# THE CASE FOR A BOOSTED SCORE

Unlocking inclusive credit through alternative data







## **About the Partners**

### About Kamoa

Kamoa is a fintech company operating in Kenya and Nigeria. In Kenya, we offer an app that provides individuals and MSMEs with personalised financial recommendations and a marketplace connecting them to financial providers such as digital lenders, microfinance banks, and more. With 250k users in Kenya, our marketplace features 8 lenders offering business, consumer, device, car, and bike loans. In Nigeria, we've partnered with the Development Bank of Nigeria to provide microfinance banks with digital tools that help them efficiently fund MSMEs, reduce costs and risks, and boost their competitiveness in the digital market. Learn more at https://kamoa.app/

KAMOA

## About CreditInfo



Creditinfo Kenya is a premier credit bureau, licensed by the Central Bank of Kenya, dedicated to transforming data into actionable insights that enable smarter lending decisions. As a key member of the global Creditinfo Group, it plays a vital role in advancing financial inclusion and promoting responsible credit access through innovative credit risk solutions. Learn more at <u>https://</u> <u>ke.creditinfo.com/</u>

## **Executive Summary**

## **Foreword:** *Why This Score Matters Now*

We didn't set out to build a credit score. We set out to build trust.

In markets like Kenya, trust is often missing, not because people are untrustworthy, but because their financial lives don't fit neatly into the systems we've inherited. Most people earn informally, transact in cash, and navigate across platforms that were never meant to work together. As a result, they're often overlooked. Banks can't assess them. Lenders misread them.

And so they remain invisible, or worse, misrepresented.

We believe that needs to change. Not just for fairness, but for progress. If we're serious about unlocking Africa's full economic potential, about moving from 3% of global GDP to something far more powerful, we need to look beyond formal records and start recognizing the real economy. That means designing tools that can read the rhythms of everyday life: how people earn, save, repay, and grow, even when those patterns don't show up in a CRB file. The Boosted Score is our contribution to that shift. It's a new kind of score; one that blends bureau data with cash flows, behavioural signals, and digital breadcrumbs that reveal how people actually operate. It captures not just credit history, but economic activity. Not just formality, but intent and reliability.

But this isn't just a product. It's part of a larger collective effort: to turn fragmented signals into shared infrastructure for trust. To help institutions of all kinds; banks, MFIs, fintechs, regulators reach people they've never been able to see before. This is infrastructure for mobility. Infrastructure that's inclusive, predictive, and grounded in the way Africa really works.

And we can't build it alone. We need collaborators across the ecosystem: data contributors, forwardthinking lenders, developers, policymakers, and advocates who believe like we do that visibility is a right, not a privilege.

Let's build a system that sees everyone. **Together.** 



**Fred,** Founder, Kamoa

## Acronyms, Abbreviations & Explanations

API – Application F

**BNPL** – Buy Now Po model allowing de

CBK – Central Bank

**CIBIL –** Credit Infor (now known as Tra

CIK – Creditinfo Ke

CRB – Credit Refere

**CRIF –** Centrale Rise Finanziaria (Credit globally)

E-AI – Estimator Ar

*FICO* – Fair Isaac Corporation used credit scoring model)

**FSD** – Financial Sector Deepening (Kenya)

*Gini – Gini Coefficient (A statistical measure of model discrimination* 

Programming Interface	<b>GIS –</b> Geographic Information System		
ay Later (Consumer financing elayed or instalment payments)	<b>KEPSA –</b> Kenya Private Sector Alliance		
layea or mstannent payments)	<b>MSME –</b> Micro, Small, and Medium Enterprises		
k of Kenya	DAVCO Deve de Vers Ce (A fin en eine en elel sub ene		
rmation Bureau (India) Limited ansUnion CIBIL)	<b>PAYGO –</b> Pay-As-You-Go (A financing model where users pay in instalments for services/products like solar or phones)		
nya	<b>RBI –</b> Reserve Bank of India		
ence Bureau	<b>SACCO –</b> Savings and Credit Cooperative Organization		
chi di Intermediazione			
t bureau operating in India and	<b>SDK –</b> Software Development Kit		
	<b>SME –</b> Small and Medium-sized Enterprises		
rtificial Intelligence			
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# **Introduction:** *Rethinking Credit Visibility in a Connected* Economy

The importance of a good credit score that encompasses everyone in the economy cannot be overstated. With a good, comprehensive, and up-to-date score, individuals can unlock opportunities and improve their quality of life; small businesses can grow, create jobs, and gain access to critical services; and for lenders, the credit underwriting process can become more streamlined.

However, current credit scores fall short, leaving a vast majority of people outside the credit ecosystem. Kenya's informal sector employs over 80% of the workforce and contributes an estimated 35-40% of GDP (KNBS, 2025). Much of this economic activity is cash-based, making it difficult to generate traditional credit records. Additionally, while lenders are generally expected to report to credit bureaus, the reality is fragmented: some don't report at all, others report inconsistently, and many report to only one bureau. As a result, an individual's credit file is often incomplete or outdated from the outset.

