, social review sites, and other online forums. Public data includes photo tags, locale check-ins, and a person's network of friends. With the user's permission, personal and professional social network sites also provide software tools that let companies automatically import information from profiles posted on existing networks. Regular users of these sites, for example, also share details about themselves every day online, and credit bureaus and payment companies have begun trials to see whether these social posts can help to confirm identities and detect when customers might not be fully disclosing financial information. Social media data can also be used to identify transactions which are outside of a customer's normal patterns, such as applications from a different location than the borrower's recent check-ins.

One of the largest sellers of personal-finance software and a provider of payment systems is already using content on a professional social network to verify the identities of consumers whose profiles are on the site, including detailed employment history, endorsements, and recommendations from colleagues.

5. Competitive edge

In the end, a benefit of social media data is that it may help lenders meet their strategic goals and improve the bottom line. Each of the potential benefits listed above can play a role in allowing lenders to better manage and price for risk, reach new customers, or expand their market share while helping to minimize expected losses. The extent to which lenders have the risk appetite to underwrite additional loans based on this alternative data may vary, and any use of social media data should be linked to that strategic decision.

Some lenders may choose to offer loans to more borrowers and become the lender of choice for millennials or others who are more likely to be approved due to this progressive approach. Others may choose to focus on lowering risk by identifying additional potential "red flags" to lower default rates. Either way, the important thing to keep in mind will be that social media data has the potential to be used as a tool to improve performance and execute on your overall credit strategy.

Go social – but manage the risks

When incorporating social media into your underwriting process it is imperative that the risk management program include a strong governance structure that clearly identifies the roles and responsibilities of senior management, and how using social media contributes to the strategic goals of the institution. Additionally, lenders should confirm that the oversight and controls are commensurable with the risks presented by the types of social media usage. Some areas that lenders should consider including in their social media risk management program are:

- Policies and procedures regarding the use of social media, ensuring compliance with all applicable consumer protection regulations including credit standards and guidelines as to what social media data will be used in the credit assessment, when it can be used, and how the information will be considered. Consistency of customer treatment is critical.

- A risk management and compliance process for selecting and managing third-party vendors that provide services for social media underwriting, data mining, and marketing.

- A risk management and compliance program that considers the unique risk associated with incorrect or misleading social media data. The risk program should treat social media data similar to other borrower-provided information that cannot be validated by third parties.

- Controls and ongoing assessment of risk, which would include operational self-assessment, key risk indicators (KRIs), and key performance indicators (KPIs).

- A training program that incorporates the policies and procedures related to the use of social media.

- Risk management and compliance functions which test compliance with internal policies, applicable laws, and regulations.

- A process to report social media risk issues which will allow for periodic evaluation and effectiveness of the program using social media for making credit decisions.

- A robust complaint process to address customer complaints resulting from perceived or real inaccuracies in social media data.

Getting started

Organizational strategy

The first thing every lender needs to contemplate when crafting a social media strategy is how the availability of social media channels and the data they present align with their organizational strategy. Lenders should consider the following dimensions when determining how to incorporate social media data in a method that aligns to their strategy and operations:

- **Organizational Risk Appetite**
- **Perceived Regulatory Risk**
- **Regulatory Relationship**
- **Credit Risk**
- **Operational Risk**

- **Approval Rates**
- **New Segments**
- **Lifetime Customer Value**
- **Tech-Savvy**
  - **Demographics and Social Media Usage**
    - **Cross-Selling Opportunities**

Aligning Social Media Usage to Your Strategy

Risk Profile

Customers

Technology

Competencies

- **Unstructured / "Big Data" Tools and Capabilities (e.g., Hadoop)**
- **Technology Platforms and System Architecture**
- **Internal Data Availability**
- **Strength of Analytics**

- **Social Media Expertise**
- **Strength Building Partnerships**
- **Current Underwriting / Modeling Capabilities**
- **Robustness of Use Cases**
- **Internal vs. Third Party Approach**

Customers

One of the first questions lenders should ask is the degree to which their customer base, or desired future customer base, would benefit from alternative data. While these tools can be effective across the credit spectrum and for borrowers of all ages, the benefits are most tangible for millennials and thin- file borrowers. However, even banks with older client bases may find that they would benefit from improved data, due to factors such as impaired credit histories. Perhaps the best way to identify the extent to which lenders can benefit from these new tools is not to look at their approved borrower base, but at their denied borrower population to understand which borrowers they could be reaching, but aren't today. Lenders should also apply this knowledge of their customers when considering the capabilities outlined below, as different social media sites have varying demographics. An in-depth understanding of the target market can help define which social media platforms and data elements to incorporate.

