# Beyond Credit Scores: Leveraging Payment Histories for Fair and Inclusive Renter Screening

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Abstract: The paper provides an overview of the challenges associated with traditional renter screening methods, particularly for immigrants and individuals with limited credit history. It underscores the limitations of depending exclusively on credit scores from major credit bureaus and discusses how these limitations create barriers for financially stable individuals seeking rental properties. The paper also introduces the innovative algorithm developed by Zently, an innovative approach to renter screening that goes beyond traditional credit scores and focuses on applicants' payment histories. Our methodology focuses on analyzing applicants' payment histories and verifying their identities through social graphs, offering a more accurate and holistic assessment of an applicant's financial stability and reliability. By examining timely paychecks and rent or mortgage payments, Zently's algorithm can predict the likelihood of future rent payments more precisely. Zently is poised to revolutionize how landlords screen potential renters, making the process more equitable and effective. This detailed analysis highlights how these elements work together to provide landlords with a robust tool for tenant selection.

Keywords: renter screening, credit history, financial stability, innovative algorithm, tenant selection

# 1. Introduction

Traditional renter screening relies heavily on credit reports from the three major credit bureaus: Experian, TransUnion, and Equifax. This process requires renters to provide their Social Security Number (SSN) and other identifying information, which the credit bureau uses to generate a comprehensive credit report. This report includes the applicant's credit score, outstanding debt, credit card balance, payment history, criminal records, and eviction history. While this method provides a detailed financial snapshot, it has significant limitations, particularly for immigrants and individuals with limited credit history. At Zently, we have developed an innovative algorithm designed to provide applicant's renter screening scores for landlords using non traditional methods. This paper explores the challenges faced by renters and landlords with traditional screening methods and how our algorithm addresses these issues by leveraging alternative data sources.

## 1.1 Challenges with Traditional Screening Methods

One of the most significant challenges with traditional renter screening is its heavy reliance on credit bureaus such as Experian, TransUnion, and Equifax. These bureaus provide credit scores that serve as the primary metric for assessing a renter's financial reliability. However, this dependency introduces several critical limitations, particularly for certain groups of renters, such as immigrants and individuals with short credit histories. This section delves into these challenges in detail, highlighting how they affect the ability of financially stable individuals to secure rental properties.

## **Influence of Credit History Length**

Credit scores from major bureaus are calculated based on various factors, one of the most important being the length of credit history. This metric considers the age of an individual's oldest credit account, the average age of all credit accounts, and the age of specific account types. A longer credit history typically indicates more experience with managing credit, which is perceived as a lower risk by lenders and landlords. For many renters, especially younger individuals or those new to credit, the length of their credit history is relatively short. This short credit history can significantly impact their credit scores, often resulting in lower scores that do not accurately reflect their current financial stability or capability to make timely payments.

## **Challenges for Immigrants**

Immigrants, in particular, face substantial hurdles due to the emphasis on credit history length. When immigrants arrive in the US, they often start with no credit history. Establishing a credit history requires obtaining and responsibly using credit products such as credit cards, loans, or lines of credit, which can take several years.

During this period, immigrants might have stable, high paying jobs and a consistent income stream, yet their lack of credit history translates to low or non - existent credit scores. This scenario creates a paradox where individuals who are financially capable and reliable are perceived as high - risk renters solely because they have not had enough time to build their credit history in the US.

## **Barriers to Securing Rental Properties**

The reliance on credit scores creates a significant barrier for renters with insufficient credit history, regardless of their actual financial stability. Landlords often use credit scores as a primary screening tool to evaluate potential tenants. A low credit score can lead to several unfavorable outcomes for renters:

1) **High Deposit Requirements**: Renters with low credit scores may be required to pay higher security deposits to mitigate the perceived risk. These higher deposits can be financially burdensome and may prevent renters from securing properties that would otherwise be within their budget.

- 2) Rejection of Rental Applications: Some landlords may outright reject applications from renters with low credit scores, preferring to rent to individuals with established credit histories. This practice excludes many financially stable renters who simply lack a lengthy credit history.
- 3) Limited Housing Options: The combination of high deposit requirements and application rejections limits the housing options available to renters with short credit histories. They may have to settle for less desirable properties or neighborhoods, even if they can afford better accommodations.

# The Disconnect Between Credit Scores and Financial Stability

The fundamental issue with relying on credit scores for renter screening is the disconnect between what a credit score measures and an individual's current financial stability. Credit scores are retrospective, reflecting past behavior and experiences with credit. They do not account for significant life changes, such as obtaining a high - paying job or maintaining consistent income streams, that can improve an individual's financial situation.

For renters with short credit histories, especially immigrants, this disconnect means that their current financial reliability is not accurately represented. As a result, they face unnecessary barriers and challenges when trying to secure rental properties, despite being capable of meeting rent obligations.

## Impact on Landlords

The consequences of identity theft in renter screening are far - reaching and detrimental to landlords. Here are some key impacts:

## **Financial Loss**

When renters who have engaged in identity theft secure a lease based on falsified information, they may eventually default on their rent payments. This default results in significant financial losses for landlords, who must then cover the cost of missed rent, legal fees associated with eviction proceedings, and the expenses involved in finding a new tenant.