Another challenge is the wide range of informal lending and financing that remains unrecognised and unreported. For example, asset financing-used to acquire items like motorbikes, solar kits, and mobile phones—is widespread through lipa pole pole (buy now, pay later) schemes. Yet despite its prevalence, this activity has historically not been classified as "reportable credit" under bureau frameworks and is often left out of credit records. Even when it is reported, the focus tends to be on defaults or missed payments rather than full repayment histories. This skews credit files toward negative outcomes and fails to reward consistent, structured repayment behaviour-even when it reflects genuine creditworthiness

This isn't just a problem for consumers—it's also a challenge for lenders. Many lenders struggle to assess true risk due to incomplete data. Confidence in the system remains low. While some institutions have built robust in-house credit models to address some of these gaps, what if there were a shared, portable, and simple tool to bridge this divide? The Boosted Score was built to do just that—providing a unified, data-rich view that addresses these challenges at scale.

In this white paper, we explore the limitations of conventional credit scoring, introduce the Boosted Score as a collaborative solution, and outline its design, methodology, and potential impact. We also share early performance metrics and show how financial institutions can integrate the Boosted Score into their existing frameworks to expand access, unlocking new customers, improve accuracy, and enable more inclusive, sustainable lending.

## **Challenges:** Gaps in the current credit ecosystem, their Consequences and how we can move forward

### Conventional Credit Leaves too many Behind...

### Gap 1: A Bias Toward the Formally Visible

A major limitation of traditional credit scoring is its inherent bias toward individuals who are already part of the formal financial system. Many people remain outside the scope of credit bureau data, not because they are financially inactive, but because they have either never borrowed from reporting institutions or have done so too infrequently to establish a meaningful credit history. As a result, they are excluded from the credit ecosystem by default.

Relying solely on 'formal' credit history to assess someone's creditworthiness is deeply flawed, especially when that history is thin, outdated, or invisible. This disproportionately affects youth, rural communities, and those with limited access to formal financial services (FSD, 2024). These groups aren't necessarily higher risk - they're just harder to see using traditional tools. Without a fair and accurate way to assess them, they remain misjudged and underserved, reinforcing systemic barriers to financial inclusion.

2000	2007	2000	KE: P	riv
0.100	2007	2008	2009	
5	1.500	2.100	2.300	
10				
15				
20				
25				
30				
35				

bureau coverage

### *Gap 2: Gaps in data coverage and timelines*

Credit bureaus generate credit scores based on data reported by financial institutions, primarily credit facilities extended to individuals or businesses. In Kenya, all CBKregulated financial institutions are required to submit this information.

### About the Boosted Score 💡

The Boosted Score is an enhanced credit scoring model designed to bridge data gaps in traditional credit systems by incorporating both conventional credit bureau data and alternative data sources. It aims to provide a more complete, up-to-date, and inclusive view of an individual's creditworthiness, especially for those in the informal economy who are often excluded from mainstream credit scoring.

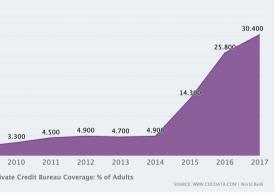


Figure 1: KE: Credit Bureau Coverage: % of Adults

We see despite the coverage increasing YoY, a lot of adults are still excluded from

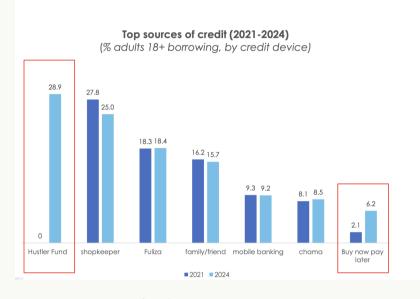
However, in practice, reporting can be inconsistent or incomplete. Some institutions may report to only one bureau, while others may have gaps in frequency or scope. Even when reporting does occur, it is often periodic, typically monthly, and may rely on legacy systems that are still transitioning toward greater automation and accuracy. These challenges can result in delayed or incomplete records, which, in turn, affect the granularity and reliability of credit scores derived solely from this data. They also present an opportunity for systemic improvements that combine traditional and emerging data approaches to better serve underrepresented segments.

### Gap 3: Gaps in 'Reportable Credit'

Another important gap in current credit scoring frameworks is the widespread presence of informal or non-traditional lending—what might be termed "non-lending lending." While most of the data reported to credit reference bureaus (CRBs) in Kenya today comes from regulated, cash-based loans, a much broader ecosystem of credit-like activity remains largely unreported. For instance, models such as pay-as-you-go (PAYGO) and lipa pole pole (buy now, pay later) have become increasingly popular for everyday purchases like phones, solar kits, and household appliances (Business Daily, 2024). These arrangements involve structured repayments and reflect meaningful credit behaviour. Yet until recently, they often fell outside the scope of what qualified as "reportable credit," especially before 2022.

Even among providers who report to CRBs, the historical emphasis has been on listing defaults rather than capturing full repayment histories. As a result, many individuals with consistent repayment records receive little or no formal recognition in their credit profile, while missed payments are more likely to be flagged. This creates an asymmetry in how such activity is treated, penalizing defaults without rewarding positive behavior

Both local lenders and analysts have raised concerns that this imbalance may unintentionally skew perceptions of creditworthiness, especially for low-income or first-time borrowers. While recent regulatory reforms such as the Business Laws (Amendment) Act of 2024—have brought buy now, pay later products under Central Bank of Kenya oversight, including requirements for licensing, affordability checks, and consumer protections (Kenya Ministry of Industrialization, Trade & Enterprise Development, 2024), consistent and standardized reporting remains a work in progress.