Competencies

Competencies can be considered from two angles: First, what do we need to be able to do in order to use social media in the way that we want to? Second, how effectively can we use social media today? Understanding the gap between these two answers will guide decisions that need to be made when determining how to develop the social media underwriting solution.

This decision is largely driven by what social media use cases you want to pursue. Defining questions include:

- What social media platforms and data elements do we want to leverage?
- How will we combine social media data with our existing internal data or other third-party sources?
- At what point will we incorporate social media into our underwriting process?

The approach to developing a social media underwriting strategy will also be heavily influenced by existing social media competencies. An organization which is already using robust social media listening as part of a Voice of the Customer program, for instance, is likely to have a better understanding of the social media landscape. On the other hand, organizations without an existing strategy for social media should start by establishing a core team to build awareness, identify industry best practices, and socialize potential strategies to identify business leader appetite for social media-based opportunities.

Lenders can consider opportunities to partner with third parties to leverage their expertise and infrastructure. Alternatively, in-house development may provide more flexibility to customize the approach, but would require strong technical skills and knowledge.

Finally, while this paper is focused on social media underwriting, lenders can consider building out their social media competencies in other areas such as digital marketing and social listening as part of a comprehensive social media strategy. Developing this overarching social media viewpoint can help to inform how best to structure a firm's entry into social media underwriting, as well as what tools and technology should be used.

Technology

From a technology standpoint, incorporating social media data is likely to require a significantly different IT architecture than is currently used for traditional credit risk modeling. Lenders will need to consider the data elements currently involved in underwriting models and how they'll be supplemented by new data elements derived from social media. Successful companies will carefully consider the integration between existing systems and platforms and these new capabilities in order to eliminate data silos and improve data transparency.

Unstructured or "big" data generally requires a substantially different paradigm for processing and storage due to the volume, velocity, and variety of the data. Lenders will need to consider the architectural implications of multiple processing and the use of tools and platforms such as Hadoop. In addition, current employees may need training on the new tools and systems, especially if much of the analytics is performed in house rather than by third parties.

Risk profile

Lenders must also understand their own risk profile and the risks associated with social media. Simply put, lenders should assess the risks and compare them to the potential market opportunity. By understanding the legal, compliance, and business implications of these new underwriting approaches, lenders can more effectively perform a cost-benefit analysis and determine their risk tolerance.

Final thoughts

The consumer finance market is transforming as a result of innovative lenders that are reshaping business models, underwriting criteria, and customer experiences. These pioneers are leveraging advanced analytics and big data to gain insights to fuel growth. Their innovations are customer centric – reflecting an understanding of demographic changes, borrower needs, and how to connect to borrowers through social media channels.