## **Increased Vacancy Rates**

The process of evicting a renter who has defaulted on their payments is time - consuming and costly. During this period, the property remains vacant, contributing to a loss of rental income. Additionally, the longer the property stays unoccupied, the more revenue the landlord loses, further exacerbating their financial burden.

## Administrative Burden

Managing cases of identity theft involves considerable administrative effort. Landlords must invest time and resources in verifying the authenticity of renter applications, pursuing legal actions, and managing the eviction process. This administrative burden diverts attention from other essential property management tasks and can strain the landlord's operations.

## **Damage to Property Reputation**

Properties with a history of problematic tenants and frequent vacancies may suffer reputational damage. Prospective renters might be deterred by negative reviews or word - of -

mouth reports, making it more challenging for landlords to attract reliable and trustworthy tenants in the future.

## The Need for Reliable Verification Methods

Given the significant challenges posed by identity theft, there is a pressing need for more reliable and comprehensive verification methods in the renter screening process. Traditional methods relying solely on credit reports are insufficient to safeguard landlords against fraudulent applicants. Instead, a multifaceted approach that incorporates various data sources and verification techniques is essential.

## Zently's Algorithm: An Innovative Solution

To address these challenges, Zently's algorithm utilizes innovative methods and alternative data to provide a more accurate and inclusive renter screening score. Our solution focuses on two main aspects: payment data and income verification.

# Payment History Analysis: A Key Indicator of Financial Stability

Payment history is a critical component in understanding an applicant's financial behavior. Unlike traditional credit scores, which provide a broad overview of past credit usage and debt management, payment history offers real - time insights into an individual's current financial habits. This is particularly valuable for predicting the likelihood of future rent payments.

## Leveraging Payment Data

The algorithm analyzes renters' payment data to identify patterns of consistent deposits, such as monthly paychecks, into their bank accounts. This approach allows us to assess the applicant's financial stability without relying solely on credit scores. By examining inbound payments, we can verify that the renter has a steady income stream, which is a critical factor in determining their ability to pay rent.

## **Timely Paychecks: Indicating Income Stability**

One of the primary factors Zently examines is the consistency and timeliness of an applicant's paychecks. Regular and timely paychecks are strong indicators of a stable income source, which is essential for ensuring the applicant can meet their rent obligations consistently.

- By verifying that an applicant receives regular paychecks, Zently can confirm the applicant's employment status and income stability. This is crucial for renters who might not have an extensive credit history but maintain a steady job and income.
- Regular paychecks contribute to financial predictability, ensuring that the applicant has a reliable income stream to cover their monthly expenses, including rent.
- In addition to payment data, our algorithm evaluates the applicant's income to rent ratio by tracking outbound payments, such as rent and mortgage payments, from their bank accounts. This metric helps determine whether the applicant's income is sufficient to cover their rent obligations. A good income to rent ratio indicates that the renter is likely to meet their rental payments consistently.
- By using direct bank account data, our algorithm minimizes the risk of identity theft. Unlike traditional methods that rely on self reported information and credit

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reports, our approach involves real - time verification of financial transactions. This reduces the chances of fraudulent applications and ensures that landlords receive accurate and reliable information about potential renters.

# Timely Rent or Mortgage Payments: Demonstrating Financial Responsibility

In addition to examining paychecks, Zently analyzes the applicant's history of rent or mortgage payments. This data provides insights into the applicant's financial discipline and their prioritization of housing payments.

- A history of timely rent or mortgage payments indicates that the applicant prioritizes their housing expenses and is likely to continue doing so. This consistency is a strong predictor of their future behavior regarding rent payments.
- Timely payments demonstrate the applicant's commitment to meeting their financial obligations, reducing the risk for landlords.

## **Comprehensive Financial Picture**

By combining data from both timely paychecks and timely rent or mortgage payments, Zently's algorithm creates a detailed and comprehensive picture of an applicant's financial stability. This holistic approach offers several advantages:

- Payment history data provides real time insights into the applicant's current financial situation, offering a more accurate assessment than retrospective credit scores.
- Regular income and consistent housing payments are strong predictors of the applicant's ability to make future rent payments, helping landlords make more informed decisions.
- For immigrants and individuals with short credit histories, payment history data offers a fairer assessment of their financial stability, ensuring that financially capable renters are not unfairly excluded.

## **Identity Verification through Social Graphs**

In addition to analyzing payment histories, Zently employs innovative methods for identity verification by examining applicants' social graphs through open APIs. This approach adds an additional layer of security and accuracy to the screening process.

# Social Graph Analysis: Verifying Identity and Social Connections

Applicants are provided with the option to connect their social media accounts, such as LinkedIn, Facebook, and Twitter. By leveraging the open APIs of these platforms, Zently can verify the applicant's identity and analyze their social graph.