### *Figure 2: Top Sources of credit*

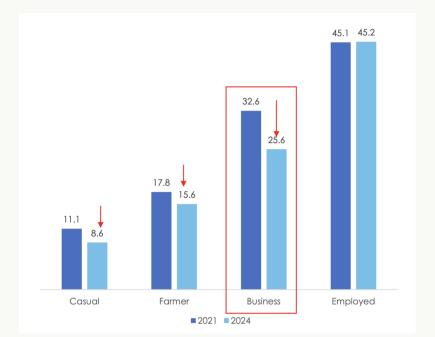
2024 FSD household survey showed an increase in BNPL as a top source of credit over the past few years

### *Gap 4: MSMEs & the Shadow economy*

Micro, small, and medium enterprises (MSMEs) form the backbone of Kenya's economy, representing over 98% of business establishments (KEPSA, 2024) and employing more than 80% of the private-sector workforce (KNBS, 2025). Yet many MSMEs face persistent challenges in accessing formal credit. A key barrier is the lack of clear separation between personal and business finances. Many MSME owners use a single mobile wallet or bank account for both business operations and personal expenses. This blending of financial activity makes it difficult for traditional credit scoring systems, which were not designed to interpret such complexity, to assess business performance or creditworthiness accurately.

At the same time, large segments of the population participate in the shadow economy, including informal traders, casual labourers, and rural households. Though they may be economically active, these individuals often operate outside the formal financial system and are not

consistently captured in bureau data. Taken together, the blended financial patterns of MSMEs and the scale of informal economic activity highlight a visibility challenge, not a risk issue. The current data frameworks often overlook these signals, not due to a lack of relevance, but because they fall outside standard reporting structures.



### Figure 3: Financial health by livelihoods

2024 FSD household survey found between 2021 and 2024, business owners, many of whom operate MSMEs, experienced a notable decline in financial health. While the survey does not attribute causality, this trend aligns with ongoing challenges MSMEs face in accessing formal credit for investment and growth.

### *Consequences for the market*

The limitations of traditional credit scoring don't just affect individuals. They also create broader ripple effects across the credit market and the economy. When lenders can't accurately see or assess large segments of the population, they tend to default to risk-averse or extractive lending practices. This leads to a market that is overly cautious at best, and outright exploitative at worst. Two major outcomes stand out: short-termism and predatory practices.

### **Consequence 1:** 'Short Term Borrowing Trap Cycles'

When lenders lack reliable data about a borrower's full financial behaviour, they tend to limit risk by focusing on small, short-term loans, often offered at high frequency but with low value. While this may seem prudent from a portfolio and risk perspective, it severely constrains the kind of financing that is needed to build long-term economic value. For individuals and businesses alike, access to larger,

longer-term credit is essential. It enables people to acquire productive assets like equipment, solar kits, or inventory and helps small businesses invest in growth, resilience, and job creation. But in the absence of accurate credit visibility and scoring, lenders hesitate to extend this kind of meaningful capital.

The result is a credit market optimised for low-trust, highfriction lending: quick loans for consumption, rather than productive investment. Small businesses are stuck cycling through microloans that barely support daily operations, let alone expansion. This undermines their ability to create jobs, access basic utilities (such as energy and water), or scale sustainably. In the long run, this limits economic mobility and slows overall development.

### **Consequence 2:** Predatory Practices

Another outcome of poor credit visibility is the rise of exploitative lending models. In environments where lenders cannot properly assess risk, many compensate by charging extremely high interest rates, requiring unnecessary collateral, or embedding hidden fees into their products. For borrowers, particularly those from vulnerable or low-income



Yet her credit offers remain the same: small, short, and expensive. Why? Because lenders only see a "thin" file—no formal business registration, no CRB data that captures her actual financial behaviour. And since she started her business less than a year ago, she hasn't had time to build long-term lending relationships or trust.

But a closer look tells a different story. Janet's mobile wallet shows steady daily income, regular supplier payments, and a consistent minimum balance above KSh 3,000. Her repayment history is flawless, her cash flow predictable, her savings behaviour disciplined. She's running a responsible micro-business, but remains under the radar. When we spoke with Janet, she mentioned needing KSh 200,000 to buy a second-hand fridge, diversify into perishable goods, and significantly increase her profits. Instead, she has spent over KSh 35,000 in interest in just three months—money that could have gone into growing her business.

groups, this leads to over-indebtedness and financial stress. In some cases, the cost of credit becomes so burdensome that it outweighs any potential benefit the loan might have provided. Instead of enabling progress, credit becomes a constraint, reinforcing exclusion rather than addressing it. But these patterns are not just a matter of bad actors—they are often a symptom of insufficient data. When lenders operate with limited information, they either price in extreme risk or restrict access entirely, leading to an even more fragmented and high-friction credit environment that stifles economic potential rather than enabling it.

### *Case Study: Janet, a grocer*



Janet (anonymised) runs a vegetable stall in Umoja. She earns about KSh 2,500 daily, translating to a monthly turnover of around KSh 75,000 and a consistent profit of KSh 20,000-25,000. Like many informal traders, she relies on short-term digital loans to manage inventory and cash flow. In just three months, Janet took 11 loans from two major digital lenders, each between KSh 10,000-15,000. She also borrowed from seven smaller providers, mostly 30-day loans with average interest rates of 22.5%. Despite the volume, she's never defaulted, often repaying early.