An already explosive industry, the growth of big data and data mining shows no signs of slowing. This growth could lead to a significant increase in the approval rates associated with credit assessments and expand the impact of current lending trends. Companies that have not yet developed strategies or begun integrating social media data in some capacity may already be at a disadvantage. Before long, catching up to the innovators and their fast followers will become increasingly difficult. Companies that integrate social media data into their lending practices may be able to position themselves to thrive in an increasingly competitive and technologically sophisticated market.
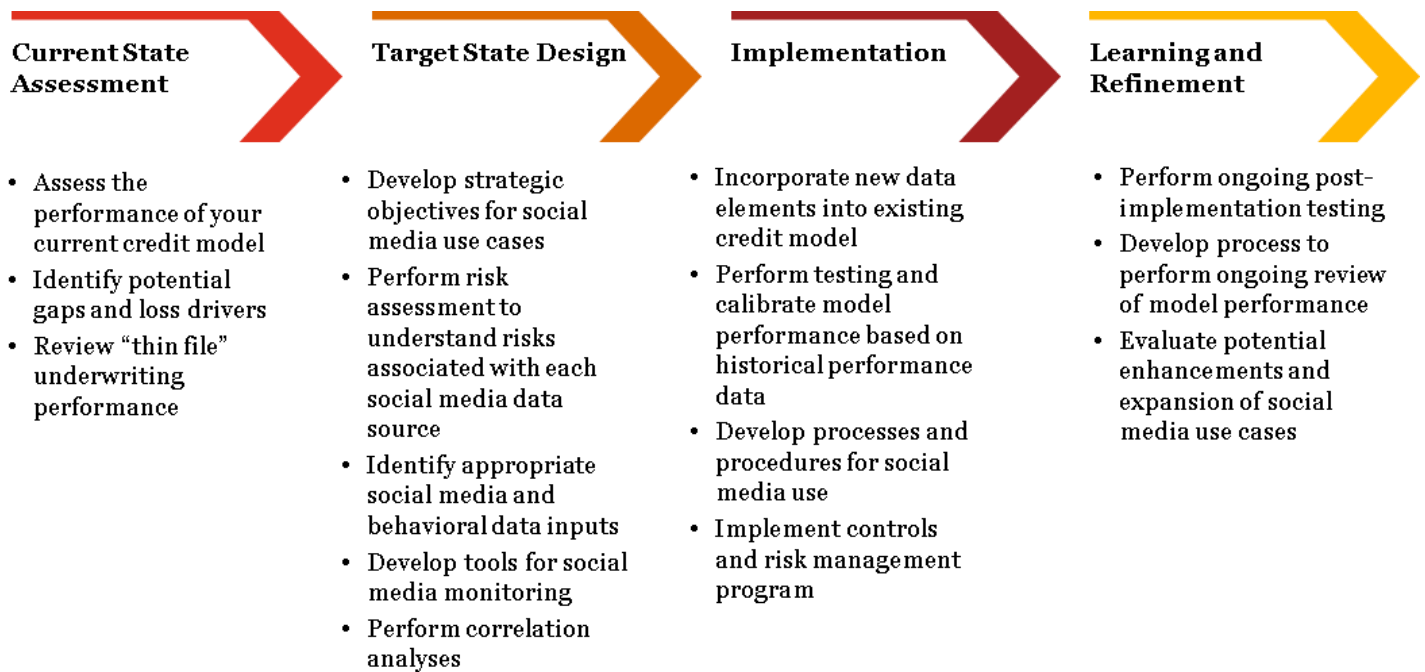
How PwC can help

PwC's Consumer Finance Group has a deep understanding of the consumer finance market, and is at the forefront of the industry working with our clients to anticipate, understand, and resolve emerging issues. As a firm, we bring together strong skillsets on both the consumer credit and social media fronts, which combine to create a unique perspective on how our clients can drive their strategy through the use of social media data.

We have helped lenders develop their lending strategies and operating models, origination and underwriting policies and procedures, design pricing optimization strategies and credit risk models, and implement origination risk management programs including fraud prevention and detection across all consumer finance asset classes.

Within the consumer lending space, we have helped our clients establish business intelligence frameworks, perform data analytics, and implement new technology platforms. PwC also has extensive knowledge and experience in social media, having developed a social listening and analytics tool with robust natural language processing capabilities.

PwC can help lenders at each stage of your implementation of social media underwriting:

Current State Assessment	Target State Design	Implementation	Learning and Refinement
• Assess the performance of your current credit model • Identify potential gaps and loss drivers • Review "thin file" underwriting performance	• Develop strategic objectives for social media use cases • Perform risk assessment to understand risks associated with each social media data source • Identify appropriate social media and behavioral data inputs • Develop tools for social media monitoring • Perform correlation analyses	• Incorporate new data elements into existing credit model • Perform testing and calibrate model performance based on historical performance data • Develop processes and procedures for social media use • Implement controls and risk management program	• Perform ongoing post-implementation testing • Develop process to perform ongoing review of model performance • Evaluate potential enhancements and expansion of social media use cases

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PwC's Consumer Finance Group has extensive experience helping companies develop solutions that are tailored to their specific needs. To learn more, please contact:

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