- Connecting social media accounts allows Zently to cross verify the applicant's identity information. This reduces the risk of identity theft and ensures that the information provided by the applicant is accurate.
- By examining the applicant's social connections, Zently can assess the authenticity of their profile and detect any discrepancies that might indicate fraudulent behavior.

## **Enhancing Security and Reliability**

The integration of social graph analysis enhances the overall security and reliability of the renter screening process. It provides additional data points that complement the financial information gathered from payment histories.

- By verifying identities through social media platforms, Zently minimizes the chances of fraudulent applications, ensuring that landlords receive accurate and trustworthy information.
- The combination of payment history analysis and social graph verification offers a comprehensive approach to screening, providing landlords with a more complete picture of the applicant.

## The Technical Process at Zently

To effectively utilize payment histories and social graphs, Zently has developed a sophisticated technical process that ensures accuracy and reliability in renter screening. This process involves several key steps:

- 1) **Bank Account Integration**: Applicants connect their primary bank accounts to Zently's secure platform. This integration allows the algorithm to access the applicant's financial transactions over the past 12 months.
- 2) **Data Extraction and Analysis:** The algorithm extracts relevant data, focusing on regular income deposits (paychecks) and outgoing rent or mortgage payments. Advanced data analysis techniques are then applied to identify patterns and assess the consistency and timeliness of these transactions.
- 3) **Income to Rent Ratio Calculation**: The algorithm calculates the applicant's income to rent ratio by comparing their monthly income against their rent or mortgage payments. A favorable ratio indicates that the applicant can comfortably afford the rent, further enhancing their suitability as a tenant.
- 4) **Social Media Integration**: Applicants connect their social media accounts, allowing the algorithm to verify their identity and analyze their social graph. This step adds an additional layer of security to the screening process.
- 5) **TransUnion Credit Report Generation:** We will connect to TransUnion to generate a renter's credit report, providing access to their credit score, outstanding balance, eviction history, and criminal records.
- 6) Score Generation and Recommendations: Based on the analysis, the algorithm generates a comprehensive score that reflects the applicant's financial stability and likelihood of making timely rent payments. This score is accompanied by recommendations for the landlord, such as accepting the applicant with or without conditions or suggesting a higher security deposit if necessary.

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#### Flow chart:



## **Comprehensive Renter Scoring**

The algorithm generates a score for the renter application by integrating various data points:

- 1) Monthly income to rent ratio
- 2) Stability of income over the last 12 months
- 3) Verification of the next salary deposit against the gross salary stated in the renter application
- 4) Rent or mortgage payment history over the last 12 months
- 5) Data received from credit bureaus, including credit score, outstanding debt, and credit card payment history
- 6) Criminal records and eviction history
- 7) Identity verification from social platforms and their network graph

Based on the assigned score, the system provides recommended next steps for the landlord. These recommendations include:

- 1) Renting to the applicant with specific conditions, such as a certain number of months of rent as an advance deposit
- 2) Renting without any conditions
- 3) Not recommending the applicant for rent

# 2. Case Studies and Real - World Impact

To illustrate the effectiveness of Zently's algorithm, we conducted several case studies involving renters with diverse backgrounds. These examples highlight how our algorithm offers a more accurate and fair assessment compared to traditional screening methods.

## Case Study 1: Immigrant Couple

An immigrant couple, newly arrived in the US, both held stable, high - paying jobs. Despite their strong financial standing, they had no credit history in the country. Traditional screening methods classified them as high - risk due to their non - existent credit scores. However, Zently's algorithm painted a different picture. By analyzing their consistent income and excellent income - to rent ratio, our system was able to provide a comprehensive and positive assessment. This allowed the couple to secure a rental property without having to provide exorbitant deposits, demonstrating how our approach can support financially responsible individuals who are overlooked by conventional methods.

## Case Study 2: Young Professional

A young professional with a short credit history but a stable job also faced challenges with traditional screening processes. Despite having a steady income and demonstrating responsible financial behavior, they were flagged as high risk by standard criteria.

Our algorithm, however, took into account their consistent paychecks and prudent financial management. By recognizing these positive attributes, the algorithm generated a favorable renter screening score. This case illustrates how Zently's system can accurately assess and benefit individuals who might otherwise be unfairly penalized due to their limited credit history.

These case studies underscore the real - world impact of Zently's algorithm, showcasing its ability to provide fairer and more accurate assessments for renters from diverse backgrounds.

# 3. Conclusion

Zently's algorithm represents a significant advancement in renter screening, addressing the limitations of traditional methods by leveraging non - traditional data sources. By focusing on payment data and income verification, our solution provides a more accurate and inclusive assessment of renters' financial stability. This approach not only benefits renters, particularly immigrants and those with limited credit history, but also offers landlords a reliable and secure method to screen applicants.

In conclusion, Zently's innovative algorithm for renter screening marks a transformative step in the rental industry, ensuring fair access to housing for all renters while protecting landlords from potential risks. As we continue to refine and expand our methods, we aim to set a new standard for renter screening that prioritizes accuracy, inclusivity, and security.

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