### *Comparisons with Other Markets*

The limitations of traditional credit scoring in Kenya are not unique. Many markets have faced similar challenges and responded with different strategies. By examining how countries like the United States, China, and India are evolving their credit systems, we can identify approaches that may help inform future improvements in Kenya's credit ecosystem

### *The United States: Diversification through Alternative Data*



In the United States, credit scoring traditionally relied on models like FICO and VantageScore, which assess creditworthiness based on data

from major credit bureaus: Experian, Equifax, and TransUnion (Kansas City Reserve Bank, 2024). Recognising the limitations of solely using traditional credit data, these models have evolved to incorporate alternative data sources. For instance, FICO's newer models\* consider rental payments, utility bills, and other non-traditional credit information to evaluate consumers with limited credit histories.

This diversification allows lenders to make more informed decisions, particularly for individuals who are new to credit or have thin credit files. By broadening the data inputs, the U.S. credit system aims to enhance financial inclusion while maintaining risk assessment standards.

### China: Comprehensive Social Credit Integration



China's approach to credit scoring extends beyond financial behavior to encompass a wide range of personal and social activities (<u>GIS reports,</u> <u>2021</u>). The social Credit Systems, im-

-plemented by the government, aggregates data on individuals' financial history, social behaviour, and even online activities to assess trustworthiness. This system influences access to loans, travel, and employment opportunities. Additionally, private entities like Ant Group have developed platforms such as Zhima Credit\*\* (Sesame Credit), which utilises data from e-commerce and digital payments to generate credit scores. These comprehensive models aim to create a holistic view of an individual's reliability, although they have raised concerns regarding privacy and data security.

## *India:* Standardisation and Inclusion through Regulatory Mandates



India's credit ecosystem has undergone significant reforms to enhance data accuracy and financial inclusion. The Reserve Bank of India (RBI) has mandated that all financial institutions, including asset reconstruction companies stan-

-dardise their reporting to credit bureaus\*\*\* (Economic <u>Times India, 2024</u>). This ensures that credit histories are comprehensive and up-to-date.

Moreover, Indian credit bureaus like TransUnion CIBIL\*(4) and CRIF High Mark \*(5) have expanded their data collection to include alternative sources such as telecom and insurance data. By doing so, they aim to assess the creditworthiness of individuals who may not have traditional credit histories, thereby broadening access to credit.

### *Lessons for Kenya: Embracing Alternative Data*

Kenya's credit market can draw lessons from these international models. The integration of alternative data sources, such as mobile money transactions, utility payments, and digital behaviour, can provide a more accurate assessment of creditworthiness for individuals outside the formal financial system. Establishing standardised reporting requirements and encouraging the use of diverse data inputs can enhance the reliability of credit scores. By adopting some of these practices, Kenya can work towards a more inclusive and effective credit ecosystem that better serves its diverse population.

# **The 'BOOSTED' SCORE:** A Smarter Score for a more visible economy

To address the known limitations in credit scoring, we developed the Boosted Score—a composite model that combines the strengths of alternative data and bureau-reported intelligence. At its core is a simple belief: creditworthiness shouldn't be limited to those with formal loans or banking relationships. It should also reflect the full scope of financial behaviour, especially in mobile-first economies like Kenya. When we examine mobile money ecosystems such as we find a wealth of transactional signals that reveal a person's financial reality. Spending patterns, income regularity, savings behaviour, and even repayment tendencies are all embedded in day-to-day usage. When structured correctly, this data provides powerful insights that complement and enhance formal credit histories.

To transform this raw information into a usable credit signal, we built an end-to-end technology pipeline-from data ingestion to deployable score. It begins with data collection and moves into feature engineering, where we extract hundreds of behavioural indicators: income flows, balance trends, savings patterns, payment streaks, airtime usage, token purchases, device-sharing risk, SME procurement behaviour, and geospatial or socioeconomic stability. These signals are parsed, cleaned, and structured by custom-built parsers across a broad spectrum of sources, including mobile money platforms, SMS inboxes, device metadata, utility portals, psychometric inputs, ecommerce activity, business registries, and location intelligence. This unified data stream is then fed into machine learning models trained to detect repaymentlinked behaviour. Where available, CRB data is integrated providing context, anchoring signals, and improving accuracy.

The strength of the Boosted Score lies in how it combines two distinct but complementary data streams. Alternative data significantly expands credit visibility, especially for individuals and businesses with limited or no formal credit history. It fills critical gaps, offering timely, behaviour-rich insights that traditional reports may miss. At the same time, when bureau data is available-even if partial—it adds valuable context. It helps anchor risk models with known defaults or repayment records and adds credibility in regulated lending environments. Rather than relying on one or the other, the Boosted Score blends both to build a fuller, more accurate picture. Alternative data fills the gaps where bureau data is thin or absent, while Bureau data enhances the model where available. Together, they strengthen the score's predictive power, especially outperforming traditional models on underrepresented segments: thin-file borrowers, youth, MSMEs using personal wallets, and others often overlooked by formal financial systems.

**This is the vision:** a score that sees more, includes more, and performs better—built for real-world financial lives, and powered by the right data.

<sup>\*</sup>An example is FICO® Score XD developed in partnership with LexisNexis® Risk Solutions and Equifax® — is a credit score that leverages alternative data sources to give lenders a new opportunity to assess consumers who do not have an established credit history or whose credit files contain limited or outdated information.

<sup>\*\*</sup>Launched in 2015, Zhima Credit utilizes data from e-commerce activities and digital payments to generate credit scores. The scoring system considers factors like credit history, fulfillment capacity, personal characteristics, behavior and preferences, and interpersonal relationships.

<sup>\*\*\*</sup>In October 2024, the RBI directed Asset Reconstruction Companies (ARCs) to standardise their reporting procedures to credit bureaus. This move aligns ARCs' data submission norms with those governing banks and Non-Banking Financial Companies (NBFCs). Key aspects include mandatory membership, Uniform Reporting Format, fortnightly updates and compliance deadlines.

<sup>\*(4)&</sup>lt;u>TransUnion CIBIL</u> has developed products that leverage alternative data to profile borrowers more accurately.

<sup>\*(5)</sup>CRIF High Mark incorporates data from telecom and insurance companies into their credit assessments, evaluating the creditworthiness of individuals lacking traditional credit histories.

## **Methodology:** *How The Score was Built*

The Boosted Score was developed through a multi-phase methodology grounded in empirical data, model experimentation, and real-world validation. The process spanned two years of alternative data collection, research, field testing, and the collection of both structured and alternative data.

### Participant recruitment and alternative data acquisition

To generate a representative training dataset, Kamoa onboarded hundreds of thousands of individuals across Kenya, drawn from all 47 counties and reflecting a diverse mix of age groups, income levels, and genders. Participants provided full consent and were incentivized to share multiple categories of data. These included mobile wallet transaction histories, device metadata, and a range of behavioural signals. The data collected encompassed income flows, expenditure patterns, borrowing behaviour, utility payments, geolocation trails, and evidence of business activity, offering a rich, real-world view of how people engage with money in their daily lives.

### Structured data integration via Credit Bureau partnership

To enhance and validate the dataset, Kamoa partnered with Creditinfo Kenya (CIK). Through this collaboration, the team accessed up to four years of historical credit bureau data, which included disbursement records, repayment histories, loan product types, overdraft activity, and repayment regularity across a range of financial institutions. The integration of CIK data provided verified, formal credit histories that served as a foundation for supervised model training and validation. This alignment of structured bureau data with alternative behavioural signals allowed for the mapping of informal financial behaviour to formal credit outcomes for these people

## Financial signal inference using E-AI

A key technical component of the methodology was the development of Kamoa E-AI (Estimator AI), a proprietary machine learning system designed to infer cash flow characteristics from partial or indirect data. E-AI was trained on a labelled dataset of 48,567 people who had both verified mobile wallet data and complete credit records. The model was optimized to predict features such as income frequency, spending levels, and financial volatility based

solely on credit history and behavioural signals. The E-AI enhances the predictive power of the Boosted Score in cases where raw cash flow data is unavailable; the performance of the Boosted Score model powered by E-AI performs only 9.3% lower than the Boosted Score model trained using true cash-flow data.

### Score Training and Repayment Prediction Modeling

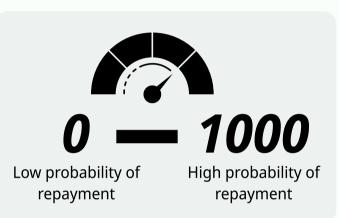
The Boosted Score was built using a larger dataset comprising over **10 million** anonymized records of loan facilities disbursed between October 2023 and October 2024, and extracted from cash flow and bureau data. These records included repayment outcomes across a wide spectrum of credit products, including mobile loans, digital credit, microfinance loans, and traditional bank-issued loans. The score model was developed using supervised machine learning techniques to identify the behavioural and financial patterns most predictive of successful loan repayment. Model features were drawn from both CIK's bureau data and the alternative data collected or inferred through E-AI.

### Cross-Source Feature Engineering 💡

One of the defining features of the Boosted Score is its use of cross-source features—composite indicators that integrate inputs from both structured and alternative data to create a more holistic view of borrower behaviour. For example, a credit-to-income ratio might combine bureau-reported outstanding balances from CreditInfo with income estimates inferred from mobile wallet activity or E-AI predictions. Similarly, repayment streaks, savings behaviour, airtime spending patterns, and device metadata (such as handset changes) are all integrated into the feature set to build a multidimensional view of borrower reliability.

# *Initial Performance of Score*

Performance Metrics



*Figure 4: The scale of the score* 

The Boosted Score reflects a prediction of an individual's repayment performance on future loan facilities, running on a scale from 0 (low probability of repayment) to 1000 (high probability of repayment). We evaluate the Boosted Score against three commonly used CRB scores: a mobile score (Score A), a generic bureau score (Score B) from a bureau, and a second mobile score from another bureau (Score C). Models were trained to predict repayment risk for mobile, overdraft, and business working capital products on a month-by-month basis, using cross-source features.

Performance is assessed on a held-out test set representing around 20% of the dataset using three key metrics:

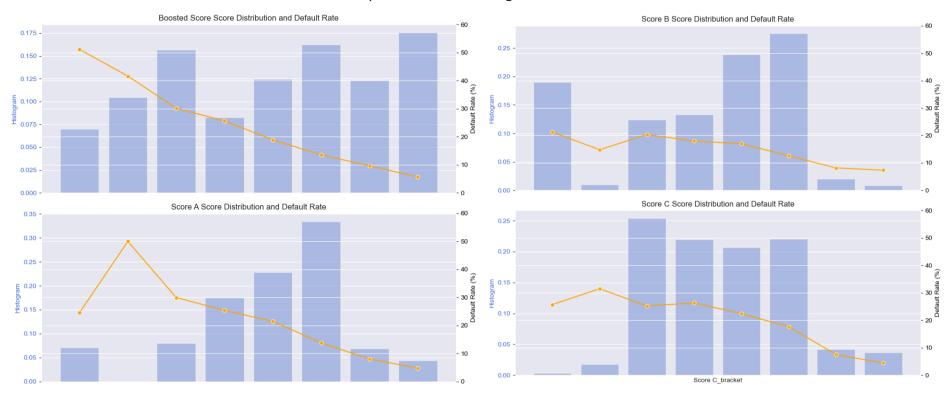
- 1. Gini Coefficient: Measures model discrimination between good and bad outcomes. Higher values reflect better separation.
- 2. Overlook Rate: Percentage of good customers incorrectly classified as bad (false negatives). A conservative model overlooks good customers and negatively impacts the lender's unit economics.
- 3. Bad Rate: The share of bad customers misclassified as good (false positives). A high bad rate increases portfolio risk.

We defined the binary outcomes as follows :

- **Good Outcome**: Facility fully repaid within 90 days of due date.
- Bad Outcome: Any facility still outstanding 90 days past due date.

### Score Evaluation

We find that the Boosted Score outperforms all three other scores at identifying creditworthy individuals. Figure 5 compares the performance of all four scores - the orange line gives the observed default rate across score brackets, the blue histogram illustrates the relative distribution of individuals across each score bracket. As all four scores have different scales, the brackets have been rescaled to allow for a consistent comparison across all figures.



### Figure 5: Score Comparison

The Boosted Score exhibits a smoothly decreasing observed default rate as the score increases. Among the four scores, the Boosted Score obtains the steepest slope and highest Gini score, indicating superior discriminatory power. Notably, individuals in the lowest Boosted Score bracket show the highest default rate, unlike those in the lowest brackets of the scores A, B & C —underscoring the Boosted Score's effectiveness in filtering out high-risk individuals. Moreover, the Boosted Score is evenly distributed across the population, whereas the scores A, B & C tend to cluster around the middle range. This broader distribution provides lenders with greater flexibility in setting score thresholds, allowing for more precise control over both bad rates and overlook rates

We evaluate the overlook and bad rates predicted by each score, by making a cut at the "low risk threshold" suggested by each respective CRB. The Boosted Score provides the best individual risk assessment, obtaining the lowest overlook rate (47%) and the lowest bad rate (10.9%) among the four scores. Scores A, B & C yield similar bad rates but with much higher overlook rates, indicating that they misclassify a larger proportion of creditworthy individuals as high risk. This inefficiency limits their practical utility in minimizing missed opportunities (see table below).

	Boosted Score	Score A	Score B	Score C
	Low Risk Threshold	Low Risk Threshold	Low Risk Threshold	Low Risk Threshold
% Scorable	98%	80%	86%	91%
Gini	0.45	0.25	0.15	0.17
Overlook rate	47.3%	67.6%	90.4%	80.8%
Bad rate	10.9%	11.3%	11.3%	10.0%

The Boosted Score strikes a more optimal balance between risk avoidance and opportunity capture, making it a more effective tool for identifying low-risk individuals without excluding good applicants, and giving lenders the opportunity to increase their lending volume without sacrificing on a strong collections rate.

### **Outlined Use Cases**

Young and new-to-bank borrowers are often the most difficult for Credit Bureaus to score accurately, as they have limited credit history from which to infer borrowing behaviour. While lenders consequently favour lending to older borrowers with established credit history to minimize risk, this approach overlooks a significant population; approximately 40% of the 18yo+ Kenya's population is between 18-30, and the youth represent a largely untapped market.

The Boosted Score is particularly well-suited to assessing young and new-to-bank borrowers, as we leverage alternati-

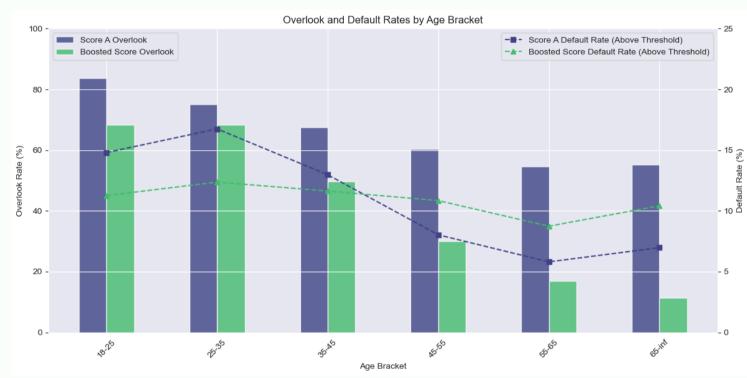


Figure 6 shows the performance of the Boosted Score (compared to the second-best performing CRB score, Score A) across various age brackets. We evaluate the overlook and default rate obtained for each bracket by making a cut at the "low risk threshold" described in the previous section. The Boosted Score exhibits a consistent default rate across all age brackets, unlike Score A, which shows much higher variability, at the expense of the youth. Amongst younger borrowers, the Boosted Score has both a lower overlook rate and a lower default rate, indicating that the Boosted

-ve data from informal sources, typically inaccessible to the Credit Bureaus, and combine this information with the user's formal borrowing record. Given the Boosted Score's effectiveness at scoring young, new-to-bank, and thin-file individuals, lenders will be able to increase their market share by tapping into these underserved segments that are often considered unscorable by traditional credit bureaus, without compromising on performance.

## Use Case1 New To Bank + Youth

*Figure 6*: Performance of the Boosted Score vs the second-best performing CRB score across various age brackets

Score is better at identifying high-quality young borrowers. At older age segments, the Boosted Score obtains a significantly lower overlook rate compared to Score A, while maintaining a consistent bad rate across the age segments, highlighting its effectiveness at identifying credit-worthy individuals without increasing risk.

## **Use Case 2** Thin Files

Similarly, the Boosted Score is particularly apt at scoring CRB thin files, especially compared to the more traditional CRB scores. Figure 7 shows the performance of the Boosted Score (compared to the second-best performing CRB score, Score A) for CRB thin and thick files.

Among thin files, the Boosted Score achieves a 25% decrease in default rate compared to Score A, and a 19% decrease in overlook rate. On thick files, the two scores obtain similar default rates, while the Boosted score decreases the overlook rate by 33%.

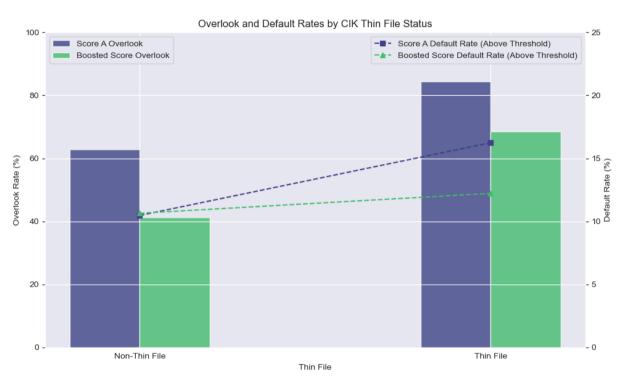


Figure 7: Performance of the Boosted Score vs the second-best performing CRB across thin and thick files

## **Use Case 3** MSME Lending

As the Boosted Score uses alternative data to augment the full picture of the individual, including informal business lending and other signals of SME ownership, it can be used effectively for decisioning for both mobile and business loans. We evaluate the Boosted Score at decisioning on both mobile and business loans, to compare performance across

loan types. As Figure 8 shows, the Boosted Score can also be used effectively for business loan decisioning, as well as short-term mobile lending: the Boosted Score attains a similar default rate with a 44% decrease in overlook rate on Business Working Capital loans, compared to Score A.

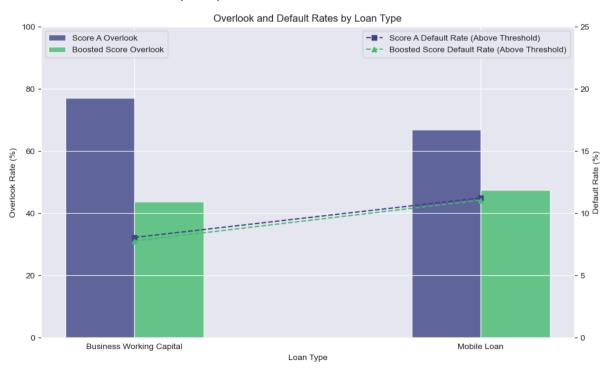
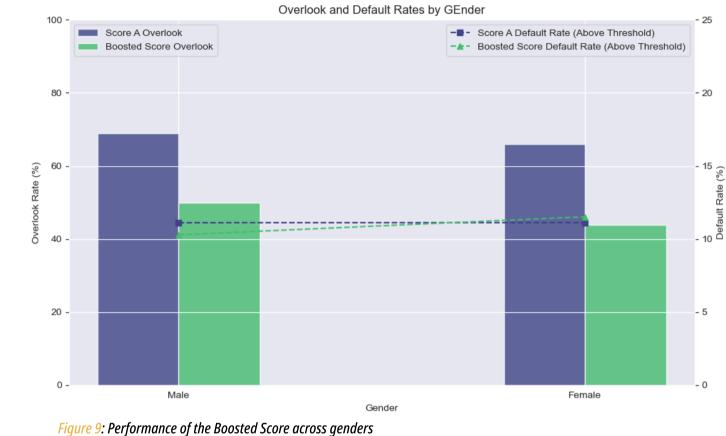


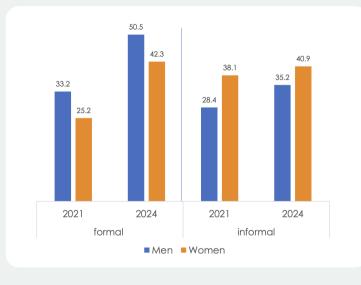
Figure 8: Performance of the Boosted Score within business loans

## **Use Case 3** Women & Social Lending

As Figure 9 shows, both the Boosted Score and Score A perform equally well on women and men. For a fixed default rate, the Boosted Score obtains a lower overlook







2024 FSD Kenya Household Survey shows how men and women differ in their use of formal and informal lending

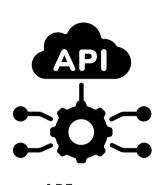
rate than Score A on both genders.

### Female-Male Borrowing Patterns $\mathbb{P}$

In Kenya, women often rely on informal credit like chamas and table banking, while men tend to access formal loans from banks and SACCOs. This is largely due to women's limited access to collateral such as land, lower financial literacy, and the informal nature of many women-run businesses. Group-based lending offers women a way to borrow using social trust rather than physical assets. Men, by contrast, are more likely to own property, operate formal businesses, and feel confident navigating formal financial systems. These patterns reflect structural barriers that continue to limit women's access to formal credit.

## **Getting Started:** Accessing The Score

To make the Boosted Score as actionable and accessible, we've built multiple access points designed to meet the needs of diverse financial institutions, from large banks and fintechs to SACCOs and asset financiers. Whether you're looking to integrate the score into an existing decision engine or explore it via a simple dashboard, the Boosted Score is built to plug in easily. Across all channels, data security and compliance are a priority. Every integration is built with strong encryption, access controls, and audit trails, ensuring that the score is not only easy to use but also safe and trustworthy. The goal is simple: make the Boosted Score easy to access, easy to act on, and easy to integrate so that more institutions can lend with confidence, and more people can be seen.



For institutions with in-house technology teams or automated loan workflows, the Boosted Score is available through a set of APIs. These APIs are designed to be developer-friendly, fast, and secure, allowing you to fetch scores, review underlying features, and integrate decision logic directly into your systems with minimal friction. You can pull scores on demand, in real time, and incorporate them seamlessly into your onboarding, underwriting, or monitoring flows.





For those building or enhancing digital channels, we offer SDKs that allow for deeper integration at the point of customer interaction. These SDKs make it easy to embed the Boosted Score into your customer journey, enabling real-time credit assessment, pre-qualification, or risk segmentation inside your own interfaces.





For teams who prefer a no-code experience, the Boosted Score can also be accessed through a secure web portal. Here, credit officers or analysts can review individual scores, explore financial profiles, and download reports. The portal offers intuitive dashboards and filtering tools, enabling your team to make informed decisions even without a deep tech stack.

## The Road Ahead: What next?

Credit is a powerful engine for opportunity, but only if it is fairly distributed and grounded in the realities of how people actually live, earn, and repay. For too long, large segments of the population have been left out or misrepresented. Outdated assumptions, incomplete data, and rigid models have created vast gaps in financial access, slowing both personal growth and national development. The Boosted Score was built to change that.

By blending alternative data, credit bureau records, and other third-party insights, the Boosted Score offers a more complete and accurate view of individual and business financial behaviour. It produces a score that is not only more predictive but also more inclusive and better suited to the current credit ecosystem.

With the Boosted Score, lenders can make better decisions, faster. They can responsibly serve borrowers who were previously invisible. They can reduce defaults, improve risk segmentation, and design products that reflect real financial lives and customer needs. For consumers and businesses, this means access to credit that is fairer, more tailored, and available when it's most needed, not just in emergencies, but for long-term growth and resilience.

This has a real, tangible impact on the economy. The Boosted Score is part of a larger vision where data works harder, systems become fairer, and financial services reach further, unlocking economic potential at scale. When MSMEs can access working capital based on real-time business behaviour, not just paperwork, they can grow, create jobs, and contribute more. When a farmer can finance solar lighting through pay-as-you-go history, their children can study at night. When a young adult builds a credit profile through digital wallet activity, they gain a path to asset financing or even a mortgage. These aren't just hypotheticals—they are everyday cases, and they show what's possible when credit becomes more inclusive and forms pathways to a more inclusive, resilient economy.

Realising this vision requires collaboration. It calls for more consistent reporting to credit bureaus, better integration of alternative signals, and shared tools, like the Boosted Score, that can work across the ecosystem. As more institutions adopt the Boosted Score and contribute to the feedback loop, the system gets stronger, more representative, and more equitable for everyone.

This is the path forward: where inclusion and insight go hand in hand, powered by data that reflects the full picture. The Boosted Score is a step in that direction; a smarter score for a more dynamic, more human economy.

### Let's Build it. Toegther!

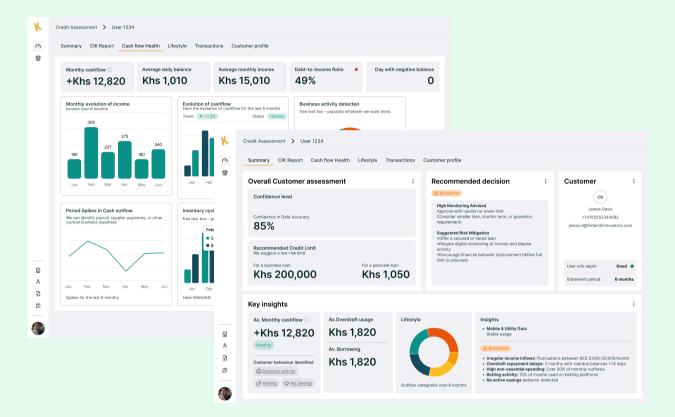
## End Notes

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If you have any questions, would like to discuss the insights from this report, learn more about the Boosted Score, or request a demo, reach out to product@kamoa.app.



Want a Demo of the Score?